No. 23-1078

UNITED STATES COURT OF APPEALS
FOR THE FOURTH CIRCUIT

B.P.J., by her next friend and mother, HEATHER JACKSON,

Plaintiffs-Appellants,

v.

WEST VIRGINIA STATE BOARD OF EDUCATION; HARRISON COUNTY BOARD OF EDUCATION; WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION; W. CLAYTON BURCH, in his official capacity as State Superintendent; DORA STUTLER, in her official capacity as Harrison County Superintendent,

Defendants-Appellees,

and

THE STATE OF WEST VIRGINIA; LAINEY ARMISTEAD,

Intervenors-Appellees.

On Appeal from the United States District Court
for the Southern District of West Virginia (Charleston)
Case No. 2:21-cv-00316

APPELLEES WEST VIRGINIA STATE BOARD OF EDUCATION, WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION, W. CLAYTON BURCH, STATE OF WEST VIRGINIA AND LAINEY ARMISTEAD'S JOINT RESPONSE TO MOTION FOR INJUNCTION PENDING APPEAL

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INTRODUCTION

West Virginia passed House Bill 3293 (Sports Act) to ensure equal opportunities and fair play for female athletes. The Act was one vote in an ongoing national debate. On one side, some states' policymakers have allowed males who identify as female to compete in female sports. That has led to female athletes losing championships, medals, and opportunities to compete in the sports they love. On the other, West Virginia lawmakers acted to ensure women can fairly compete for scholarships, recognition, and the chance to be champions. The Sports Act does this by requiring males to compete on teams consistent with their sex. This path is legal, logical, and longstanding. And the court below upheld it.

Appellant B.P.J. seeks an injunction pending appeal. That request should be denied. On the merits, B.P.J. agrees that West Virginia can exclude males from female sports—*if they identify as males*. But B.P.J. then demands a distinction based on gender identity instead of sex. So B.P.J.'s theory would allow males to compete on female teams (no matter their hormone levels); require males who identify as men to be excluded from these teams; and force females to compete against bigger, faster, and stronger males anytime they identify as female. More broadly, this legal theory will require courts to engage in an athlete-by-athlete adjudication whenever anyone alleges (by birth or intervention) to have the same athletic ability or hormone levels as females.

That theory doesn't work. It would require the state to discriminate based on gender identity by making gender identity (and not sex) the criteria for designating school sports teams. It upends countless precedents upholding classifications based on sex in prisons, physical fitness tests, and elsewhere. And it cannot justify B.P.J.'s requested relief because the Act properly applies in nearly all cases, requiring males who identify as males to compete in male sports. In the end, the Sports Act makes a common-sense judgment rooted in real-world experience: biological differences between males and females matter in sports. Title IX and the Fourteenth Amendment allow that judgment.

On the equities, B.P.J. displaced scores of girls when allowed to compete against them before the judgment below. Those girls were harmed, and more girls will be. Their harms should not be forgotten, erased, or dismissed. It has happened too often in our history. When males displace females—even one—the goal of equal participation by females in interscholastic athletics is set back, not advanced. An injunction on appeal would perpetuate this harm. This Court should deny the requested injunction and, like the court below, allow the Act to continue protecting West Virginia girls this spring and beyond.

BACKGROUND

Two years ago, West Virginia passed the Sports Act, which requires public schools to designate sports teams "based on biological sex" and so ensures that males cannot compete against females in contact or competitive sports. W. Va. Code § 18-2-25d(c)(1). This Act seeks to "promote equal athletic opportunities for the female sex" because there are "inherent differences" that make it unfair or even dangerous for females to compete against male athletes. *Id.* § 18-2-25d(a)(1)-(5); App. in Supp. of Appellee's Joint Resp. to Mot. for Inj. Pending Appeal (App.) 1714, 1720.

In recent years, males have been increasingly competing against—and beating—females in female sports events. App.1714, 1720. In Connecticut alone, for example, two males recently took 15 women's track championship titles that would have belonged to nine different females. App.195, 201. Chelsea Mitchell, for example, lost to these males more than 20 times. App.170. Alanna Smith lost to them three times. App.194-95. And Selina Soule lost to them at least four times. App.200-01. For Selina, the experience was "demoralizing." App.201. And Alanna "felt defeated before [she] even got set in [her] blocks." App.194.

College women have have fared no better. Consider Lia Thomas, a male swimmer on the University of Pennsylvania women's swim team. App.322 (¶137); 703-04 (212:14-214:6). Thomas recently set two Ivy League records, App.255, 261, and became an NCAA champion in the

500-yard freestyle, App.268. Thomas beat two Olympic champions in the same race and bumped 15 women down the scoreboard that day.

Such defeat and "displace[ment]" worried West Virginia lawmakers. W. Va. Code § 18-2-25d(a)(3). Relying on these troubling "experiences of other jurisdictions," *Imaginary Images, Inc. v. Evans*, 612 F.3d 736, 742 (4th Cir. 2010); *see City of Renton v. Playtime Theatres, Inc.*, 475 U.S. 41, 51-52 (1986), the West Virginia Legislature passed the Sports Act to ensure that sports were as "safe" and "fair as possible." App.85.

B.P.J. sued. B.P.J. is a 12-year-old biological male who identifies as female and seeks to designate sports based on gender identity. App.1706, 1722-23. But, as the court below held, biology is what affects athletic performance—not gender identity. And another court explained, "due to average physiological differences, males would displace females to a substantial extent if they were allowed to compete" against each other. *Clark v. Ariz. Interscholastic Ass'n (Clark I)*, 695 F.2d 1126, 1131 (9th Cir. 1982); App.285, 317-334. So, consistent with history, sex-specific sports are allowed to ensure both equality and safety for female athletes.

B.P.J. seeks to benefit from this sex-based system—claiming to be similarly situated to a female. But while B.P.J. takes puberty-suppressing drugs that (according to B.P.J.) will allow B.P.J. to "develop physiological characteristics consistent with a typical female," Appellant's Mot. for Stay Pending Appeal (Mot.) 5, scientists disagree on "whether and to what extent" taking such drugs will reduce male physiological

advantages. App.1723. And not all males who identify as female take these drugs; some "choose to only transition socially." App.1723.

The court below entered a preliminary injunction based on an early and incomplete record. Afterward, B.P.J. competed on the Bridgeport Middle School girls' cross-country and track-and-field teams, routinely defeating and displacing many female athletes. App.1729-1746.

Last month, after reviewing a complete record, the court below granted summary judgment to defendants. The court held—as B.P.J. concedes—that males have physiological advantages over females because of their higher average testosterone levels. App.1722. And these "inherent" advantages make "biological males [ ] not similarly situated to biological females" in athletics. App.1722, 1724, 1727. That one male—whether due to naturally low testosterone or intervention—lacks typical testosterone levels does not negate the State's substantial interest in advancing equality for female athletes by designating sex-specific sports teams. App.1722, 1724. So the court held that the Sports Act was lawful, dissolved its prior injunction, and entered judgment. App.1724, 1727.

B.J.P. now seeks an injunction pending appeal.

LEGAL STANDARD

B.P.J. seeks an injunction pending appeal—not a stay. A stay "suspend[s] judicial alteration of the status quo;" an injunction requires it. *Nken v. Holder*, 556 U.S. 418, 429 (2009). While B.P.J. says the requested injunction "seeks to preserve the status quo," Mot. 1, 14, the preliminary injunction below *did not set the status quo*. State law did. As this Court recently affirmed, "it is the state's action—not any intervening federal court decision—that [sets] the status quo." *Wise v. Circosta*, 978 F.3d 93, 98 (4th Cir. 2020) (en banc).

B.P.J. seeks to enjoin the Sports Act, which requires "judicial intervention that [was] withheld below." *Nken*, 556 U.S. at 429. Such intervention is "an extraordinary remedy that may only be awarded upon *a clear showing* that the plaintiff is entitled" to it. *Winter v. Nat. Res. Def. Council, Inc.*, 555 U.S. 7, 22 (2008) (emphasis added). This is especially true when the plaintiff seeks to enjoin the "enforcement of a presumptively valid state statute." *Brown v. Gilmore*, 533 U.S. 1301, 1303 (2001) (Rehnquist, C.J., in chambers). Such a request "demands a significantly higher justification" than a stay request. *Lux v. Rodrigues*, 561 U.S. 1306, 1307 (2010) (Roberts, C.J., in chambers) (cleaned up).

For over 50 years, this Court has held that the preliminary-injunction standard sets the floor for issuing injunctions on appeal. *See Blackwelder Furniture Co. of Statesville, Inc. v. Seilig Mfg. Co., Inc.*, 550 F.2d 189, 194 (4th Cir. 1977); *Long v. Robinson*, 432 F.2d 977, 979 (4th Cir.

1970). For good reason. A preliminary injunction offers plaintiffs relief while the facts and arguments are still developing, but an injunction on appeal offers plaintiffs relief after a court has ruled against them on the merits based on a complete record. In such a situation, plaintiffs bear a "substantially greater" "burden." *Blackwelder*, 550 F.2d at 194.

At a minimum, plaintiffs seeking an injunction on appeal must prove (1) they are "likely to succeed on the merits"; (2) they will "suffer irreparable harm" without the injunction; (3) the "balance of equities" favors them; and (4) the "injunction is in the public interest." *Real Truth About Obama, Inc. v. FEC*, 575 F.3d 342, 346 (4th Cir. 2009). B.P.J. says the Court should balance these factors and issue an injunction if a "substantial case" is presented. Mot. 13. But the correct test "is far stricter." *Real Truth*, 575 F.3d at 347. No such balancing is allowed, and "all four requirements must be satisfied." *Id.* at 346; *accord Roman Cath. Diocese of Brooklyn v. Cuomo*, 141 S. Ct. 63, 66 (2020) (per curiam).

And the standard should be even higher for B.P.J.'s expedited request. B.P.J. seeks to reverse a summary judgment ruling based on a record over 3,000 thousand pages long. This appeal is particularly ill-suited for a rare injunction on an expedited basis.

ARGUMENT

I. B.P.J. is unlikely to prevail on the merits.

A. B.P.J. is unlikely to prevail under equal protection.

B.P.J. says the Sports Act violates equal protection because it "discriminates on the basis of transgender status." Mot. 15. But it doesn't. The Act distinguishes based on sex; this distinction is allowed because it reflects the "inherent differences between men and women"; *United States v. Virginia*, 518 U.S. 515, 533 (1996) (cleaned up); and this is true whether B.P.J. challenges the law facially or as applied.

1. The Sports Act designates sports teams based on biological sex, not gender identity.

To decide equal-protection claims, courts "begin with the statutory classification itself." *Califano v. Boles*, 443 U.S. 282, 293-94 (1979). The Sports Act designates athletic teams "based on biological sex." W. Va. Code § 18-2-25d(c)(1). Under the Act, all males—those who identify as male, female, nonbinary, fluid, or anything else—cannot compete in female sports. Teams for males may be open to females, but not vice versa. *Id.* § 18-2-25d(c)(2)-(3). This keeps sports safe and competitive for females. Nowhere does the Act distinguish based on gender identity.

A law may classify based on biological sex without unlawfully discriminating on the basis of transgender status. *See Bauer v. Lynch*, 812 F.3d 340, 350-51 (4th Cir. 2016) ("[A]ccommodations addressing physiological differences between the sexes are not necessarily unlawful.");

Adams ex rel. Kasper v. Sch. Bd. of St. Johns Cnty., 57 F.4th 791, 809 (11th Cir. 2022). Nor does the fact that the Act may *affect* some transgender athletes mean that the law classifies based on gender identity. Many laws "affect certain groups unevenly, even though the law itself treats them no differently from all other members of the class described." *Pers. Adm'r of Mass. v. Feeney*, 442 U.S. 256, 271-72 (1979). A law that favors veterans isn't sex-based even if veterans are 98% male. *Id.* at 270, 274. Nor does "[t]he regulation of a medical procedure" that affects only one sex—like abortion—trigger heightened scrutiny. *Dobbs v. Jackson Women's Health Org.*, 142 S. Ct. 2228, 2245-46 (2022).

At most, B.P.J.'s challenge amounts to a claim that the Sports Act "has a disparate impact" on "transgender students." *Adams*, 57 F.4th at 810. But any disparate impact is "plausibly explained on a neutral ground." *Feeney*, 442 U.S. at 275. Sex-based distinctions often overlap or contradict a person's gender identity. *Grimm v. Gloucester Cnty. Sch. Bd.*, 972 F.3d 586, 609 (4th Cir. 2020). So they are "an unavoidable consequence of a legislative policy that has … always been deemed to be legitimate." *Feeney*, 442 U.S. at 279 n.25. Here, the Act keeps all males from competing in female sports, no matter how they identify. "Too many men are affected to [say] that the [law] is but a pretext" for disfavoring transgender people. *Feeney*, 442 U.S. at 275; *see Geduldig v. Aiello*, 417 U.S. 484, 496 n.20 (1974); *Dobbs*, 142 S. Ct. at 2245-46.

2. The Sports Act validly distinguishes based on biology because sex matters in sports.

The Equal Protection Clause does not eliminate the State's power to classify, but instead "measure[s] the basic validity of the legislative classification." *Feeney*, 442 U.S. at 271-72. Sex-based distinctions trigger intermediate scrutiny. *City of Cleburne v. Cleburne Living Ctr.*, 473 U.S. 432, 440 (1985). But sex is not "a proscribed classification." *Virginia*, 518 U.S. at 533. Equal protection just requires that a sex-based distinction serve an "important" government "objective[]" and that the "means" used "substantially relate[] to" the goal. *Tuan Anh Nguyen v. INS*, 533 U.S. 53, 60 (2001). A "perfect fit" is not required; "only a reasonable one." *United States v. Staten*, 666 F.3d 154, 167 (4th Cir. 2011).

B.P.J. suggests the Court should narrowly tailor the analysis to B.P.J.'s (and every other student's) "individual circumstances" because the claim is as-applied. Mot. 17. That's wrong. Labeling a claim "facial or as-applied … does not speak … to the substantive rule of law." *Bucklew v. Precythe*, 139 S. Ct. 1112, 1127 (2019). For as-applied claims under intermediate scrutiny, this Court does "not consider any individual characteristics of the person raising the as-applied challenge but focuse[s] entirely on the [law] itself and the evidence" showing its "purpose and fit." *Harley v. Wilkinson*, 988 F.3d 766, 769-70 (4th Cir. 2021); *accord Staten*, 666 F.3d at 167; *Cap. Associated Indus., Inc. v. Stein*, 922 F.3d 198, 209 (4th Cir. 2019). The Supreme Court agrees. *Ward v. Rock Against*

Racism, 491 U.S. 781, 801 (1989) (law's validity depends on how it relates "to the overall problem the government seeks to correct, not on the extent to which it furthers the government's interests in an individual case"); *United States v. Edge Broadcasting Co.*, 509 U.S. 418, 431 (1993).

Applying the correct standard, the Sports Act satisfies equal protection. To start, it promotes equal athletic opportunities for females. Designating sex-specific sports to promote this goal is allowed "to advance full development of the talent and capacities" of women and girls. *Virginia*, 518 U.S. at 533. "There is no question that" these goals are an "important governmental interest." *Clark I*, 695 F.2d at 1131.

The Sports Act tightly fits this interest. The U.S. Supreme Court "has consistently upheld statutes" when the sex distinction "realistically reflects the fact that the sexes are not similarly situated in certain circumstances." *Michael M. v. Superior Ct. of Sonoma Cnty.*, 450 U.S. 464, 469 (1981). Laws may distinguish males for having sex with underage females because of pregnancy risks. *Id.* at 471-73. And laws may impose "a different set of rules" to prove biological parenthood because of "the unique relationship of the mother to … birth." *Nguyen*, 533 U.S. at 63-64. In fact, "biological sex … is the driving force behind the Supreme Court's sex-discrimination" cases. *Adams*, 57 F.4th at 803 n.6.

In sports, "[t]he difference between men and women … is a real one." *Nguyen*, 533 U.S. at 73. Unlike in *Grimm*, where this Court held that designating sex-specific bathrooms "was not substantially related"

to ensuring bodily privacy because officials presented no "evidence that a transgender student" would observe other students undressed, 972 F.3d at 614, here, B.P.J. *agrees* that designating sports by sex generally furthers the state's interest in protecting female athletes. And B.P.J.'s counsel has argued elsewhere that "privacy" rulings like *Grimm* offer no help in cases like this because the state's interest in protecting female sports is "distinct." App.1747-48. Males and females "are not physiologically the same for the purposes of physical" activities. *Bauer*, 812 F.3d at 350. Indeed, "due to average physiological differences, males would displace females to a substantial extent if they were allowed to compete" for the same teams. *Clark I*, 695 F.2d at 1131. And most "females would quickly be eliminated from participation and denied any meaningful opportunity for athletic involvement" without distinct teams. *Cape v. Tenn. Secondary Sch. Athletic Ass'n*, 563 F.2d 793, 795 (6th Cir. 1977) (per curiam).

B.P.J. claims to be "similarly situated" to "girls" after identifying as one and taking drugs to mitigate male puberty. Mot. 15. But anyone can take these drugs—including males who identify as boys. And biological sex "is not a stereotype." *Adams*, 57 F.4th at 809. The physiological differences between the sexes are real and "enduring." *Virginia*, 518 U.S. at 533. Moreover, because B.P.J. argues that males with naturally low testosterone levels, or who just perform poorly in sports, can be excluded from female sports, App.1724, B.P.J.'s theory would have the perverse effect of *requiring West Virginia to discriminate based on gender*

identity—a classification that, according to B.P.J.'s own experts, is not "useful" for indicating "athletic performance." App.814 (167:24-168:1).

The Sports Act accommodates the physiological differences between the sexes, which are rooted in biology. B.P.J. agrees that laws designating sex-specific sports teams are legal because it would be unfair for most biological males to compete in female sports because of their physiological advantages. Yet B.P.J. also argues that a biology-based distinction is illegal and pushes instead for an identity-based one—which has nothing to do with physiology. If designating sex-specific sports is valid to accommodate the average physiological differences between males and females, it cannot be invalid because it draws a biology-based distinction. This line validly applies to 99% of males because they are biologically male; so it must also be valid as applied to B.P.J. who is biologically male.

Despite this near-perfect efficiency, West Virginia need not use a classification "capable of achieving its ultimate objective in every instance." *Nguyen*, 533 U.S. at 63, 70; *accord Clark I*, 695 F.2d at 1132. Requiring such proof would require a "perfect" fit when this Court requires only a "reasonable" one. *Harley*, 988 F.3d at 769. And that would convert intermediate scrutiny into strict, contradict Fourth Circuit and Supreme Court precedent, and create up a circuit split—which this Court should avoid. *Ward*, 491 U.S. at 801; *Adams*, 57 F.4th at 809.

B. B.P.J. is unlikely to prevail under Title IX.

Title IX forbids schools from treating individuals "worse than others who are similarly situated" based on sex. *Grimm*, 972 F.3d at 618. While B.P.J. claims to be "similarly situated" to a biological female, that is incorrect. Section I.A.2, *supra*. That alone dooms B.P.J.'s claim. So does Title IX's text.

1. Title IX deals with sex, not gender identity.

Title IX prohibits "discrimination" in educational programs and activities "on the basis of sex." 20 U.S.C. § 1681(a). But Title IX does not define "sex," so we "look to the ordinary meaning of the word when it was enacted in 1972." *Adams*, 57 F.4th at 812. And this ordinary meaning in 1972 was "biological sex." *Id* (collecting sources); *accord Neese v. Becerra*, No. 2:21-CV-163-Z, 2022 WL 1265925, at *12 (N.D. Tex. Apr. 26, 2022). As the Supreme Court put it, "sex" is "an immutable characteristic" determined solely by "birth." *Frontiero v. Richardson*, 411 U.S. 677, 686 (1973).

2. Title IX sometimes requires sex distinctions.

Sports show that Title IX doesn't just permit sex distinctions; Title IX sometimes requires it. Again, start with the text. Title IX doesn't forbid noticing sex (sex blindness) but states that no person "shall, on the basis of sex, be excluded from participation in [or] be denied the benefits of … any education program or activity." 20 U.S.C. § 1681(a). To "exclude" means "to shut out," "hinder the entrance of," or "bar from participation,

enjoyment, consideration, or inclusion." Webster's Third New International Dictionary 793 (1966). To "deny" means "to turn down or give a negative answer to." *Id.* at 603. And these words must be understood as applying to an "education program or activity," including sports. Together, these words forbid schools from shutting out or hindering females from enjoying, participating in, or reaping *educational* benefits.

And enjoying these *educational* benefits sometimes requires noticing sex. After all, an educational program "made up exclusively of one sex is different from a community composed of both." *Virginia*, 518 U.S. at 533 (cleaned up). When both sexes are present, recognizing sex differences can be necessary for students to fully enjoy educational programs and activities. As Title IX's sponsor put it, sometimes sex separation is "absolutely necessary to the success of the program—such as in classes for pregnant girls or emotionally disturbed students, in sports facilities or other instances where personal privacy must be preserved." 118 Cong. Rec. 5807 (1972). In sports, too, sex separation is necessary to provide females with "the chance to be champions." *McCormick ex rel. McCormick v. Sch. Dist. of Mamaroneck*, 370 F.3d 275, 295 (2d Cir. 2004).

Accommodating the "enduring" differences between males and females is written repeatedly into Title IX. *Virginia*, 518 U.S. at 533. Indeed, Title IX "explicitly permit[s] differentiating between the sexes in certain instances," *Adams*, 57 F.4th at 814—from some single-sex educational institutions and organizations, 20 U.S.C. § 1681(a)(1)-(9) to

"separate living facilities for the different sexes," *id.* § 1686. If sex included gender identity, then Title IX's regulations would not make sense. They allow for "separate [sports] teams for members of each sex," 34 C.F.R. § 106.41(b), and direct schools to "provide equal athletic opportunity for … both sexes" to "effectively accommodate the interests and abilities of members of both sexes," *id.* § 106.41(c). Title IX cannot require sex-blindness; it would make Title IX's text and rules incoherent.

Title IX's context confirms this conclusion. Although courts start with the words themselves, *Neese*, 2022 WL 1265925, at *14, a text "cannot be divorced from the circumstances existing at the time [the statute] was passed, and from the evil which Congress sought to correct and prevent," *United States v. Champlin Refin. Co.*, 341 U.S. 290, 297 (1951). Many courts have recognized that "Title IX was enacted in response to evidence of pervasive discrimination against women with respect to educational opportunities." *McCormick*, 370 F.3d at 286; *Cannon v. Univ. of Chi.*, 441 U.S. 677, 704 & n.36 (1979). "The circumstances and the evil" that motivated Title IX "are well-known." *Champlin*, 341 U.S. at 297. It had nothing to do with gender identity, and everything to do with sex.

No one seriously disputes that Title IX allows educational institutions to consider sex in some circumstances—athletics being case-in-point. It is almost universally understood that Title IX allows sex-specific sports. But to interpret Title IX as requiring sex blindness would make sex-specific sports illegal. Schools could no longer use "biology-based

classifications to separate physical education classes involving contact sports like boxing or rugby." *Neese v. Becerra*, No. 2:21-CV-163-Z, 2022 WL 16902425, at *11 (N.D. Tex. Nov. 11, 2022). Yet as 34 C.F.R. 106.41(b) and its passage confirm, Congress never intended Title IX to require sex-blindness in the first place.

Shortly after Title IX, Congress passed the Javits Amendments, directing the Health, Education, and Welfare department to publish athletics regulations. Pub. L. No. 93-380, § 844, 88 Stat. 484, 612 (Aug. 21, 1974). HEW proposed regulations that included provisions identical to the sports exception now codified at 34 C.F.R. 106.41(b). *Compare* Nondiscrimination on the Basis of Sex Under Federally Assisted Education Programs and Activities, 40 Fed. Reg. 24128, 24142–43 (1975), *with* 34 C.F.R. § 106.41. Congress then allowed the regulations to take effect. *See McCormick*, 441 U.S. at 287. Thus, Congress ratified the regulation's understanding of Title IX—an understanding that allows educational institutions to recognize biological sex (and the corresponding physiological differences that result from it) when necessary to ensure equal access in education, such as in sports. Congress endorsed this understanding again in 1987, defining Title IX's educational programs to cover *all education programs*, including sports. *See* 20 U.S.C. § 1687(2)(A); *Cohen v. Brown Univ.*, 991 F.2d 888, 894 (1st Cir. 1993). In all these ways, Congress reaffirmed that Title IX allows for sex-specific sports.

B.P.J. agrees that Title IX allows for this distinction, at least sometimes. The only question is what type of distinction Title IX allows "for members of each sex" in sports. The answer is biological sex. Section I.B.1 *supra*. This makes sense in the athletic context, where biological distinctions matter most. The Sports Act accommodates these differences by giving space for women to compete fairly. So it cannot violate Title IX when Title IX contemplates this precise distinction. Otherwise, any student who identifies as female could play female sports, even without taking drugs—something no major sports organization allows.

3. *Bostock* and *Grimm* do not forbid the Sports Act.

Bostock and *Grimm* do not require Title IX be interpreted to require West Virginia to allow B.P.J. on female sports teams.

First, *Bostock* doesn't mean Title IX forbids sex-specific sports. *Bostock* limited its ruling to Title VII employment. *Bostock v. Clayton Cnty.*, 140 S. Ct. 1731, 1753 (2020). Title VII "is a vastly different statute" than Title IX, *Jackson v. Birmingham Bd. of Educ.*, 544 U.S. 167, 168 (2005); *see Neese*, 2022 WL 16902425, at *8. And *Bostock*'s logic does not work when applied to sex-specific sports. Whereas *Bostock* interpreted Title VII to forbid considering sex when hiring and firing, Title IX often requires sex distinctions to accommodate physiological differences between males and females. Section I.B.2 *supra*. Thus, Title VII principles do not "automatically apply" to Title IX. *Meriwether v. Hartop*, 992 F.3d 492, 510 n.4 (6th Cir. 2021).

Indeed, there is a stark difference between firing employees because of their gender identity and providing sex-specific sports. Sex is "not relevant to the selection, evaluation, or compensation of employees." *Bostock*, 140 S. Ct. at 1741 (cleaned up). But in athletics, "gender is not an irrelevant characteristic." *Cohen v. Brown Univ.*, 101 F.3d 155, 176–78 (1st Cir. 1996). The 3,000+ page record shows this; the court below held this; and B.P.J.' own counsel seems to agree—suggesting such a "distinct[ion]" matters. App.1747-48. In fact, to achieve Title IX's purpose of giving women equal opportunity in athletics, Title IX *must* treat the sexes differently by designating specific teams for females. *See Clark ex rel. Clark v. Ariz. Interscholastic Ass'n (Clark II),* 886 F.2d 1191, 1193 (9th Cir. 1989). So courts have frequently refused to read Title VII requirements into Title IX's athletic context. *See Cohen*, 101 F.3d at 177.

Second, *Bostock* and *Grimm* did not conflate gender identity and biological sex. Those cases said that gender-identity discrimination necessarily considered sex, and this constituted sex discrimination under Title VII. *Bostock*, 140 S. Ct. at 1748; *Grimm*, 972 F.3d at 616. But those cases did not consider the converse—whether considering sex is always gender-identity discrimination. The Sports Act *only* considers biological sex, not gender identity. This does not treat B.P.J. "worse than others who are similarly situated." *Bostock*, 140 S. Ct. at 1740; *Grimm*, 972 F.3d at 618. Like all males, B.P.J. can participate on male teams. Like all

males, B.P.J. cannot play on female teams. That way, females have an equal opportunity to compete. That is what Title IX is all about.

II. The remaining factors favor protecting female athletes.

B.P.J. says the remaining factors favor an injunction because the injunction would allow B.P.J. to participate in sports, protect B.P.J.'s identity, and harm "no one." Mot. 20-21. But the injunction would thwart the will of West Virginia voters and harm all females who compete against and lose to B.P.J. this spring and beyond.

The Sports Act represents the state's considered judgment about the harms of allowing males to compete in female sports. After much debate, lawmakers chose to protect fair play and safety for biological females. While B.P.J. disagrees with that judgment, B.P.J. is wrong that the harm is one-sided. And this Court should consider *all* "the public consequences" that the injunction would bring. *Winter*, 555 U.S. at 24.

Consider the scores of girls who have already lost to B.P.J. in competitions. App.1729-46. B.P.J. stresses how the law affects only one person, but that's not how B.P.J.'s peers likely see it. When males displace females "even to the extent of one player … the goal of equal participation by females in interscholastic athletics is set back, not advanced." *Clark II*, 886 F.2d at 1193. And these girls—no less than B.P.J.—will experience their middle school years only once during their life. Their lives, interests, and dignity matter too. An injunction would injure them.

B.P.J. minimizes that injury. While B.P.J. may finish "near the back of the pack" sometimes, Mot. 2, bumping other girls down the standings harms them. Indeed, it "may not seem like a big deal to some, but placements matter to athletes." App.219. They understand that losing is a part of every sport, but they still want to earn their spot "fair and square." *Id.* And that goes even for B.P.J.'s "teammates" and "coaches" who have given B.P.J. "support." Mot. 9. *Every biological woman and girl* who participates in female sports benefits from sex-specific sports.

B.P.J. also may not finish "near the back of the pack" much longer. Mot. 2. Athletes train to win. And puberty can catapult a child from zero to hero quickly. As B.P.J. grows, B.P.J. will more likely begin beating the competition. While B.P.J. stresses that drugs can mitigate male puberty, the science says otherwise. *E.g.* Lidewij Sophia Boogers et al., *Transgender Girls Grow Tall: Adult Height Is Unaffected by GnRH Analogue and Estradiol Treatment*, The Journal of Clinical Endocrinology & Metabolism (June 6, 2022), https://bit.ly/3jW1PRK.

B.P.J. has another spot available. The Act designates sports by sex to accommodate the average physiological differences between the sexes, not diverse gender identities. B.P.J. may compete on the boys' team. App.1727. And in sports, many females across the country have long sought to compete on male teams because they desire more competition. *See O'Connor v. Bd. of Educ. of Sch. Dist. 23*, 449 U.S. 1301 (1980).

Finally, because West Virginians deserve to have a valid statute enforced, the "public interest is … served" by upholding the Act during this appeal. *Telvest, Inc. v. Bradshaw*, 618 F.2d 1029, 1036 (4th Cir. 1980). And while B.P.J. asks for a lone exception, the underlying rule has no limiting principle. If this court issues the requested injunction, what should schools say to the male student whose gender identity "switches back and forth"? App.1255 (121:3-6). Or the male with low testosterone? Or the male who lacks athletic talent? There's no principled reason for excluding these students if there's an exception for B.P.J. An exception for B.P.J. would only create more inequity. The public interest is better served by applying the law consistently to everyone.

This case is far past preliminary stages; the court below upheld the Act on summary judgment. And while this case concerns a debate fraught with emotions on both sides, that's all the more reason to defer to state lawmakers. *Andino v. Middleton*, 141 S. Ct. 9, 10 (2020) (Kavanaugh, J., concurring). It's their call to make. And they made a valid one.

CONCLUSION

This Court should deny the requested injunction.

Dated: February 15, 2023

By: */s/ John J. Bursch*

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CERTIFICATE OF COMPLIANCE

This response complies with the type-volume limitation of Fed. R. App. P. 27(d)(2)(A) because it contains 5,182 words, excluding the parts of the motion exempted by Fed. R. App. P. 32(f), as determined by the word counting feature of Microsoft Office 365.

This response complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type-style requirements of Fed. R. App. P. 32(a)(6) because it has been prepared in a proportionally spaced typeface using 14-point Century Schoolbook.

Dated: February 15, 2023

/s/ John J. Bursch
John J. Bursch

CERTIFICATE OF SERVICE

I hereby certify that on February 15, 2023, I electronically filed the foregoing response with the Clerk of the Court for the United States Court of Appeals for the Fourth Circuit by using the CM/ECF system, which will accomplish service on counsel for all parties through the Court's electronic filing system.

/s/ John J. Bursch
John J. Bursch

No. 23-1078, 23-1130

UNITED STATES COURT OF APPEALS
FOR THE FOURTH CIRCUIT

B.P.J., by her next friend and mother, HEATHER JACKSON,

Plaintiffs-Appellants,

v.

WEST VIRGINIA STATE BOARD OF EDUCATION; HARRISON COUNTY BOARD OF EDUCATION; WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION; W. CLAYTON BURCH, in his official capacity as State Superintendent; DORA STUTLER, in her official capacity as Harrison County Superintendent,

Defendants-Appellees,

and

THE STATE OF WEST VIRGINIA; LAINEY ARMISTEAD,

Intervenors-Appellees.

On Appeal from the United States District Court
for the Southern District of West Virginia (Charleston)
Case No. 2:21-cv-00316

APPELLEES WEST VIRGINIA STATE BOARD OF EDUCATION, WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION, W. CLAYTON BURCH, STATE OF WEST VIRGINIA AND LAINEY ARMISTEAD'S APPENDIX

Appellees West Virginia State Board of Education, West Virginia Secondary School Activities Commission, W. Clayton Burch, State of West Virginia, and Lainey Armistead jointly designate the following parts of the record to be included in the Appendix in support of their Joint Response to Motion for Injunction Pending Appeal:

ECF No.	Document Description	Page
25	Supplemental Declaration of Katelyn Kang	App.1
286-1	Appendix to Defendant-Intervenor's Motion for Summary Judgment	App.155
512	Memorandum Opinion and Order re: Motion for Summary Judgment	App.1706
515-3	Exhibit A to Plaintiff's Motion for a Stay Pending Appeal	App.1729
	Letter from Attorney Kathleen R. Hartnett to Clerk of Court for 9th Circuit dated January 27, 2023 in *Hecox v. Little*, Case Nos. 20-35813, 20-35815	App.1747

Dated: February 15, 2023

By: */s/ John J. Bursch*

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CERTIFICATE OF SERVICE

I hereby certify that on February 15, 2023, I electronically filed the foregoing appendix with the Clerk of the Court for the United States Court of Appeals for the Fourth Circuit by using the CM/ECF system, which will accomplish service on counsel for all parties through the Court's electronic filing system.

/s/ John J. Bursch
John J. Bursch

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA
CHARLESTON DIVISION

B.P.J., by her next friend and mother, HEATHER JACKSON, *Plaintiff*, v. WEST VIRGINIA STATE BOARD OF EDUCATION, HARRISON COUNTY BOARD OF EDUCATION, WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION, W. CLAYTON BURCH in his official capacity as State Superintendent, and DORA STUTLER in her official capacity as Harrison County Superintendent, *Defendants*.	Civil Action No. 2:21-cv-00316 Hon. Joseph R. Goodwin

SUPPLEMENTAL DECLARATION OF KATELYN KANG

I, Katelyn Kang, declare under penalty of perjury of the laws of the United States of America that the following is true and correct, and state:

1. I am an attorney with the law firm Cooley LLP, counsel of record for Plaintiff B.P.J, with her next friend and mother, Heather Jackson. The following is true of my own personal knowledge, and, if called as a witness, I would and could testify competently thereto.

2. As set forth below, I have reviewed audio recordings and provided full transcripts of the West Virginia Legislature's testimony regarding H.B. 3293. Each transcript is accurately described in the respective Exhibit and transcribed to the best of my ability. Each transcript contains timestamps of testimony as available on the West Virginia Legislature's public recordings, or in the audio files provided below. I have also provided hyperlinks where the recordings are available for review. As of the date of this filing, each of the hyperlinks is in working order.

3. Attached hereto as Exhibit A is a true and correct transcription of testimony heard during the West Virginia House of Delegates Education Committee Meeting on or around March 18, 2021. A recording of the testimony is available for download at: https://liquidfiles.cooley.com/link/02OaNUdHjag73hII87u1bQ (last accessed June 7, 2021).

4. Attached hereto as Exhibit B is a true and correct transcription of testimony heard during the West Virginia House of Delegates Judiciary Committee Meeting on or around March 18, 2021. A recording of the testimony is available at: https://liquidfiles.cooley.com/link/IBA66jDqugGj5EM04cqf2Q (last accessed June 7, 2021).

5. Attached hereto as Exhibit C is a true and correct transcription of testimony heard during the West Virginia House of Delegates Hearing on or around March 25, 2021. A recording of the testimony is available at: https://www.youtube.com/watch?app=desktop&v=af_ikMx-PJU (last accessed June 7, 2021).

6. Attached hereto as Exhibit D is a true and correct transcription of testimony heard during the first part of the West Virginia Senate Education Committee on or around April 1, 2021. A recording of the testimony is available at: http://sg001-harmony.sliq.net/00289/Harmony/en/PowerBrowser/PowerBrowserV2/20210330/-1/50887 (last accessed June 7, 2021).

7. Attached hereto as Exhibit E is a true and correct transcription of testimony heard during the second part of the West Virginia Senate Education Committee on or around April 1, 2021. A recording of the testimony is available at: http://sg001-harmony.sliq.net/00289/Harmony/en/PowerBrowser/PowerBrowserV2/20210401/-1/50893 (last accessed June 7, 2021).

8. Attached hereto as Exhibit F is a true and correct transcription of testimony heard during the West Virginia Senate Hearing on or around April 8, 2021. A recording of the testimony is available at: http://sg001-harmony.sliq.net/00289/Harmony/en/PowerBrowser/PowerBrowserV2/20210408/-1/50919 (accessed June 7, 2021).

I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct.

Executed on June 9, 2021

/s/ Katelyn Kang
Katelyn Kang, Esq.

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA
CHARLESTON DIVISION

B.P.J., by her next friend and mother, HEATHER JACKSON, *Plaintiff*, v. WEST VIRGINIA STATE BOARD OF EDUCATION, HARRISON COUNTY BOARD OF EDUCATION, WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION, W. CLAYTON BURCH in his official capacity as State Superintendent, and DORA STUTLER in her official capacity as Harrison County Superintendent, *Defendants*.	Civil Action No. 2:21-cv-00316 Hon. Joseph R. Goodwin

CERTIFICATE OF SERVICE

I, Andrew D. Barr, do hereby certify that on this 9th day of June, 2021, I electronically filed a true and exact copy of the ***Supplemental Declaration of Katelyn Kang*** with the Clerk of Court and all parties using the CM/ECF System.

/s/ Andrew D. Barr
Colorado Bar No. 49644
Admitted *pro hac vice*

EXHIBIT A

West Virginia House of Delegates Education Committee Discussion of H.B. 3293

March 18, 2021

Chairman Ellington:	00:00:00	And some of the potential witnesses today or testimony today. Um, clerk, uh, will take us out on quorum and we do have a quorum. So, uh, Vice Chair make a motion to accept the minutes from the previous meeting.
Vice Chair:	00:00:16	Uh, Mr. Chairman, I move the minutes as presented in the packet, be approved.
Chairman Ellington:	00:00:23	Uh, you heard the Vice Chair. Any, uh, questions, additions, deletions, directions? Chair here is now all in favor of accepting the minutes from the previous meeting, say aye.
Audience:	00:00:32	Aye.
Chairman Ellington:	00:00:34	Those opposed, nay. Ayes appear to have it. Ayes do have it. Minutes adopted. First on the agenda will be an originating bill. Is there any interest in the bill?
Counsel:	00:00:43	Chairman Ellington, I move the bill.
Chairman Ellington:	00:00:45	All right, Counsel. Counsel, explain the bill.
Counsel:	00:00:47	Thank you Chairman Ellington. This bill uh, mens' current code with regard to admission and, uh, participation in single-sex sports. Uh, the bill provides that the birth certificate required for admission to public school must confirm the pupil's sex at the time of birth and the birth certificate. If a birth certificate cannot be obtained, a signed physician's statement indicating the pupil's sex based solely on the pupil's unaltered internal and external reproductive anatomy must be submitted. The sex confirmed at the time of admission shall be the pupil's sex for the purposes of participating in SSAC, single-sex interscholastic athletic events. Prior to the students' participation, uh, the SSAC must verify with the county board that each student participating in the single-sex athletics is participating according to, uh, sex listed according to, um, the county provision. And this requirement does not require, it does not apply to co, coed sports, and that's the bill, Mr. Chairman.
Chairman Ellington:	00:01:51	All right. Any questions of the bill of Counsel? Gentlemen from the, uh, was it 43rd?
Del. Thompson:	00:02:00	Yep.

Chairman Ellington:	00:02:01	I got it right this time.
Del. Thompson:	00:02:10	Thank you Chairman Ellington. Counsel, would this, if this was adopted, would this apply to, um, all ages, middle school and high school?
Counsel:	00:02:19	Middle school and high school, not elementary.
Del. Thompson:	00:02:21	Mm-hmm (affirmative).
Counsel:	00:02:21	So secondary.
Del. Thompson:	00:02:22	Okay. Um, how would, the way this bill is written and drafted, you mentioned birth certificate, but, um, so are we going to re-have to require a birth certificate for every time a student wants to play basketball or football?
Counsel:	00:02:41	No, if you, if you look at the, um, the originating bill, I'm on page one, "Birth certificate is required upon admission to public school." So this just requires that the sex be identified at that time. And then uh, that is the sex that the county would follow, when the student is participating in sports. So know that, that that's already done at the enrollment admissions stage.
Del. Thompson:	00:03:14	Okay. And correct me if I'm wrong on this, but would this preclude any student from actually participating in a sport?
Counsel:	00:03:25	It would preclude an opposite sex person from participating in, like in, in, in the opposite sex sport.
Del. Thompson:	00:03:33	Okay. So would this, like so if a, uh, a person who was born biologically male, um, let me rephrase. A person was born biologically female, but later in life, um, they have began the transition process to identify and become a male. With this bill, and they're taking testosterone, they are taking, they're under medical care and, uh, they're transitioning. So this bill would require them to play, even if they're taking testosterone, they'd be required to play, uh, girls basketball versus boys basketball, which is what they would identify with?
Counsel:	00:04:14	Right. If I understood, if the person was born as a female, yes. That person would under this, under this bill as it is, would have to apply.
Del. Thompson:	00:04:23	Even though they're, they're transitioning take it. They might even, they, uh, you know, they appear masculine, they are taking testosterone, they would have to play female sports?
Counsel:	00:04:34	Correct.

Del. Thompson:	00:04:35	Okay. Um, have any other states adopted this?
Counsel:	00:04:43	Uh, to my knowledge, no other states have. Um, well actually, I, I think there are a couple of states that may have passed similar laws. Um, but in most cases, a lot of those are pending. Uh-
Del. Thompson:	00:04:56	Am I correct in North Carolina? Did they, did they attempt to pass something similar to this?
Counsel:	00:05:05	Just a second.
Del. Thompson:	00:05:06	I believe so. Like maybe around like 2016 or 2017, I thought.
Counsel:	00:05:12	Uh, hmm. I don't, I don't know about North Carolina. I know there are other states that have, um, introduced various types of legislation. And I don't, that doesn't mean that I think there, there definitely are other states that have looked at different sides of the issue and, um, some have addressed it in policy or have attempted to address it in the legislation. But, um, I don't know specifically about North Carolina.
Del. Thompson:	00:05:37	So currently, um, students right now who identify, um, with an opposite sex of what they were assigned at birth, they can play whatever sport that they identify with. Is that correct?
Counsel:	00:05:51	Uh, I, the way I understand it is that, a student would participate in whatever way they're identified in WVEIS. And so that would actually be up to how the county identifies the students. So-
Del. Thompson:	00:06:06	So this would—
Counsel:	00:06:07	I'm not sure, I think the answer would be, it depends on how the county identified the student in WVEIS.
Del. Thompson:	00:06:11	Okay. Um, at, at the appropriate time Chairman Ellington, I don't know who would be appropriate to maybe to really clarify that question for me and is there, maybe the SSAC or, uh, maybe someone from the State Department to kind of get a better understanding of that particular question at the appropriate time.
Chairman Ellington:	00:06:31	Will do.
Del. Thompson:	00:06:31	Um, thank you. And then, uh, Counsel is, to your knowledge, um, would this apply to, uh, would this apply only, uh, like you said, secondary school in middle school and high school. Would this have any implications to collegiate sports?
Counsel:	00:06:54	No, it would not.

Del. Thompson:	00:06:55	Okay. Uh, no further questions at this time. I may have some later though.
Chairman Ellington:	00:07:01	All right. Gentleman from the 67th.
Del. Doyle:	00:07:04	Uh, thank you, Chairman Ellington. Uh, Counsel, to follow up on that. Um, the uh, and, and as background, um, some of us, some may be aware that this past football season Vanderbilt University had a female place kicker. Uh, she kicked in several games and is, am I correct that if we pass this bill, that would be prohibited, say for a high school football team in West Virginia, but it would be okay for a college team?
Counsel:	00:07:39	I believe that in an, I'm, maybe someone from the, um, department will be able to um, clarify this. But-
Del. Doyle:	00:07:39	Yeah, I, I-
Counsel:	00:07:47	Even under title, Title IX, if there is not a female sport that the female, that the females must be able to join a male team.
Del. Doyle:	00:07:59	So-
Counsel:	00:07:59	So I don't think that is correct.
Del. Doyle:	00:08:01	So if a high school had a female football team, uh, that person would have to kick for the female football team?
Counsel:	00:08:08	Correct.
Del. Doyle:	00:08:09	But would not be prohibited from kicking for the male football team? Uh, do you know of any high schools in West Virginia that have female football teams?
Counsel:	00:08:19	I don't.
Del. Doyle:	00:08:19	Thank you. Uh, and, and as background, what had happened here was, two of the place kickers for Vanderbilt, were injured. And the, the woman, uh, this woman was, was a first-rate soccer player and a number of the male football players went to the coach and said, "Listen, we need a kicker and she can do it." This would be prohibited for a high school in West Virginia. Is that correct if this bill passed?
Counsel:	00:08:44	I don't think so, no. Not according to Title IX.
Del. Doyle:	00:08:48	So you think Title IX might override this, uh, the, the statute?
Counsel:	00:08:55	When there is not a female sport, um, federal law-

Del. Doyle:	00:09:01	Okay.
Counsel:	00:09:01	States that a female-
Del. Doyle:	00:09:02	Okay.
Counsel:	00:09:02	Has to be allowed to play, then becomes a coed team. And so that, that and under this bill a coed team is not [crosstalk 00:09:09].
Del. Doyle:	00:09:08	So you're, you're . . . Yes, okay. So you are saying that federal law would trump this in that kind of a situation?
Counsel:	00:09:13	Yes.
Del. Doyle:	00:09:14	Thank you.
Chairman Ellington:	00:09:16	Further questions of Counsel, Gentleman from 16th.
Del. Hornbuckle:	00:09:20	Uh, thank you Mr. Chair. And so to piggyback off the, off the gentleman's question and the Gentleman from the 43rd. If there was a transgender male, uh, that started out life as a male, uh, one years old becomes a female and they're playing for their high school and they are competing in we'll just say, uh, swimming. And there is only a male team, will, will that individual be permitted to, to be on the, on the male team?
Counsel:	00:10:00	The individual was born male?
Del. Hornbuckle:	00:10:01	Mm-hmm (affirmative).
Counsel:	00:10:01	Yes.
Del. Hornbuckle:	00:10:04	And, and vice versa?
Counsel:	00:10:07	If there was, if there was a female?
Del. Hornbuckle:	00:10:09	Yes ma'am.
Counsel:	00:10:11	If there's not a female team, then that female would be allowed to participate on the male team.
Del. Hornbuckle:	00:10:16	So, so-
Counsel:	00:10:17	And then it would become coed.
Del. Hornbuckle:	00:10:19	Okay. So the, the, the, the, the, what the Gentleman from the 43rd said, uh, a, uh, the individual that started out as a female, uh, then became a male, was taking the hormones and all those

		things, if there was no, uh, I guess there was only a, a female team, then they would, they would be able to be on that or a male team, I guess, any of the team they would have to be allowed, correct?
Counsel:	00:10:43	Uh, I, I, I'm not, I didn't follow on-
Chairman Ellington:	00:10:47	Clarify your question.
Del. Hornbuckle:	00:10:48	The question would be, they, they would be permitted to, to participate on any team, if there was only one team. So regardless of the individual, if there was only a male team, they will be permitted to participate on a female team?
Counsel:	00:11:01	The federal law is designed to help women excel in sports. So the, the way that it works if there's not a female team, that female can participate on the male, in the male sport, which then becomes coed, but it does not go the other way around.
Del. Hornbuckle:	00:11:19	Okay. Okay. Thank you.
Chairman Ellington:	00:11:26	Gentleman from the 19th.
Del. Griffith:	00:11:31	Thank you Mr. Chairman. And I'm trying to think of scenarios here, whereby this might be um, unclear. And one is, there are many schools who have volleyball programs for girls only, would this mean that any boy who so claimed would be able to go out for the volleyball team, because there was no equivalent male team. Uh, would that be a possible scenario?
Counsel:	00:12:01	No.
Del. Griffith:	00:12:03	Why would that be? Uh.
Counsel:	00:12:08	Currently, uh, a female sports are female sports, and males are not included in that. And this bill would preclude a person who was born male, who then identi—, that person would have to continue to play as a male.
Del. Griffith:	00:12:23	Okay.
Counsel:	00:12:24	Does that answer your question?
Del. Griffith:	00:12:25	Yes. Thank you.
Chairman Ellington:	00:12:27	[inaudible 00:12:27] the gentlemen that has been challenged before, and they were told they need to start a male team if they were gonna have the male play on it. So further questions to Counsel? Lady from 51st.

Del. Walker:	00:12:38	Thank you, Mr. Chairman. Thank you, Counsel. So I have a question, because we do have a foster care system here, and we do have trans individuals in that foster care system. And as you know and we all know, all of those documents don;t come with the student. So, if we had a trans student in a new foster home that did not have the documents, it takes even a while to get a, a doctor's visit scheduled with how we are, so with DHHR. So would the coach assume what this person's identity is, gender?
Counsel:	00:13:21	According to statute, uh, in order to be admitted in the current statute, I'm on page one, the pupil has to have either a birth certificate or an affidavit of why they don't, which I think would be the secondary case, the case in this with the foster child. Um, and then they need the signed, the, if they didn't have the birth certificate, would need the physician statement.
Del. Walker:	00:13:47	So we would not allow this child to play because we didn't have that documentation, and they may not have a, a doctor's appointment at that time?
Counsel:	00:13:57	I, in order to be admitted, that's, that's the way this bill reads.
Del. Walker:	00:14:02	So, and I'm not sure if you can answer this question for me. What do we do with children that are born with both sex organs?
Counsel:	00:14:15	I do not know.
Del. Walker:	00:14:17	At the appropriate time, Mr. Chair, if we have anyone to answer that question?
Chairman Ellington:	00:14:24	[inaudible 14:23] Any further questions Counsel? Gentleman from the 43rd.
Del. Thompson:	00:14:35	Thank you Mr. Chairman. Counsel, on page one of the bill under, uh, section two, line 10 and 11. "So a signed physician statement indicating the pupil's sex based solely on the pupil's unaltered internal and external reproductive anatomy." So if we, I'm assuming this is if that a birth certificate cannot be obtained?
Counsel:	00:15:02	Correct.
Del. Thompson:	00:15:03	So we're gonna subject the child to go to the, a doctor and essentially show them their genitalia to prove their, what genitals they have. Is that what this says?
Counsel:	00:15:16	And I'm assuming that doctors have those types of exams in a [crosstalk 00:15:21].

Del. Thompson:	00:15:22	Well, I'm sure, I'm sure they do for medical purposes, not just to, you know, show and tell. But, um, is that, is that what that reads that they would, they would have to show their genitals to a doctor to prove their?
Counsel:	00:15:35	I'm not a doctor. I don't know what a doctor would require.
Chairman Ellington:	00:15:46	I assume the Gentleman wants to ask the chair questions.
Del. Thompson:	00:15:49	Yeah. (laughs)
Chairman Ellington:	00:15:50	Um, there are ways to tell on exam what their gender is.
Del. Thompson:	00:15:55	Without?
Chairman Ellington:	00:15:57	Well, I mean, you do an exam, pediatricians do exams all the time.
Del. Thompson:	00:16:00	Right.
Chairman Ellington:	00:16:00	Children, and-
Del. Thompson:	00:16:01	I'm talking about like a—
Chairman Ellington:	00:16:02	Adolescents, you would do an exam and they do have a physical exams at those ages too. So yes, you would probably have to determine whether it was altered or not.
Del. Thompson:	00:16:11	By like physical—
Chairman Ellington:	00:16:12	Right.
Del. Thompson:	00:16:13	Observation? Okay. Uh, thank you Mr. Chair and Counsel.
Chairman Ellington:	00:16:21	Lady from the 30th, 41st?
Del. Tully:	00:16:24	The uh, Counsel, do you, are you aware if the WVSSAC requires a physical, sports physical for participation in sports at the secondary level in West Virginia?
Counsel:	00:16:37	I don't know if it's the SSAC or the county. Um, I'll, I'll defer to the department on that.
Del. Tully:	00:16:41	Okay. I believe it's the WVSSAC, 'cause I think it's a pretty standard form. Actually, I have it right here. And, um, it also talks about a physical exam and it talks about actually, when you do the physical exam for the G, the genital urinary system, it talks about like actually doing a physical exam for inguinal

hernias, which are down in the groin folds for those that don't know, and also looking for bilaterally descended testicles.

So there's, those students aren't gonna be put through probably an unnecessary exam that they wouldn't already get to play sports. Would that be a correct assumption based upon this?

Counsel:	00:17:18	If, if that's what it says, yes.
Del. Tully:	00:17:20	Thank you.
Chairman Ellington:	00:17:22	Gentleman from 26th?
Del. Evans:	00:17:28	Thank, thank you Mr. Chairman. Um, are there any girls in West Virginia currently playing the high school football?
Counsel:	00:17:38	I believe that the Delegate just said that there was. Maybe that was a college. I'm not sure.
Chairman Ellington:	00:17:44	[inaudible 00:17:44]. Yeah.
Counsel:	00:17:44	I, I'm not sure.
Del. Evans:	00:17:46	I believe there definitely are. I stood on the football field this year against a team that definitely had a girl on the football field. We went to Webster County at one time, Webster County had a kicker female. So, I guess it is true that girls can play male sports.
Counsel:	00:18:04	Yes.
Del. Evans :	00:18:05	But males cannot play female sports?
Counsel:	00:18:09	That's currently the way, the current law—
Del. Evans:	00:18:10	So how does this, how does this bill then affect them, or does it affect it at all?
Counsel:	00:18:17	This bill would affect those that changed their sex after birth.
Del. Evans:	00:18:22	Okay. So it has nothing to do with current sex or like, like I'm a guy, I'm not going to change that. So it would not affect me?
Counsel:	00:18:30	It would not affect you.
Del. Evans:	00:18:31	Okay, that's all I want to know. Thank you.
Chairman Ellington:	00:18:34	Further questions to Counsel? I believe by leave of the committee, we had requests from the school system. Uh, Ms.

Sarah, would you like to come on up and . . Ms. Stewart, you've been sworn in before. I think there was a question regarding the school system, as far as what's currently practiced. Um, Gentleman from 43rd, do you have questions and Sarah, if you would just state name and title for the people listening in on.

Sarah Stewart: 00:19:05 Sarah Stewart, West Virginia Department of Education.

Chairman Ellington: 00:19:09 Gentleman.

Del. Thompson: 00:19:10 Thank you Mr. Chairman, thank you Sarah. I appreciate you being here again. Um, So my question was, currently what is in place? This bill, it's gonna change? Uh, currently right now, if a student who was born um, biologically female, but is a, a high school student and is transitioning, identifies as a male and is transitioning taking hormones, uh, and she wants to play or he wants to play basketball. How, how is that working right now? Is that a county by county decision? Is it a school decision? Uh, is there, what, what is currently working or in place?

Sarah Stewart: 00:19:49 Let me be clear that I am a representative from the Department of Education and not a representative from the WVSSAC.

Del. Thompson: 00:19:57 Correct, I understand that. And I, I, I might have a question for them about that as well, but from your perspective from that.

Sarah Stewart: 00:20:02 I just, I wanted to make that clear and I, 'cause I don't want to speak for them. It is my understanding, that currently there is no specific rule that address, squarely addresses, transgender student participation in extracurricular activities. Um, there are Title IX considerations that do come into play with, um, coed sports.

And if there is only one sport at a, at a, um, particular school that, that we have to be mindful of Title IX and make sure those opportunities are made available. I do believe there is also a rule that if separate teams are maintained, for example a girl's basketball team and a boy's basketball team, that they, I believe there is an SSAC rule, SSAC guidance that directs that, um, that you play on the, on this, um, whatever sex, um, that the, that the students is, that does not address however, any transgender student issues.

Del. Thompson: 00:21:01 Okay. Does your department have any policy on transgender students at all or has that not been addressed?

Sarah Stewart: 00:21:09 Uh, we, um, there is currently a Fourth Circuit decision that is being appealed to the, the United States Supreme Court, dealing with, um, guidance relating to transgender students. Um, as we are in the Fourth Circuit, we are bound at least at this point, by

that guidance. The department has not put out any specific guidance, but it will just be mindful of, of the courts' um, direction in that regard. And should that change, we'll appropriately revise and advise the counties appropriately.

Del. Thompson: 00:21:39 If this bill is passed and we later learn, I don't know, whether the outcome of that court decision may or may not be, could this bill then potentially be in violation of that?

Sarah Stewart: 00:21:47 I don't want to speculate on what the US Supreme Court would take.

Del. Thompson: 00:21:54 Right. But not speculation, but is it a possibility that this bill would be in violation?

Sarah Stewart: 00:21:59 It, it could be.

Del. Thompson: 00:22:00 Okay. Has, has your office received, um, calls, concerns, complaints regarding anything remotely related to this about students participating in, in sports or extracurricular activities that you know, that they're . . .?

Sarah Stewart: 00:22:17 Surrounding the conversation today, no, we have not.

Del. Thompson: 00:22:20 Okay. Um, that's all I have for you Sarah. Thank you. I appreciate it.

Chairman Ellington: 00:22:28 Gentleman, from the 16th.

Del. Hornbuckle: 00:22:33 Thank you Mr. Chair. Um, and thank you for being here today. Uh, giving your legal expertise, um, would the WVSSAC have the ability, uh, uh, to set a guideline concerning transgender participation in sports on their own?

Sarah Stewart: 00:22:50 I do not want to speak for whether or not the WVSSAC— I'm not um, comfortable talking to their authorizing statute and where, where their rulemaking ability lies and ends. Potentially they could, but I think it's a better question addressed to them.

Del. Hornbuckle: 00:23:04 And are they here today? Oh, I guess not. Oh, thank you.

Chairman Ellington: 00:23:11 I have a copy of the uh, SSA, WVSSAC um, physical exam certificate, um, Delegate from the 41st asked that it be submitted as a, as an addendum. So, if anyone wants to look at it, they can afterwards. Lady from the 51st.

Del. Walker: 00:23:33 Thank you Mr. Chairman. Thank you, Sarah for being in here. So we just heard that . . . So, I have a question. When there's a transgender student that is entering K-12 public education, do

you require besides when that student first entered school, a birth certificate and that student is going through transition, do they need to report anything to the school system?

Sarah Stewart: 00:24:00 No.

Del. Walker: 00:24:03 Would that WVEIS, will WVEIS change the identification of the child, once they start their transition, if that child and parent wanted that to be changed?

Sarah Stewart: 00:24:13 I do not believe at the state level that we have any hard rules or regulations regarding, um, if a, a transgender student wishes to change their designation in WVEIS. Um, I believe counties perhaps have encountered this and have handled it on the local level, um, and appropriately we have not received any complaints at our office regarding that.

Del. Walker: 00:24:40 Okay. Thank you very much.

Chairman Ellington: 00:24:42 Further questions? Gentleman from the 65th?

Del. Clark: 00:24:49 Yes. I've got a current question in regards to, um, we're hearing a lot of talk about, uh, uh, a child born as a female and is transitioning to a male.

PART 1 OF 4 ENDS [00:25:04]

Del. Clark: 00:25:01 In high school, on the Board of Education, is, is it a suspendable offense for taking performance enhancing drugs?

Sarah Stewart: 00:25:15 Counties do have, um, illegal or controlled substance and illegal substance abuse policies. Um, I think it should be, I rel- I hesitate to speculate and make a broad statement. If you are taking something under the supervision of a physician, um, I, I, I'm not sure. Um, there would have to be a conversation between the county board and the parents about whether or not it was appropriate. But I'm hesitant to say that a, a student that is taking something that's prescribed by a physician could then be disciplined on the school level for that.

Del. Clark: 00:25:47 Okay. Um, I reserve my right to ask the same question later.

Chairman Ellington: 00:25:52 Okay. Further questions of, uh, Ms. Stewart? None. Thank you, Ms. Stewart. Further questions of Counsel? Other questions? Any amendments? Lady from the 51st, uh, questions or amendment?

Del. Walker: 00:26:13 Question.

Chairman Ellington:	00:26:14	Okay. Of who? Counsel?
Del. Walker:	00:26:15	Yeah. Can we get, um-
Chairman Ellington:	00:26:19	Speak into your mic, please. I can't hear you.
Del. Walker:	00:26:21	Can we get someone from, uh, Fairness West Virginia? I have some questions for you. Thank you.
Chairman Ellington:	00:26:27	By leave of the committee. Would you state your name and title, sir? I know you've already been sworn in.
Andrew Schneider:	00:26:34	Thank you. Um, my name is Andrew Schneider, and I'm the Executive Direction of Fairness West Virginia.
Chairman Ellington:	00:26:40	All right Mr. Schneider. Lady from the 51st has a question.
Del. Walker:	00:26:43	Thank you, Chairman Ellington. Thank you, Andrew, for being here.
Andrew Schneider:	00:26:45	Thank you.
Del. Walker:	00:26:46	Can you tell me if any trans women have dominated any sporting events?
Andrew Schneider:	00:26:53	Not one athlete who has transitioned has been successful at the highest levels of sport. The lack of success is a strong indication of the fairness of permitting transgender women to compete against cisgender women. In fact, the problem with these bills is that they, they say that all bills, all boys are stronger than all girls. And that is just incorrect. Uh, the, look at a young woman from North Carolina named Heaven Fitch, who won the high school state wrestling championship last year. I bring this story up because Heaven is a ci- is a cisgender girl, and yet she beat a bunch of cisgender boys. Young girls have many skills that are better than young boys. What counts as an advantage may shift dramatically depending on the sport. For example, factors such as height, weight, and reaction time all affect a participant's advantage depending on the sport. A young woman on the volleyball team may be very tall, and yet few people would consider that to be an unfair competitive advantage in her sport. Similarly, a man on the swimming team may have a naturally high hemoglobin count, enabling him to

take in more oxygen, but he would not be barred from swimming for that reason.

Some cisgender women, like Olymp- Olympic athlete Caster Semenya, naturally produce high levels of testosterone compared to other cisgender women. All bodies are different, and there is no single physical trait that determines if a student will excel in a sport.

Del. Walker: 00:28:27 Do you know if this has ever occurred in West Virginia? Have you received any calls from anyone in assistance with?

Andrew Schneider: 00:28:38 We have not. This appears to be a, a solution in search of a problem. Uh, there is no, uh, as I said before, there is no, uh, pattern or examples of, uh, transgender women dominating school sports in West Virginia.

Del. Walker: 00:28:59 Do you know how many, um, transgender persons that we have playing any sports in West Virginia, K through 12? Or secondary sports, sorry.

Andrew Schneider: 00:29:11 I, I'm not aware of, that, that data, that number. Um, and I don't know who would, or if that, that kind of statistic is even kept, um, by our secondary schools. Um, but I would imagine there's not many, and clearly it's not an issue, because we, no one has received any complaints about it. I mean, these, these bills come from national organizations that-

Chairman Ellington: 00:29:39 Um, limit to the question please.

Andrew Schneider: 00:29:41 Okay, sorry.

Del. Walker: 00:29:41 Thank you.

Chairman Ellington: 00:29:42 I, I told you beforehand, we're not going into a prepared speech.

Andrew Schneider: 00:29:45 Okay.

Del. Walker: 00:29:47 Thank you, Mr. Schneider.

Andrew Schneider: 00:29:47 Thank you.

Chairman Ellington: 00:29:49 Further questions [inaudible 00:29:50]? Gentleman from the 16th?

Del. Hornbuckle: 00:29:53 Thank you, Chairman Ellington. At the appropriate time, I'd like to ask somebody from the civil liberties group.

Chairman Ellington:	00:29:59	Any further questions for Mr. Schneider? All right. Mr. Baumwell, you, uh, have been sworn in. If you would name your name and title.
Eli Baumwell:	00:30:13	Uh, thank you, Chairman Ellington. My name is Eli Baumwell and I'm the policy director for the American Civil Liberties Union of West Virginia.
Chairman Ellington:	00:30:19	All right. Gentleman from the 16th has a question. Question? Gentleman from the, uh, 16th?
Del. Hornbuckle:	00:30:29	Thank you, Mr. Chair. Um, and thank you for being here today, sir. Uh, I got a couple of questions for you. We'll try to be brief. Uh, how will this, uh, affect the state's obligations under Title IX?
Eli Baumwell:	00:30:39	Uh, Delegate, I do believe, looking at this legislation, it does risk, um, a significant amount of federal funding under Title IX. Um, looking at federal courts, um, as I've looked at some of this legislation, Idaho was enjoined from this, and as Counsel mentioned, um, here in the Fourth Circuit, following the Bo-Bostock ruling, um, we have, we have got Fourth Circuit ruling saying that transgender individuals have to, have to be given, um, access to space based on their gender identity. That's Bo-coming from Bostock. There's also now federal executive orders, um, following from those, those ruling in in alignment, rather, with those. Um, so we do risk violating Title IX based on these federal court rulings.
Del. Hornbuckle:	00:31:25	Uh, when you speak about violations, uh, per any civil law, are there any privacy concerns here with students?
Eli Baumwell:	00:31:32	There are potential privacy concerns. While students, um, may have to go under, undergo medical examinations to clear them for sports, um, having to disclose, um, whether it be their birth sex or any, uh, gender affirming therapy they might be undergoing is a violation of their potential, is a potentially violation of their privacy.
Del. Hornbuckle:	00:31:48	Okay. Uh, uh, legally could this have a negative impact on any other students?
Eli Baumwell:	00:31:55	This particular legislation is tailored solely to, um, athletics. Uh, looking at this particular, um, bill that just originated. Um, other, other pieces of legislation have been more broad, but this one is limited just to athletics.

Del. Hornbuckle:	00:32:11	Uh, has there been any case law on, uh, deni- denial of participation leading to any type of, uh, mental health issues with transgender youth?
Eli Baumwell:	00:32:21	Well, absolutely. There, there's been a lot of, um, research rather. I, I shouldn't say there's case law. But there is a lot of research into, um, the, the mental health of trans youth and what can be done to protect their mental health. And being treated, um, based by their gen- gender identity and being an op- given an opportunity to, um, participate in sports and participate in social activities has certainly been linked with better, uh, mental health outcomes, both in the short and long term.
Del. Hornbuckle:	00:32:53	All right. Thank you.
Chairman Ellington:	00:32:55	Further questions for Mr. Baumwell? None? Thank you, sir.
Eli Baumwell:	00:33:01	Thank you.
Chairman Ellington:	00:33:01	Further questions of any of the other witnesses? Gentleman from the 65th, who are you?
Del. Clark:	00:33:06	Do we have anybody from the, uh, West Virginia SSAC here?
Chairman Ellington:	00:33:09	Uh, unfortunately, they are over on our Senate colleagues' side, uh, working on a bill that's over there at the moment.
Del. Clark:	00:33:15	Okay.
Chairman Ellington:	00:33:17	Further questions? Any further questions of Counsel? Chair hears none. Any amendments? None? Chair recognized Vice Chair for motion.
Vice Chair:	00:33:29	Mr. Chairman, I move that originating House Bill relating to participation in single-sex secondary school winter scholastic athletic events be reported to the floor, with the recommendation that it do pass.
Chairman Ellington:	00:33:42	Gentleman uh, moved that, uh, House Bill originating on participation in single-sex secondary school ath- interco- interscholastic athletic events be reported to the floor with a recommendation it do pass. Is there any questions or discussion? Gentleman from the 43rd.
Del. Thompson:	00:34:00	I, I have a . . . Thank you, Chairman Ellington. I have a question. Would it be possible to, uh, lay this over until we could speak to someone from the, the SSAC? To like, actually hear from how that, s- since that is their, kind of, you know, what they kind of control and govern, since that would affect them?

Chairman Ellington:	00:34:19	Are you moving to lay it over?
Del. Thompson:	00:34:21	Yes.
Chairman Ellington:	00:34:22	If you move to lay it over, then I guess-
Del. Thompson:	00:34:23	Just one day. Or the next meeting.
Chairman Ellington:	00:34:25	Well, we don't have one day. (laughs) Um.
Del. Thompson:	00:34:29	We don't have one day?
Chairman Ellington:	00:34:30	Well, we don't have a meeting tomorrow.
Del. Thompson:	00:34:32	Oh, it's Wednesday. Thursday.
Chairman Ellington:	00:34:37	Gentleman moves that we lay this over. That takes a vote and it's non-debatable. So all in favor would say aye.
Del. Thompson:	00:34:43	Aye.
Chairman Ellington:	00:34:44	Those opposed, nay. I would say nays have a-
Del. Thompson:	00:34:49	Division?
Chairman Ellington:	00:34:50	Well, he had the s- he had the, uh, microphone, so [inaudible 00:34:53]. (laughs)
Del. Thompson:	00:34:56	Thank you. That worked. (laughs)
Chairman Ellington:	00:34:58	I could have used my microphone, too. So motion r-
Del. Thompson:	00:35:02	I did call division, though.
Chairman Ellington:	00:35:03	Motion, uh, rejected.
Del. Thompson:	00:35:05	Could I call div- I called division.
Chairman Ellington:	00:35:07	I think I had already called it, but. Well, okay, we'll call division. Is it sustained? All right, we have it sustained. The clerk will call, call the vote on that. So, if you vote yay, that means we lay it over. If you, uh, vote nay, that means it is rejected. All right. Well, those that are in favor of the Gentleman's, uh, motion to lay it over, raise your hands. That's six. Yeah. There's six.

All right. Those, uh, those opposed to the Gentleman's motion, raise your hands. All right, six to thirteen. All right, motion rejected.

Any further amendments? Or actually, we're on discussion. Gentleman from the, uh, 60-uh-7th?

Del. Doyle: 00:36:27

Uh, uh, thank you, Chairman Ellington. Um, I oppose the bill for, for, for two reasons. First, uh, in our questions of Counsel, uh, I think it became pretty obvious that, uh, we're on rather dangerous legal ground r- uh, relating to the feds if we pass this bill a- as it is written. So that is one.

A- also, uh, uh, the one, uh, person who testified, the gentleman from Fairness, mentioned, uh, something that I had heard before, as one of the arguments in favor of this, and that is that males are inherently stronger than females. And I, I just have a, a vignette I'd like to, uh, to go over. I've remembered this ever, ever since it happened.

When I was a, a rifle platoon leader in Vietnam, I had a guy in my platoon that weighed barely 100 pounds. He had no upper body strength whatsoever. And the rules were, we have two, what are called, uh, uh, uh, heavy machine guns there, uh, uh, uh, 7.62 machine guns, it's roughly a 30 caliber for those people who are not into metrics. And you had to carry that and 200 rounds of ammunition, and he couldn't carry it.

So, whenever it was his turn, somebody else just volunteered. I am a big time women's college basketball fan, and I'm telling you, every time I see a game, there are people out there playing that could have easily carried that machine gun and 200 rounds of ammunition.

So that's why, uh, I think is p- another part of the reason I think this is a bad bill, and I'm going vote no. Thanks.

Chairman Ellington: 00:38:06

Anyone else wish to speak? Gentleman from the 43rd?

Del. Thompson: 00:38:11

Thank you, Chairman Ellington. I also want to speak a- against this bill for a multitude of reasons. First, because, I mean, I would like to hear from the SSAC of how this would, you know, uh, impact their rules and impact and see, have a better understanding of how this would be implemented.

I'm also going speak against it for the reason, and I ask what I asked Counsel, pertaining to, if I have a daughter, and she's playing basketball, and she's on a basketball team, and with this bill, um, a person who was born female, identified as male, was taking testosterone, is transitioning, is going to be on the same

team as my daughter, outperforming her, because my daughter is not taking testosterone, this is not, this is not going to be fair to the children of West Virginia.

I under, were there, whatever side you fall on this, it's not, that's not fair. Uh, and also, I have a major problem, and as the, the Lady from the 41st mentioned about the, the sports physicals, I played basketball and baseball through middle and high school, and um, I, I had to do a physical every year, but I never once, uh, was subjected to, I guess I could've been, to the, the hernia check. So, I have a major problem with forcing children, middle school children or high school children, uh, to, for this purpose, to specifically . . . If it's for a medical reason, I totally understand it and get it, but just to par- just to prove their gender, I don't think that's right. And I don't think any of us would want our children subjected to that.

Uh, so for those reasons, I, uh, strongly, uh, do not support this bill, and I urge you all to do the same. Thank you.

Chairman Ellington: 00:39:55 Anyone else wishing to speak to the bill? Lady from the 41st.

Del. Tully: 00:39:58 I'm just want to give a point of clarification, actually, on the addendum, the thing that I provided from the WVSSAC that was the addendum. It was revised in May of 2016, so I don't know when the hernia checks, uh, first originated, but I don't . . . You probably graduated well after 2016, I would assume, sir.

Chairman Ellington: 00:40:22 Anyone else wishing to speak to the bill? All right, before us is the motion. All those in favor would say aye. Those opposed, nay. Gentleman from the 53rd?

The Chair is undecided, so uh, let's do that again. All those in favor say aye. Those opposed, nay. (laughs) Got a loud group there. Okay. Division has been called. Yeah, I'm still undecided on that.

So, division. All those in favor, raise your hands. [inaudible 00:41:18] Those opposed, raise your hands. Fifteen, six? Fifteen to six. Motion adopted.

Next thing on the agenda is House Bill 2364. Any interest in the bill?

EXHIBIT B

West Virginia House of Delegates Judiciary Committee Discussion of H.B. 3293

March 18, 2021

Chairman Capito:	00:41	. . . left on the agenda. The bill is 3293. We have a guest presenter with us. We're happy to have her back with the co- with the committee today. And whenever she is ready, she may proceed.
Counsel:	00:56	I thank you Mr., Mr. Chairman. This committee substitute provides that for the purposes of participating in Single Sex Secondary School Interscholastic Athletic events, under the controlled supervision and regulation of the Secondary School Acti- Activities Commission, each county school district shall confirm that the sex of the people identified, on the pupil's original birth certificate provided on his or her admission to public school is the pupil's sex at the time of birth. If an original birth certificate was not provided or if the birth certificate provided does not indicate the pupil's sex at the time of birth, a signed physician's statement indicating the pupil's sex based solely on the pupil's unaltered, internal and external reproductive anatomy must be submitted prior to the pupil's participation in single sex secondary school interscholastic ac- ac- athletic events. Prior to the student's participation in single sex inter- secondary school interscholastic athletic events, the SSAC must verify with each county board that each student participating in Single Sex Interscholastic events is participating according to the student's sex at the time of birth. This requirement does not apply to co-educational, uh, sports. And that's a summary of the bill.
Chairman Capito:	02:15	Thank you very much, Counsel. I appreciate that presentation. Are there questions for Counsel? Are there questions? The Lady from the 4th.
Del. Zukoff:	02:26	Thank you Mr. Speaker. Do you know if there's any federal re- any federal, um, any federal courts looking at this, um, issue currently?
Counsel:	02:36	Yeah. There is a case, uh. Grimm versus, I'm not sure I'm going to pronounce the, Glo- Glo- Gloucester County School Board. It's a Fourth Circuit case. It's, it has to do with, uh, a student, uh, transgender male's right to use a male bathroom.
Del. Zukoff:	03:00	Okay. Nothing involving sports, though?
Counsel:	03:06	It, it does not, uh, does not-
Del. Zukoff:	03:07	Specifically?

Counsel:	03:08	. . . directly a- uh, state anything about sports.
Del. Zukoff:	03:11	Okay. Have we had this come up before the Department of Education? Have we had any issues around this, this bill that, transgender students participating in sports come before the Department of Education as a concern?
Counsel:	03:26	It is my understanding that there have been no problems on the county level.
Del. Zukoff:	03:26	Okay. I checked with mine and there weren't. That's why I was just curious if you knew from a statewide perspective.
Counsel:	03:28	That's what they'd indicated to me. There had been no problems.
Del. Zukoff:	03:39	Thank you.
Chairman Capito:	03:40	Gentleman from the 37th.
Del. Pushkin:	03:44	Thank you, Mr. Chairman. Thank you, counsel. Um, and I'm sorry I missed the first part of the, of your, uh, presentation of the, uh, of the bill here. But would this preclude a female student from participating in a male sport?
Counsel:	03:59	No.
Del. Pushkin:	04:00	It would not?
Counsel:	04:01	No. Under Title IX, a female has to be allowed to participate in a sport. So, if the, for instance, there are no female football, then the female would be allowed to play in, uh, football, um.
Del. Pushkin:	04:15	All right. And that would be, I mean the only case I can, cases in West Virginia I could think of would be in sports where there aren't female sports that, that the, that the girls participate in the boys sports. That's the only time I've ever heard of it even happen, anything like this happening in West Virginia.
Counsel:	04:29	It's my understanding there have not been any issues. I, and the, the re- the executive director of the SSAC is here if anyone wants to talk to him. But I believe there are only, the only solely female sports are volleyball and softball.
Del. Pushkin:	04:46	So this only affects those two sports?
Counsel:	04:46	Well, well it would affect the single sex. So, in other words, you have single sex—you have women's basketball and, and men's basketball or-

Del. Pushkin:	04:53	Yeah.
Counsel:	04:54	. . . and-
Del. Pushkin:	04:55	Okay.
Counsel:	04:55	. . . track-
Del. Pushkin:	04:55	I got you. I got you.
Counsel:	04:56	Two, two sets. Yeah.
Del. Pushkin:	04:56	I got you.
Counsel:	04:56	Yeah.
Del. Pushkin:	04:58	Okay, thank you.
Chairman Capito:	05:00	Further questions of Counsel? Further questions of Counsel? Chair, recognize Gentleman from the 17th.
Del. Lovejoy:	05:07	Thank you, Chairman Capito. Good afternoon, Counsel. Uh, you mentioned that Grimm case. I tried to read a little bit about it, uh, for today. So that was a Fourth Circuit case, um.
Counsel:	05:07	Mm-hmm (affirmative).
Del. Lovejoy:	05:17	The Fourth Circuit is a federal Circuit Court of Appeals. It includes the state of West Virginia, right?
Counsel:	05:23	Correct.
Del. Lovejoy:	05:24	And in that case, um, this was not a sports case but it, it dealt with the requirement to use facilities on a school ground with the sex assigned at birth. Is that fair?
Counsel:	05:39	It did.
Del. Lovejoy:	05:40	Okay.
Counsel:	05:41	Uh, the, the, uh, Grimm was born a female and wanted to us- and was transitioned to male, and wanted to use the male bathroom.
Del. Lovejoy:	05:50	So in that case, the court, the Fourth Circuit, um, found that the student's, uh, rights had been violated under Title IX, right?
Counsel:	06:02	Yes.

Del. Lovejoy:	06:03	And also, I think second, second basis was under, was it equal protection?
Counsel:	06:08	Yes.
Del. Lovejoy:	06:08	And so, what, what, you know, if we're to do something like this and we have a lawsuit come under Title IX, what are the consequences of a school board in West Virginia being found, like that case, to violate Title IX? I mean what, what's the, what are the consequences?
Counsel:	06:26	Well, uh, the schools receive federal funds. So that is, they're, they're required to follow the federal guidelines, which would include the Fourth Circuit. Um, there is also a recent executive order, um, and so the, the, the s- the board, or the department would, is required to follow federal guidelines. So, um, I think the practical effect would be that under the Fourth Circuit case, uh, which is currently there has been a writ filed before the Supreme Court and, um, Grimm has ex- has, uh, petitioned for additional time to answer. And that is the current procedural history right now with that. Um, so in other words, you know, the, the Supreme Court may or may not take the case. If they do, then Fourth court c-, Fourth Circuit would be controlling. If they did take the case, then of course they would issue an opinion. Um, but un- as it stands right now, the department would be bound to if a transgender person wanted to use, for instance, a transgender female wanted to use a female bathroom, they would have to allow that transgender female to use the, the female bathroom under this Fourth Circuit case. But the, the bill, the, they would have to play a different sport.
Del. Lovejoy:	07:47	So, so let me understand the posture. The Fourth Circuit Court of Appeals has rendered a decision that as it stands now, found that school's policy in, in the bathroom context as opposed to the sports context, to violate Title IX.
Counsel:	08:04	And, and they did not, um, deal with sports specifically and the, that particular person was not involved in sports. So, it did not deal with locker rooms or sports because he was not involved in sports.
Del. Lovejoy:	08:14	But the basis of that opinion was the Bostock case, is that what it's called?
Counsel:	08:19	That was one of the cases that was, yes, quoted.
Del. Lovejoy:	08:22	Bostock was not, was neither a sports nor a bathroom case, right?

Counsel:	08:25	I haven't read that entire case. I just-
Del. Lovejoy:	08:28	But it's employment case. Yeah.
Counsel:	08:29	. . . did but, yeah. It, in a, I believe a Supreme Court case. Yes.
Del. Lovejoy:	08:31	Right.
Counsel:	08:32	Yes.
Del. Lovejoy:	08:32	Yes. And so, it's a, it's a, it's a 2020 case and it deals with employment discrimination and the Fourth Circuit applied the holdings in the employment discrimination decision of Bostock to apply to the restroom question. And so, if the Fourth Circuit were to also apply that to this situation, we could be passing a law that puts us in violation of Title IX?
Counsel:	09:00	I mean, it, it, there, there would be a, a question perhaps. I mean, it, there's a slippery, this, this is literally something that is changing every day across the United States. I mean, literally every time I'm, I go on the internet, there's something different happening. So, um, you know, who know, it's hard to say what a court is going to do. But, you know, it, it is, I think pretty safe to say that something like this would be up for, um, liti- litigation because it is being litigated-
Del. Lovejoy:	09:33	Yes.
Counsel:	09:33	. . . throughout the country daily. I mean-
Del. Lovejoy:	09:35	Yes. And we're going to have some guidance soon, won't we?
Counsel:	09:35	I'm, I-
Del. Lovejoy:	09:38	With Fourth Circuit, right?
Counsel:	09:39	Yeah. I mean, ma- uh, yeah. I guess we'll see what the Supreme Court-
Del. Lovejoy:	09:44	We have a decision from the Fourth Circuit-
Counsel:	09:44	Mm-hmm (affirmative).
Del. Lovejoy:	09:46	. . . and we're s- we're at, somebody's at the doorsteps of the United States Supreme Court saying, "We'd like you to take this up on a, on a writ of cert and that decision has not been made yet." But we will know the results of that decision by the US Supreme Court at some point in the, maybe near future, right?

Counsel:	10:02	We would, yes.
Del. Lovejoy:	10:04	Okay. Um, okay. In addition to losing federal funding if you're found to violate Title IX, um, is the successful claimant also entitled to money damages?
Counsel:	10:17	Uh, in this case, uh, I believe the way I read the case, uh, the, Grimm received $1. I mean, it was not a money case.
Del. Lovejoy:	10:26	Well, did they also receive an award of attorney's fees?
Counsel:	10:28	Attorney's fees, yes.
Del. Lovejoy:	10:29	Yes, which were more than $1.
Counsel:	10:30	I'm sure.
Del. Lovejoy:	10:31	Yeah, um. And so, if for instance, we pass a law that before the Supreme Court rules on the case up there, uh, on the writ, that also is found to violate Title IX, then we could lose our, our federal funding and be on the losing end of litigation in a fee shifting situation, right?
Counsel:	10:51	I-
Speaker 6:	10:51	One point of order, point of order, Chairman Capito.
Chairman Capito:	10:55	Gentleman will state his point of order.
Speaker 6:	10:56	Um, uh. My friend is, uh, asking Counsel, number one, to speculate and number two, to offer personal opinions. Uh, neither of which are technical in nature so, uh, I would ask the line of question be, uh, prohibited.
Chairman Capito:	11:12	[crosstalk 00:11:12] well I would just, I would just say the chair's ruling is that the, uh, the Gentleman will, will, will stick to the thrust of the bill. I think the Gentleman is asking counsel to make, uh, a legal assessment of a, of a Fourth Circuit opinion, um, and I think it's, uh, appropriate. Uh, and I think it's appropriate for her to make that distinction as Counsel, so I'll allow question to continue.
Del. Lovejoy:	11:32	Thank you Mr. Chairman. Um, and I'll try to keep it cleaner. If we pass a law that violates Title IX of the federal law, then the result of a violation is a loss of federal funding. That is a, that is a true statement of the law?
Counsel:	11:47	I don't know the particular, um, process for loss of funding. I mean, I would hope that, um, it wouldn't be, and you know, I

		mean, I would say that there would be a process for that. I don't know. I don't think that-
Del. Lovejoy:	12:00	Can I restate as, can or may? If I say that, would that be a fair statement, that you can lose your federal funding if you pass laws that violate Title IX?
Counsel:	12:11	It's my understanding that the funding the federal government supplies is based upon the assumption that the laws that it enacts will be followed.
Del. Lovejoy:	12:21	Okay. Thank you very much. Thank you, Mr. Chairman.
Chairman Capito:	12:24	Further questions of Counsel? Gentleman from the 37th, did you have questions of Counsel?
Del. Pushkin:	12:29	At the appropriate time I'd like to ask you now just to take leave of committee for a, a testimony from, uh [crosstalk 00:12:35]-
Chairman Capito	12:34	At the appropriate time. Chairman from the 50th for counsel. I recognize Gentleman from the 50th.
Del. Garcia:	12:40	Thank you, counsel. So, when I look at page two of, uh, let's see, what section is this, p- yeah, page two, line 26, subdivision E of section, it's on another page, 5C, um, it appears that—there's a proviso related to if somebody does not, is not able to provide a birth certificate or their birth certificate does not indicate a sex at the time of birth, correct?
Counsel:	13:21	I'm, I'm sorry. Can you rephrase that again? I see where you-
Del. Garcia:	13:23	Yeah, yeah.
Counsel:	13:24	What was your question again? I'm sorry.
Del. Garcia:	13:24	So, so that relates to—the proviso relates to a situation, um, if someone is unable to provide their original birth certificate or their birth certificate as it states here, does not indicate people's sex at the time of birth.
Counsel:	13:39	So, yeah. If you look at page one, the first paragraph, when a student is admitted to a public school, they are to provide a birth certificate. So it goes, it's referring back to that birth certificate. But if, for, for it, but there's also, if the birth certificate cannot be provided, then they have to say, have to have an affidavit proviso. So in the case that their birth certificate was not a, supplied or the, the sex was not identified, then that proviso for

		the, uh, doctor's affidavit, I mean doctor's statement would apply. Does that answer your question?
Del. Garcia:	14:14	That do- well that doesn't and kind of continuing on further. So, if, if a birth certificate is not provided or if the birth certificate does not indicate the people's sex at the time of birth, I just want to make sure I'm understanding this correctly. So, the, the physician statement that they have to, I guess, they have to figure out about whether the person has unaltered internal and external reproductive anatomy?
Counsel:	14:51	That's what it says, yes.
Del. Garcia:	14:52	So, the, that means that anybody who can't fulfill, who can't provide their birth certificate has to undergo an examination, I would imagine some type of genital examination, by that doctor?
Counsel:	15:10	Well, all of the students are required to have a physical exam to ta- I mean, to participate in sports.
Del. Garcia:	15:17	But does that necessarily include . . . I mean, you know, again, internal and external reproductive anatomy. I, that, is that something that's normally part of a physical?
Counsel:	15:33	I don't know.
Del. Garcia:	15:35	And, and whether it's unaltered. That's, that's what this bill states.
Counsel:	15:40	That it does, yes.
Del. Garcia:	15:43	What happens if, if a student has both male and female reproductive anatomy?
Counsel:	15:58	The bill doesn't address that.
Del. Garcia:	16:03	That, and, and that's my understanding is, one or 2% of the population of the United States, that, that is, you know, that's, that happens. That's probably not a good, good question for counsel. That's, I didn't really ask a question, so I apologize. That's, that, those are, those are the questions that I have. Thank you.
Chairman Capito:	16:25	Thank you. Further questions of Counsel? Further questions? I, I had the gent- gent- excuse me, I had the Lady from the 4th followed by the Gentleman from the 13th.
Del. Zukoff:	16:35	Thank you, Mr. Chairman. Just one last question. You had mentioned when you're answering the Gentleman from the

		17th's question that there's an executive order currently that addresses this issue. Could you give us-
Counsel:	16:48	Oh, I'm sorry. It do- it, there's an executive order that has to do with, um, from, uh, March 8th.
Del. Zukoff:	16:56	An executive order from?
Counsel:	16:58	The President, President Biden.
Del. Zukoff:	17:00	Okay. And what does that say?
Counsel:	17:04	It is guaranteeing an educational environment free of discrimination on the basis of sex, including ori- sexual orientation and g- or gender identity.
Del. Zukoff:	17:16	Okay. Thank you.
Chairman Capito:	17:19	Gentleman from 13th.
Del. Zukoff:	17:20	I didn't know that.
Del. Pinson:	17:21	Yes, thank you Mr. Chair, thank you Counsel for your presentation of the bill that's before us. Uh, couple quick questions. I know the question was asked to you, has there been issues of this within the boundaries of our state and I believe that you answered that you weren't aware of any. I'm aware that we do have someone from the SSAC here that could either provide the same answer or their own opinion. Is that correct?
Counsel:	17:51	Yes, someone, uh, the Executive Director is here.
Del. Pinson:	17:54	Okay. I'll ask you this. In your preparation of the bill, were you able to find instances in other states where questions surrounding the legality of this same issue have been raised?
Counsel:	18:15	Yes.
Del. Pinson:	18:16	Okay. Uh, turning my attention now to the Gavin Grimm case out of Virginia, if I understood your assessment of, of that legal proceeding, the county school board, and I'm not going to try to pronounce it either, they were found to have violated Title IX based on the, the circumstances and the facts surrounding that particular case. Is that correct?
Counsel:	18:53	Yes, they were.
Del. Pinson:	18:55	And-

Counsel:	18:55	Under that case, yes. And under those circumstances, they were.
Del. Pinson:	18:55	So-
Counsel:	18:58	And equal protection.
Del. Pinson:	19:00	Thank you. And we, that case did not deal with the legality of transgender athletes at all. We're dealing with something completely separate from that. Is that correct?
Counsel:	19:14	It did not deal with sports and it said in there that, that issue was not raised because he did not play sports.
Del. Pinson:	19:21	Okay. That will be all. Thank you. Thank you, Mr. Chair.
Chairman Capito:	19:23	Further questions of Counsel. Further questions of Counsel. Uh, Counsel, question from the chair. Under, uh, I understand I think, uh, part, partially the holding in Grimm, um, that it, that, that the, the Grimm's equal protection rights were violated that he was not able to access the men's bathroom. Was, was he, is, is Grimm still able to access to women's bathroom?
Counsel:	19:51	Uh, initially they, uh, had him using the nurse's bathroom and, but there was, it was inconvenient. It sometimes made him late for classes. And so, then they fashioned a separate, um, bathroom for transgender, uh, people and, or, or they redid the stalls. I, I'm-
Chairman Capito:	20:15	Was he prohibited-
Counsel:	20:15	But they, they fashioned [crosstalk 00:20:17]-
Chairman Capito:	20:17	Was he prohibited from using the women's bathroom?
Counsel:	20:18	It, it, uh, he, this was a transgender male who was an original female.
Chairman Capito:	20:18	Right.
Counsel:	20:18	He was put-
Chairman Capito:	20:24	Right.
Counsel:	20:24	. . . prohibited from using the male bathroom.
Chairman Capito:	20:26	Right. Was he prohibited from using the female bathroom?
Counsel:	20:29	No.

Chairman Capito:	20:30	Okay. With the holding, is he permitted to use either bathroom still?
Counsel:	20:36	Uh, it, the holding-
Chairman Capito:	20:38	If you don't have that, I understand-
Counsel:	20:39	Let, I mean my, my, well let, let me say he's in college now. So-
Chairman Capito:	20:39	Okay.
Counsel:	20:43	. . . this went on for five years.
Chairman Capito:	20:44	Okay.
Counsel:	20:44	So, um, it's, it, he's not in high school anymore but-
Chairman Capito:	20:50	Okay.
Counsel:	20:50	. . . essentially he, if the, the, he was able to use the bathroom that he identified, that-
Chairman Capito:	20:56	I understand, I understand-
Counsel:	20:56	Yeah.
Chairman Capito:	20:57	. . . the thrust of the, of the whole thing.
Counsel:	20:57	Mm-hmm (affirmative).
Chairman Capito:	21:00	I just was curious. Questions?
Counsel:	21:00	Yeah.
Chairman Capito:	21:02	The Gentleman from the 37th desires leave of the committee to call a witness. Is that witness on the screen? Oh yeah, okay. Uh. (laughing) Are, are you, uh, able to hear us?
Cathryn Oakley:	21:15	I am able to hear you.
Chairman Capito:	21:17	Okay.
Cathryn Oakley:	21:17	Are you able to hear me?
Chairman Capito:	21:19	We can hear you. Would you please introduce yourself to the committee and, uh, who you are here representing?
Cathryn Oakley:	21:35	Yes, definitely. I'm [inaudible 00:21:35]. Hold on one second.

Chairman Capito:	21:35	Mark, go up and mute that.
Mark:	21:37	Should I mute that computer? Well, then she won't be able to hear us.
Chairman Capito:	21:39	Yes, you're right.
Cathryn Oakley:	21:40	Yeah, I can hear you. What, I'll turn my volume down while I'm introducing myself and then I'll turn it back up so I can hear you. Um, my name is Cathryn Oakley and I am the, uh, State Legislative Director and Senior Counsel at the Human Rights Campaign. Um, the Human Rights Campaign is the nation's largest organization working for equality for the LGBTQ community. Um, and I'm here on behalf of our more than three million members and supporters nationwide, including many in West Virginia, um, in opposition to the bill. And I stand ready to answer questions and, and also provide a brief statement if you allow.
Chairman Capito:	22:19	Thank you very much, Ms. Oakley. We appreciate you taking time on your Friday to be with us, as they say. So if you would, please raise your right hand. We'll swear you in. Then we'll allow questioning. Would you please raise your right hand? Do you swear to tell the truth, the whole truth and nothing but the truth?
Cathryn Oakley:	22:34	I do.
Chairman Capito:	22:38	Thank you very much. Chair recognize chairman from 37th for questions.
Del. Pushkin:	22:41	Thank you, Mr. Chairman.
Chairman Capito:	22:43	Hm? Oh.
Del. Pushkin:	22:44	Thank you, Mr. Chairman and, um, thank you for, uh, attending, uh, uh, the, uh, whatever service we're using now, uh, Ms. Oakley. Can you hear me?
Cathryn Oakley:	22:53	I can. Thank you so much for having me and, um, and to Mark for facilitating my being able to be here.
Del. Pushkin:	22:59	Okay. And, um, so you've, you, I guess you followed cases like this throughout the country, right? That's, that's part of your job at the Human Rights Campaign, is that correct?
Cathryn Oakley:	23:09	That's correct.

Del. Pushkin:	23:10	Okay. Have you, there was asked of Counsel and, and she didn't know of anybody. Do, do you know of any cases in West Virginia?
Cathryn Oakley:	23:18	I do not know of any cases in West Virginia.
Del. Pushkin:	23:21	Okay. Um, the, the, but you have . . . Well, first of all, uh, I guess this is based on a premise that a, um, a, uh, transgender athlete would have some sort of advantage over, uh, other participants. Do you, is, I'm trying, have you heard of an actual advantage being created by transgender athletes?
Cathryn Oakley:	23:46	Yeah. Thank you for that question. That's a really important question. And I'll preface this by saying that groups like the National Women's Law Center and, uh, the Women's Sports Foundation, Women Leaders in College Sports all support inclusive polices that allow transgender athletes to participate. Um, and I, that is because, uh, to, to your excellent point, um, transgender kids, and I, you know, particularly this conversation ends focusing on transgender girls, um, transgender girls, like all girls, uh, have a variety of different bodies. They have a variety of different talents. They have a variety of different interests. Some of them will be tall, some of them are short. Some of them are fast, some of them are slow. Some of them will have excellent hand-eye coordination. Others of them will not. Um, and so, you know, the trans pop- the trans population is, is fairly small. Uh, if you are, really only concerned with trans girls, that's then half of that number. And then of course, of those, uh, trans girls, you're, you're talking about only a few that are going to be interested in sports, um, and have, you know, sort of the combination of interest of, of physical capability, um, mental drive, work ethic to be able to excel.
Del. Pushkin:	23:46	Mm-hmm (affirmative).
Cathryn Oakley:	25:00	And I think very much to your point, the reason that we do not actually see, uh, instances of problems, uh, in, in the states, um, even though 16 states allow trans youth to participate in sports consistent with their gender identity and have done so for many years, um, there, there are in fact not issues in the states. Um, there is one, uh, case of Connecticut which we can speak about that much has been made of. Um, I think it's really been misrepresented what's happened in Connecticut. So, I'm happy to help, uh, diffuse some of the misinformation about that. Um, but there, this is just simply not a problem, particularly in elementary and secondary schools. Um, some of the bills that we're seeing, I know not this one, uh, deal also with collegiate athletics. So, I'll also just say that the NCAA

has had a policy for more than 10 years regulating, uh, trans, uh, participation in sports. And they also have not seen, you know, women's sports collapse as a result of, uh, people pretending to be girls in order to compete and excel.

Del. Pushkin: 26:06 Okay. Well I, I have a couple concerns about what the real consequences that, uh, this legislation could also have and that would, again, with my next question, um, do you have any statistics on like, about mental health issues or even suicide rates among the transgender teens?

Cathryn Oakley: 26:29 Yes. Um, you know, I want to preface this by saying that, uh, for transgender teens who are able to receive, um, age appropriate, medically necessarily care, um, the numbers are quite different. And in fact, having just one supportive adult in a trans youth's life can make a tremendous difference. But yes, um, trans youths experience extremely high levels of anxiety and depression, um, and also have an extremely high rate unfortunately of suicide and suicidality. Um, particularly, as I say, when they are not, um, supported by adults in their lives.

Um, and we have also found by the way that there is, uh, there is true harm, um, even with bills that are, uh, are challenging trans identity, even when they're introduced but not passed.

Del. Pushkin: 26:29 Hm.

Cathryn Oakley: 27:24 The rhetoric around those bills can be extremely harmful to transgender youth who are hearing them at home.

Del. Pushkin: 27:33 So even though it's unlikely that, that there's going to be participation from transgender girls in sports because we haven't seen it in a whole lot of places, the bill itself could be harmful just for a group that's already extremely alienated, is what you're saying, right?

Cathryn Oakley: 27:48 That's exactly what I'm saying. It's that there's actually no harm here that's being addressed by a piece of legislation like this, but, uh, there's, there's no, there's no, uh, no purpose for it. But there is harm perpetrated by it.

Del. Pushkin: 27:48 That's what I was getting at.

Cathryn Oakley: 28:01 Um, and particularly should it pass, you know, it's targeting an extremely vulnerable group of youth uh-

Del. Pushkin: 28:06 Right.

Cathryn Oakley: 28:07 . . . who as you say, are already experiencing extreme amounts of discrimination. And I, I do think that when we hear this idea that

there might be boys who are pretending, um, to be transgender women in order to get an advantage, transgender girls in order to be at an advantage, um, given the amount of discrimination that transgender youth face, uh, it's, it's really, uh, extremely difficult to imagine that that's something that anybody would do.

Del. Pushkin: 28:31 All right. Just a couple more questions. Um, I'm thinking now about, uh, like cisgender girls meaning a female, assigned a female at birth, identifies as a female, a female athlete, okay, who happens to be . . . Have you heard of any instances where it's a female athlete who just happens to be maybe tall, maybe, uh, more muscular than the other girls and the opposing team, or the opposing coach or opposing parents, uh, might make, uh, an accusation that, that, uh, she's not a girl? And then because of a law like this, they would like check into her background or something. Or, or it's been, being brought up because of a law like this. Have you heard of any instances of that, like that sort of thing happening?

Cathryn Oakley: 29:20 Yeah. Well, it, so there, there's only, um, well now two laws, that are, have passed that are on the books about this. One of them was passed only last week and hasn't yet gone. Last week, I think it was signed. And it has not gone into effect. Um, the other is the, uh, is the similar law that passed in Idaho last year, the HB500. Um, that law has been enjoined. It was challenged, um, in, uh, in the Ninth Circuit and, um, is currently enjoined, suspended from going into effect. So, we haven't had any of these laws in place yet that would give rise to that kind of a, uh, situation.

Del. Pushkin: 29:57 Ah-

Cathryn Oakley: 29:57 However, certainly that would be a side effect of what these bills would do is allow for the harassment of cisgender-

Del. Pushkin: 29:57 Yeah.

Cathryn Oakley: 30:06 . . . girls who are simply bigger and stronger. And I'll say, I'm 5'10". You can't, probably can't tell over Zoom. Um, I've been 5'10" since I was in sixth grade. Uh, and I promise you that did not come with any kind of sports advantage, no matter what people might think. Um, but certainly, you know, this idea that cisgender girls might be harassed for, you know, going through puberty early or being the first ones to grow, uh, that is, that's absolutely, um, possible that, that, that this bill will enable, uh, harassment for those girls.

Del. Pushkin: 30:39 Well your answer led me to one last question. First of all, I guess two if you count this one. You're an attorney with the Human Rights Campaign, right? You're a, you're a-

Cathryn Oakley:	30:39	Yes.
Del. Pushkin:	30:46	. . . you're an attorney? And you said this law hasn't been enacted anywhere 'cause it's in court. So, is it constitutional?
Cathryn Oakley:	30:53	No.
Del. Pushkin:	30:54	Okay. Thanks. That's all the questions I have, Mr. Chairman. Thank you very much.
Chairman Capito:	30:59	Further questions from Ms. Oakley? Further questions from, for Ms. Oakley? Ms. Oakley, thank you so much for being with us today. Uh, I'm sure there's nowhere else you'd rather be on a Friday afternoon.
Cathryn Oakley:	31:11	Never. Thank you so much. I appreciate it.
Chairman Capito:	31:14	Of course. Is there further desire by or of any member of the committee to call a witness, um, either that may be in the hallway or that might, uh, come to us virtually? Does any other member of the committee desire leave of the committee? Okay. If not, are there amendments to the bill? Are there amendments to the committee substitute? If not, chair recognizes Gentleman from the 32nd to move the committee substitute.
Del. Haynes:	31:45	Thank you, Chairman Capito. [inaudible 00:31:48] recommendation that we do that.
Chairman Capito:	31:47	You have heard the Gentleman's motion. Is there discussion? Gentleman from the 17th.
Del. Lovejoy:	31:52	Thank you, Mr. Chairman. [inaudible 00:31:53] full opposition to the bill. The timing of the bill is not the best. Um, I think that we have, this is another solution in search of the problem. But even more than that, we have legal guidance on this. We have a case from the Fourth Circuit in August of 2020 which tells you a law in this very area of Title IX. That decision is currently on appeal to the US Supreme Court. I don't know when they will rule but probably before, maybe before we get home or shortly thereafter we'll know whether the granted decision stands. Now, my friends have brought up some questions about that Grimm decision, and my good friend from the 13th said, "Well it's completely separate." And I tell you that, that it is true the Grimm case does not deal with sports, but the Grimm case deals with the same issue. You have a school board that enacts a policy that says, students are required to use this facility, um, of the gender assigned at birth, okay. Um, and the Supreme Court, or excuse me, the Fourth Circuit struck it down, said you can't do that without violating

Title IX. So if you have a policy based on a law that says you have to use or play in the team of the gender assigned at birth, it's not that much of a leap in logic to think that the same thing would apply, especially since Grimm was based on Bostock, which is another 2020 case written by Justice Gorsuch that applied, um, uh, the Title VII of the Civil Rights Act, um, that said discrimination based on sexual orientation and gender identity in the employment context.

So, you know, if you don't think that's the way it's going to go, what's the harm in giving it a couple months to find out what the law's going to be? Save our schools from Title IX violations and, and all the stuff that, um, that comes along with it. And so, I, that's the legal ground. All right. But more than that, I want to talk about the human ground.

Um, I don't know if you know a lot of transgender youth. Um, there's a lot of misconception, there's a lot of myths, there's a lot of stories about what kind of people they are. Um, they get sometimes per- put on these labels as some kind. They're, they're trying to sneak into bathrooms or get unfair competitive advantages and kind of demonized. And we do that a lot. I submit that if you will spend some time talking to some and you p- I promise you, you have them in your district, you'll find that they're like every other kid. And maybe a little worse in the sense that they face things that none of us maybe understand.

They're not trying to get over on anything. They're trying to stay alive today. They're trying to make it through the day, uh, in a, in a world that frankly is, is a little more cruel maybe than it should be. So for me, if I have a child and, and I know several in my, in my district, that the one thing that they have that makes them feel like a part of something, like a human being with dignity and respect, is being on that team, or, or running in that practice, I'm not going to take it away from them and, and, and put them back into this, this, this category or subject them to a, what my friend talked, the, the external genitalia inspection. I'm just not going to do that. I don't think it's right. I don't think it's what we need to do for kids.

We've made it a long time being able to figure out how to play sports together and how to use bathrooms and all that. We don't need a law to tell us. Uh, but if you think we need a law, you'll have one here in, in a couple of months. So for those reasons Mr. Chairman, I, I can't support this bill and I hope that, that my friends will join me in opposition.

Chairman Capito: 35:25 Further discussion. Gentleman from the 50th.

Del Garcia:	35:34	Thank you Mr. Chairman. I'm speaking in opposition of this bill. As somebody who's represented female, uh, women who've been sexually assaulted in prisons, I didn't come to Charleston to force unwanted invasive sexual assaults of young girls, young boys. That's what this bill does. That's what you're doing if you vote yes on this. That's what the language says. That a doctor, that, this isn't a health, this isn't an examination for the purpose of seeing whether somebody's in good health. This is somebody, a doctor looking at whether there's unaltered internal and external reproductive anatomy. That is disgusting. This bill singles out a group of people who face a challenging world. And I also didn't come down to Charleston to push somebody over the cliff if they're getting to the point of, of thinking about whether this life is worth living. That is crap. We shouldn't be doing this. Every single human being is made in the image of God. Every single one, whether you understand it or not. Whether you agree with how somebody lives or not, that's what we're talking about here today. I cannot support this bill.
Chairman Capito:	37:42	Further discussion. Chair recognizes Lady from the 4th.
Del. Zukoff:	37:47	Thank you Mr. Chairman. I'm also going to re- I'm also going to not support this bill for several reasons, both of which are, have already been mentioned from my friend from the 17th and the 50th. But I'm going to actually come at this from the aspect of a mother and my two daughters. And I raise my children to respect people as they are, not as some preconceived notion of what society thinks they should be. Or to ever put myself in a position that I could understand internally someone's mind, how they were made in the womb, how they came out feeling, how they felt about, you know, um, that they felt that they were always a boy. I recently, and you all can look this up, there's a gentleman this week who just pre- he, he testified in the Missouri State Capital this week on a transgender bill similar. Has a, has a, um, child that was born as a boy, always identified as a male. And they, he and his, her mother made him dress as a boy, keep his haircut as a boy, um, had issues. And he had major issues. Was sad all the time, um, asked to dress in his sister's clothes and one day she was outside playing in the front yard with her brother and he called out to them to come to dinner. And she said, "No, it's time. I want to go across the street and play. Daddy, if I come in and change my clothes, can I go?" And he realized what he was doing to that child by trying to make them something that they were not. And from a mother's perspective, I happened to be the mother of two very good

athletes. They're adults now. One of my daughters was a two time all-state softball pitcher and a two time all-state basketball guard when she was in high school. My other daughter was a swimmer and qualified every year for the state meets and she swam in college.

So, I can tell you my personal life for 20 years was running with those girls year-round, every sport they were in. They're, some of their best friends to this day as adults are the people that they participated in sports with. It helped them create lifelong friendships. They learned about leadership. They learned about how to get along with other people. All of the aspects that we find that sports, that we all love about sports.

And I think by taking these, taking, asking these children not to participate in the one thing that may bring them joy is just simply wrong. It's wrong for us to make that decision. This decision's going to be made for us very quickly. I think we have better things to do with our time in the West Virginia legislature than put this type of legislation forth. Thank you.

Chairman Capito: 40:33 Is there further discussion? Chair recognizes the Gentleman from the 13th.

Del. Pinson: 40:39 Thank you, Mr. Chair. I'll speak in favor of the bill that's in front of us today. Um, I don't think that maybe some of the dialog that, that has taken place over the last several minutes, several days, several weeks surrounding this topic is meant to be what it, what it has become. Uh, the bill that's in front of us today, uh, does not mean that individuals of this committee or of this body do not respect someone, do not have dignity for someone, despite whatever their gender might be.

The bill that's in front of us today is trying to place guardrails on the very sports that, that we're talking about, and the participation of those sports. Uh, we have spoke some today about the requests for a birth certificate in order for individuals to be able to participate in these sports. It's not been uncommon for us to request birth certificates for education and sports in the past for age-specific reasons. Just in a quick Google search, one can find that, uh, there is such a thing as age subjectivity where someone perceives themselves to be much younger or much older than they actually are.

And we would agree or at least hope we would agree that guardrails would need to be in place if someone, let's say my age, would want to participate in sports based on a different age. So, what, what we're doing here, and I hope that it's not lost in the dialog, but what we're doing here is talking about placing guardrails on these sports. It's not meant to be demeaning or

disrespectful. In fact, I would argue that for the individuals who are participating in their sports based on their natural-born gender, uh, I would argue that to them, it would seem that, that we are being very respectful to their natural-born gender. Thank you, Mr. Chair.

Chairman Capito: 43:19 Chair recognizes the Gentleman from, the Gentleman from the 37th.

Del. Pushkin: 43:23 Thank you Chairman Capito. Um, as one who has age subjectivity, I think I'm a lot younger than I actually am by the way, but, um, I apologize. You know, we're here at this late hour, uh, debating a bill that I complete, I feel is completely unnecessary. One of the, you know, my friend from the 13th's talking about guardrails. I'll tell you that most roads don't have guardrails because there's not a danger there. You put guardrails up where there's an actual, real danger of someone going off the side of the road but we don't have a single case of it. We are truly creating, looking for a solution in search of a problem and the solution itself is more problematic than the perceived problem.

We heard through testimony, this is one of the most alienated groups you can think of. Teens who are struggling with their own identity at the . . . All teens are struggling with their own identity. But especially, transgender teens who are, are incredibly alienated and struggling, we're going to, their legislature is, is up, here at 4:00 on a Friday, uh, deliberating this bill that's aimed directly at them for no apparent reason 'cause we don't even have any cases of it here.

So I would not, I mean I, I definitely wouldn't assign motives. I don't know what everybody's motives are. I'm sure there are some folks who really think this is a problem. I would beg of you to do some research and see and you'll find out it hasn't been a problem. And I think that there's a lot of us here who are wondering how they're going to vote. And they don't, they know it's not really a problem but they're still kind of not sure how they're going to come down on this vote. And I would just pray that you can muster up half the courage that these kids have who we're alienating with this bill. If you could muster up half the courage they have and vote this, this bill down 'cause it's completely unnecessary.

Chairman Capito: 45:15 Is there further discussion on a motion? Is there further discussion? If not, the question before the committee is on the Gentleman from the 32nd's motion to report out the committee substitute for House Bill 3293 to the full house for the recommendation of the committee substitute do pass. All in favor, please signify by saying aye.

Audience:	45:31	Aye.
Chairman Capito:	45:32	All those opposed, please signify by saying no.
Audience:	45:34	No.
Chairman Capito:	45:36	Aye's appear to have it.
Audience:	45:38	Division.
Chairman Capito:	45:39	Division's been called. Please raise one hand if you are in favor. One hand if you are opposed. On the question of adoption, there are 16 yes's and five no's. The motion is adopted and the committee substitute for House Bill 3293 will be reported into the floor with a recommendation that it do pass. There are two subcommittees, uh, that are out there. Actually, there's three subcommittees that are out there. Um, and I believe some of those intend to perhaps meet next week. So, uh, listen for those announcements on the floor. Is there any further business to come before the committee? If not, everybody have a nice weekend. Gentleman from the 32nd.
Del. Haynes:	46:33	9:30
Chairman Capito:	46:36	9:30.
Del. Haynes:	46:37	And Mr. Chairman, I move we adjourn.
Chairman Capito:	46:40	All those in favor please signify by saying aye.
Audience:	46:43	Aye.
Chairman Capito:	46:43	All oppose, no. Aye's appear to have it.

EXHIBIT C

House of Delegates Discussion of H.B. 3293

March 25, 2021

Clerk:	03:02:45	Committee substitute for House Bill 3293, relating to single-sex participation in interscholastic athletic events.
Speaker:	03:02:54	Are there objections to having the bill explained in lieu of having it read? If not, the Gentleman from the 27th, Delegate Ellington to explain the bill.
Del. Ellington:	03:03:01	Thank you, Mr. Speaker. Uh, this committee substitute provides that for the purposes of participating in single-sex secondary school interscholastic athletic events under the control, supervision, and regulation of the SSAC, that each county school district shall confirm that the sex of the pupil identified on the pupil's original birth certificate be provided upon his or her admission to public school is the pupil's sex at the time of birth. Now, if an original birth certificate was not provided or if the birth certificate provided does not indicate the pupil's sex at the time of birth, a signed physician statement indicating the pupil's sex based solely on the pupil's unaltered internal and external reproductive anatomy must be submitted prior to a pupil's participation in single-sex secondary school interscholastic athletic events. So prior to a student's participation in single-sex secondary school interscholastic athletic events, the SSAC must verify with each county board that each student participating in the single-sex interscholastic events is participating according to the student's sex at the time of birth. Now this requirement does not apply to coeducational secondary school interscholastic athletic events. In addition, this does not apply to elementary school or to higher education participation. Mr. Speaker, I urge the passage of the bill.
Speaker:	03:04:41	The question before the House is, shall the bill pass? Is there debate on the bill? The Gentleman from the 3rd, Delegate Fluharty, is recognized.
Del. Fluharty:	03:04:51	Thank you, Mr. Speaker. Will the gentleman yield?
Del. Ellington:	03:04:55	Yes, sir.
Del. Fluharty:	03:04:56	So, you know, you've heard, I'm sure you took some testimony up there in committee. Um, have you had, did

you have any testimony of the number of complaints that SSAC has received regarding anybody taking advantage of the single-sex sport system we currently have?

Del. Ellington: 03:05:13 Uh, not in West Virginia.

Del. Fluharty: 03:05:14 So not a single complaint received in West Virginia?

Del. Ellington: 03:05:17 Not at this point in time.

Del. Fluharty: 03:05:19 Well, was there any testimony that anticipated having complaints in the future?

Del. Ellington: 03:05:23 There have been in other states.

Del. Fluharty: 03:05:25 In other states. And how many have there been?

Del. Ellington: 03:05:27 Uh, I don't have that number in front of me.

Del. Fluharty: 03:05:29 You don't have that data. So can you tell me how many of in Ohio, for example, a neighboring state?

Del. Ellington: 03:05:32 Uh, I don't have that. No. I do know that a number of states have adopted similar, uh, rules. I think there were 27 states that-

Del. Fluharty: 03:05:42 Rules or laws?

Del. Ellington: 03:05:42 . . . were looking at, or same, the same ty- a similar type of legislation.

Del. Fluharty: 03:05:46 Okay. L- let's get to that. Um, first off, you mentioned it doesn't apply to grade schools, I believe. Correct?

Del. Ellington: 03:05:53 This bill does not look at elementary school participation.

Del. Fluharty: 03:05:59 Okay. At what grade would this be enforced?

Del. Ellington: 03:06:02 This would be secondary school.

Del. Fluharty: 03:06:03 Okay. So at what age are we talking? Is that sixth grade?

Del. Ellington: 03:06:08 That would probably be from sixth on to 12th.

Del. Fluharty: 03:06:11 Okay. So we're talking about at sixth grade, what are you, 11 years old at that, that point in time?

Del. Ellington:	03:06:17	Thereabouts.
Del. Fluharty:	03:06:18	So thereabouts 11. This will apply to 11-year olds thereabout.
Del. Ellington:	03:06:23	If they're in secondary school.
Del. Fluharty:	03:06:24	Okay. Let's talk about how that currently works now. I pulled the, the form that's currently used for athletic participation per the SSAC, um, and individuals can be examined. And the goal of that examination, I think you would agree with me as a physician, is to find out if that person is physically fit for athletic competition. Are you familiar with how these exams work?
Del. Ellington:	03:06:48	Uh, I have performed some of them in the past.
Del. Fluharty:	03:06:50	Uh, that was my, my next question. So you've performed these exams in the past, and there's criteria for it. Includes screening of the abdomen, respiratory, cardiovascular issues. Would you agree with me, the goal of the current physical exam is to make sure the per- the individual, uh, i- is going to safely participate in sports. Right?
Del. Ellington:	03:07:10	I would agree with that.
Del. Fluharty:	03:07:11	Okay. And there is through the p- through the screening process as a physician, uh, you're checking for things to, to make sure that individual, uh, will safely participate and there's no risk in that the examination you're doing and the questions you're asking, there's a medical goal at the end of the day for each step. Correct?
Del. Ellington:	03:07:31	I would agree with that.
Del. Fluharty:	03:07:32	Okay. Um, what is the medical goal of identifying whether somebody has an un- unaltered internal or ex- external reproductive anatomy?
Del. Ellington:	03:07:41	The medical goal on this bill is just stating that if, but if they do not have their gender assigned on their birth certificate that one would have to be provided by a physician statement.
Del. Fluharty:	03:07:52	Well, but through that process, you're not discovering whether they can actually participate safely in sports.

You're just discovering their anatomy, uh, their anatomy based upon whether they have unaltered internal or external reproductive anatomy. Right?

Del. Ellington: 03:08:08 That's what this bill is stating.

Del. Fluharty: 03:08:10 Okay. So there's no actual medical benefit to this exam going to this next level, is there?

Del. Ellington: 03:08:17 Uh, I would disagree with that.

Del. Fluharty: 03:08:18 Okay. Why? Tell me how.

Del. Ellington: 03:08:20 Why? Because if you have an individual that may have, uh, different characteristics that makes their ability stronger or, um, physically stronger or ha- or their habitus is different, that maybe that might affect, uh, injury to other participating students in the same sport.

Del. Fluharty: 03:08:40 So you're worried about other individuals playing the sport? Of course, we're not actually worried about it because you didn't have a single reference you could cite for me as taking place.

Del. Ellington: 03:08:46 Well, that's why the single sex, uh, um, interscholastic, uh, activities are based on gender as far as if it's, uh, with girls versus boys, it's separate, as far as putting a boy that might be a lot stronger competing against a girl and injuring the girl.

Del. Fluharty: 03:09:04 How long have you been practicing medicine?

Del. Ellington: 03:09:06 I've been practicing medicine for about 30 something years.

Del. Fluharty: 03:09:09 How many exa- of these exams do you believe you've done in those 30 something years?

Del. Ellington: 03:09:12 Well, as far as physical exams for sports?

Del. Fluharty: 03:09:15 Sure.

Del. Ellington: 03:09:15 Oh, it's several years I did that, but not recently.

Del. Fluharty: 03:09:18 Okay, several years. So, through the course of your 30 some years as a doctor, have you ever had, uh, any issue

with somebody you've examined going on and playing sports and injuring another person and coming back and, and, and you had the issue of whether you should have maybe checked their anatomy a little better?

Del. Ellington: 03:09:35 When you do a physical exam, you're checking anatomy. If you're looking at the genitalia, that's a different thing.

Del. Fluharty: 03:09:40 Okay. Well this requires, um, checking for unaltered internal anatomy. Do you do that currently?

Del. Ellington: 03:09:49 You can do that hormonally.

Del. Fluharty: 03:09:50 You can do it hormonally. Do you do it currently?

Del. Ellington: 03:09:53 I haven't had to do that for, uh, sports physicals, but I have done that for other exams.

Del. Fluharty: 03:09:58 Okay. So in your 30 some years of practicing medicine, and, and during that time providing physical examinations for sports, you've never had to check the internal organs?

Del. Ellington: 03:10:09 Not for sports physicals.

Del. Fluharty: 03:10:10 Okay. But you would under this bill, right, if there's no birth certificate?

Del. Ellington: 03:10:15 If I was the one that had to attest to the gender of the, uh, the individual.

Del. Fluharty: 03:10:19 Okay. So under current law, that's not taking place, but after we pass this today, you as a doctor would now be checking the internal organs to make sure they're unaltered?

Del. Ellington: 03:10:29 No, the- I, that's not what this bill is saying.

Del. Fluharty: 03:10:33 Well, excuse me?

Del. Ellington: 03:10:34 The bill is saying that if someone wants to prove what their gender is without their birth certificate, that they would have to have proof from a physician. That's not necessarily during the sports physical.

Del. Fluharty: 03:10:44 Well, let's talk about that proof that's required. It's not currently required under law. Okay. If there's no birth

		certificate, the proof now required is for you, the physician, to check for unaltered internal and external reproductive anatomy.
Del. Ellington:	03:10:57	Well, it's not necessarily for me. It could be for whatever physician they want.
Del. Fluharty:	03:11:00	Okay. For any physician. Okay. If we're going to get, if we're going to play games like that.
Del. Ellington:	03:11:03	I mean, they mostly have pediatricians and stuff that already know their anatomy.
Del. Fluharty:	03:11:08	The point is, the point is, Doctor, the point is under the current practice, you're not going around checking for the internal organs as far as the examination related to anything SSAC-related for sports, are you?
Del. Ellington:	03:11:22	Uh, internal organs can be checked, yes. If you think there's something cardiovascular, if-
Del. Fluharty:	03:11:22	Is it a requirement?
Del. Ellington:	03:11:27	Yes there is. If there is a cardiovascular problem, you refer them to a specialist for echos or other workup.
Del. Fluharty:	03:11:33	But it's not currently a requirement as it would be if they're not-
Del. Ellington:	03:11:36	If you feel that they're not medically competent to be able to participate, if there's injur- risk of injury to them, you refer them to something else or you deny their ability to participate.
Del. Fluharty:	03:11:44	How exactly do you check whether pupils, an 11-year-old potentially, an 11-year-old, whether they have unaltered internal reproductive anatomy? Explain that process for us.
Del. Ellington:	03:11:58	Uh, they would have exams by their provider.
Del. Fluharty:	03:12:01	O- I- I want to know what the exam's like. Tell me.
Del. Ellington:	03:12:04	I, I don't think that's in the pro view of what I'm trying to discuss here. I mean, I, I've done internal exams on people before in my practice that all vary in different ages.

Del. Fluharty:	03:12:15	All right, thanks for-
Del. Ellington:	03:12:16	I mean, I don't-
Del. Fluharty:	03:12:16	Your time.
Del. Ellington:	03:12:16	. . . know if that's pertinent to this part for-
Del. Fluharty:	03:12:18	Thanks for your time.
Del. Ellington:	03:12:19	You're welcome.
Del. Fluharty:	03:12:21	You can have a seat too, I'm done.
Speaker 22:	03:12:22	[crosstalk 03:12:22]
Speaker:	03:12:22	The gentleman did not sustain the point of order, so the gentle- the gentleman-
Del. Fluharty:	03:12:39	Very briefly, to the-
Speaker:	03:12:40	. . . is still recognized.
Del. Fluharty:	03:12:41	Briefly to the bill, you could tell that he was uncomfortable answering the questions about the actual exam. Imagine how uncomfortable it's, it's going to be for an 11-year-old who is subjected to it. You know, we had this bill on Friday. I thought about it all weekend. Fired up over it, because, you know, I was raised in a way that, if somebody's being bullied, you have a decision you can make. You could support the bully, you could take up for the person being bullied, or you could remain silent and let it go. I'm not going to do that today. I would urge you not to do that today, because as of right now at this legislation, we are the bully. We are the bully, against kids. 11-year-olds. Picking on kids who are already suffering enough, struggling to get by just to be themselves. And because what we do now, we govern in these extremes. People make some Facebook posts and then you, you guys run out and print a bill. That's what we do, we govern by Facebook commentary. It's, it's sad. It doesn't make any sense. I know this is going to pass, because you're more concerned with the reelection

campaign that you are with the real effects on children in this state. I don't get it. I mean, just read this. They have to check whether the pupil's unaltered internal and external reproductive anatomy has to be submitted before participation.

No evidence that it's an issue anywhere really, and it's certainly not an issue in West Virginia. No evidence of it. He couldn't even go through the exam process in detail because he was that uncomfortable with telling us what the details are. So, I'm voting no. It's an easy no vote for me because I'm not going to be the bully. I'm not going to allow the bully to continue to bully kids in silence. I'm just not going to do it.

It's absurd, and I think that's how West Virginians were raised to take up for kids who are being bullied. This does the exact opposite. I'm voting no.

Speaker:	03:15:05	The gentleman from the 10th [inaudible 03:15:07]Conley is recognized.
Del. Conley:	03:15:11	Thank you Mr. Speaker, may I speak to the bill?
Speaker:	03:15:14	Yes, gentleman is recognized.
Del. Conley:	03:15:18	Uh, I appreciate the, uh, the law that's been presented here, the bill that's been presented here I should say. Um, and it's a, a verification of a law that's already on the books. And, uh, let me just, uh, if you may bear with me, read from that book and read from, to you that law. It's, uh, King James' version, Genesis, chapter one. Starting with verse 26. And God said, "Let us make man in our image after our likeness, and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all of the Earth, and over every creeping thing that creepeth upon the Earth." So God created man in his own image, in the image of God, created him male and female-
Speaker:	03:16:08	That point of order is raised. That point of order is raised. Gentleman will state the point.
Del. Fluharty:	03:16:12	Talk about the bill please.
Del. Conley:	03:16:12	I'm sorry?

Del. Fluharty:	03:16:13	That's not related to the bill. That's not related to the bill. His-
Speaker 25:	03:16:17	[inaudible 03:16:17]
Del. Fluharty:	03:16:18	Well-
Speaker:	03:16:18	Let's, let's-
Del. Fluharty:	03:16:20	He's not there now.
Speaker:	03:16:20	Let's go ahead and get to it. Gentle-
Speaker 25:	03:16:22	[inaudible 03:16:22]
Del. Conley:	03:16:24	. . . is, God created a man and a woman. To believe that there is a man that thinks they should be a woman or a woman that thinks they should be a man, is saying that my God made a mistake. And I've got news for all of you, my God does not make a mistake. So the bottom line is, if you're born a boy, a male, you're a male until you die. If you're born a female, you're a female until you die. So it's only fair that if you're born a male, you compete in male sports. If you're born a female, it's only fair that you compete in a female sport. So therefor, I absolutely support this bill 100%. And I would certainly urge everybody else in here to do the same.
Speaker:	03:17:12	The gentleman from the 16th, Delegate Hornbuckle is recognized.
Del. Hornbuckle:	03:17:16	Uh, thank you Mr. Speaker. Would the chairman of education please yield?
Del. Ellington:	03:17:21	Yes sir.
Del. Hornbuckle:	03:17:22	Uh, thank you sir. Um, in regards to football, uh, whether it be middle school or high school. Uh, if there is not a girls' team, uh, are girls permitted to play on the football team?
Del. Ellington:	03:17:33	Under Title IX they are allowed to, but there are inherent risks to injury and they accept those risks.
Del. Hornbuckle:	03:17:39	But they are allowed to play?

Del. Ellington:	03:17:41	Yes they are.
Del. Hornbuckle:	03:17:42	Thank you sir.
Speaker:	03:17:47	The gentleman from the 50th, [inaudible 03:17:50] Garcia is recognized.
Del. Garcia:	03:17:52	Thank you Mr. Speaker. Each of us, when we put our name on the ballot, first question we were asked is, why do you want to go to Charleston? I didn't come to Charleston to create problems where they don't exist. We've heard that there's no complaints about this in the state of West Virginia, about this issue about some type of advantage, competitive advantage that, that, that individuals, that kids are making this decision just so they can do better at sports. That's not happening. But we are creating a problem. And I, I've talked to a lot of people, and, uh, last week, um, was, was talking to somebody about infrastructure and they said, "Infrastructure, who cares? How can I stay in a state like West Virginia when you pass bills like this? When you take up bills like this? How can we get our young people to stay, and how can we ever attract somebody to our state?" You know, I also, I didn't come to Charleston to legalize or legitimize unwanted childhood sexual assault. That is what this is. That's absolutely what this is, along with a psychological attack, an emotional attack on some of our most vulnerable people in the state of West Virginia. And the gentleman from the third said, "Unaltered internal and external reproductive anatomy." That type of examination, that's what we're talking about. That's what, you know, relating to single sex participa- no, no, no. Relating to legalizing a form of childhood assault. That's what we're doing. That's what this bill does. That should make you uncomfortable. That should make you angry. I know it makes me angry, because these are, these are children. These are children. They live in a harsh world, a cruel world. You know, one in three transgender kids attempt to commit suicide. Did you know that? That was from a letter that we received from the American Academy of Pediatrics, that you have on your desk. So, I did not come to Charleston to take any action that would make it more likely that anybody who is considering

whether or not this life is worth living anymore, to push them over the edge. I got, um, an email last Friday after we had our judiciary committee meeting, from somebody who works with a number of LGBTQ+ young people. And she was talking about how it had been a struggle to engage them in this legislative session.

And she said in her email, she said, "They care about this bill, but I have not dared to suggest they follow any of the video or audio discussions, out of fear for what they might hear their own representatives say about them." Kind of like what we just heard from the gentleman from the 10th. I mean, do you know that, you know, 2%, 2% of people actually have both reproductive organs.

So, I don't expect that I'm going to change anybody's mind in here, but I do have the opportunity to speak to those children that are listening. And I would just say this, every, every child is a beautiful creature of God. And yes, created in God's image, and beautiful exactly, exactly as they are, regardless of what anybody thinks that they should be like. Regardless of what, whether anybody understands. That doesn't matter. That doesn't matter.

I came to Charleston to do good. I came to Charleston to solve problems. I came to Charleston to protect others. I came to Charleston to speak out against what I see is wrong. And if that means that I don't get to come back to Charleston, then so be it. [inaudible 03:22:56]

Speaker:	03:23:00	Gentlelady from the 51st, Delegate Walker.
Del. Walker:	03:23:04	Thank you Mr. p- Speaker Pro-Tem. Will the chairman of education please yield?
Speaker 23:	03:23:11	Gentleman yields.
Del. Ellington:	03:23:13	Yes ma'am.
Del. Walker:	03:23:14	Thank you Mr. Chairman. Can you tell me how many elementary students we have that are transgender in this state?
Del. Ellington:	03:23:29	I can't tell you how many in this state. I can give you general numbers that I have on transgender.

Del. Walker:	03:23:36	No, that's okay sir. I, I just wanted in this state. Thank you. Do you know how many secondary transgender students-
Del. Ellington:	03:23:45	I do not, I do not have a breakdown on that. I just have .7% of U.S. teenagers-
Del. Walker:	03:23:49	That's, that's fine.
Del. Ellington:	03:23:50	Are transgender teens.
Del. Walker:	03:23:51	I appreciate you. I don't mean to cut you off. Just bear with me as I bear with you. So we, so do you know how many students that this bill would affect, if you can't tell me those numbers?
Del. Ellington:	03:24:04	I don't, and I don't think you can either.
Del. Walker:	03:24:05	In, in West Virginia. Okay.
Speaker 23:	03:24:08	Gentleman may state his point of order.
Speaker 24:	03:24:12	The, uh, chair of, uh, education has yielded the questions. Uh, uh, I think he should have an opportunity to, uh, answer the questions before, uh, proceeding to the next question. Thank you.
Speaker 23:	03:24:22	Gentleman's point is well taken to the lady. If you ask a question, please allow the gentleman to answer.
Del. Walker:	03:24:27	Thank you. Mr. Chairman, no disrespect at all, but if I'm asking for a certain state, could you just say you don't know and we can proceed? Cause I have a list of questions, thank you. Is there any other medical injury or diagnosis that can occur with someone that may cause for an internal or external, um, genitalia to be altered, besides if they choose to be, you know, besides going through the transgender surgeries?
Del. Ellington:	03:25:09	If you're saying that they choose gender-
Del. Walker:	03:25:10	No, if they-
Del. Ellington:	03:25:10	Corrective surgery, then-
Del. Walker:	03:25:12	Are there any other medical diagnosis that may cause external or internal body organs to be changed?

Del. Ellington:	03:25:20	Not to be changed, but to be ambiguous, then there-
Del. Walker:	03:25:20	Okay.
Del. Ellington:	03:25:23	There are genetic disorders, yes.
Del. Walker:	03:25:25	So there are genetic disorders?
Del. Ellington:	03:25:27	Yes.
Del. Walker:	03:25:30	So, if someone was doing this examination, that would need to, it could be an assumption that maybe this was a procedure?
Del. Ellington:	03:25:43	No. If, uh, at birth, if there was ambiguous genitalia they would do a karyotype to determine what their, uh, what their gender is or if there was some other genetic issues such as Turner's or Klinefelter syndromes, for example.
Del. Walker:	03:26:00	Can you give us some examples of altered internal or external reproductive?
Del. Ellington:	03:26:07	Well, altered would be if they're on medications as far as internal. External would be corrective surgeries.
Del. Walker:	03:26:15	So, when you speak about corrective surgeries, so maybe, um, breast removal if that person had cancer?
Del. Ellington:	03:26:21	Well someone would've ha- if they had that then yes, but there would be a provider that could attest to that surgery.
Del. Walker:	03:26:27	Thank you Mr Chairman. Can I speak to the bill Speaker Pro-Tem?
Speaker:	03:26:31	Gentlelady may proceed.
Del. Walker:	03:26:32	Thank you. I appreciate it. Colleagues. We just debated. Freedom. [inaudible 03:26:49] Same difference. I'm not the parent. I don't have a child who is transgender. And not all of us practice the same religion. And we need to be mindful of that while we share our truths, respectfully. But what is so disheartening about this bill is that a child can play a sport until they get to secondary education, where their classmates may not see their differences at all. Where that child may not have been bullied before, we're opening up an opportunity.

This flag sits on my desk for all the children and adults who are thankful to be alive, and for those who have died. Transgender people, especially transgender black people, are killed at high numbers. If we're going to talk about the rules and the respect and the good book, let's think about those individuals. If we're going to pass judgment, and this is your truth and this is your conviction, what are we saying to the children? This is not about adults. These, this is about children. Those numbers couldn't be answered but I have them. 1.0% of West Virginians at age 13 to 17-years-old identify as transgender. 1%. That's 1% that we're not going to allow in team sports, where we build team leadership and we build a bond. And we build athleticism, and we tell them right here, at secondary education, "You don't matter. You're not good enough."

Once again, I have to go back to when I went through my first year of being here. Cause we had a lot of truths today, and it shakes my soul. You called them butch, you called them the F word. You called them creatures, you called them a disgrace of God. You called them demons, you called them the devil. Well guess what I call them? Love.

I call them children. I call them future leaders. I call them trendsetters. I call them change makers. I call them to lead. I call them to use their voices. I call them to speak their pain. And I sit, uncomfortable in those moments, so they can have their own movement. Who is this bill helping, and who is it hurting? West Virginia, a place to live, work, raise a family if you choose, only if you're not transgender. Thank you, Mr. Speaker Pro-Tem.

Speaker:	03:31:33	Gentleman from the 43rd, Delegate Thompson.
Del. Thompson:	03:31:39	Thank you Mr. Speaker. Would the chair of education yield for a couple of questions?
Speaker:	03:31:44	Gentleman yields.
Del. Ellington:	03:31:45	Yes sir.
Del. Thompson:	03:31:46	Thank you Mr. Chairman. Um, so, you are a, an OBGYN by practice, correct?
Del. Ellington:	03:31:53	Yes sir.

Del. Thompson:	03:31:54	So, can you tell me, um, after conception, when do sex organs develop on a fetus? When do they start developing?
Del. Ellington:	03:32:03	The, the start, immediately, as far as the genetics.
Del. Thompson:	03:32:06	Okay. So within like, seven to 12 weeks, they're, they should be really kind of, uh, mostly somewhat formed, to an extent?
Del. Ellington:	03:32:13	Uh, seven to 12 weeks, the genetics is there, and different features over the course of their normal 40-week gestation develop.
Del. Thompson:	03:32:22	Okay. When do, when does the, the brain start really developing and the, the higher function level of the brain start developing?
Del. Ellington:	03:32:30	As they get much older when they're out.
Del. Thompson:	03:32:32	Okay. Um, so would it be-
Del. Ellington:	03:32:36	[inaudible 03:32:36]
Del. Thompson:	03:32:36	Correct to say that your sex organs are developing before your brain? Uh, higher function levels of your brain?
Del. Ellington:	03:32:42	Well, sex organs develop more during puberty.
Del. Thompson:	03:32:45	Okay, yes, true, but like, I'm talking about solely in utero. Like, whenever they're-
Del. Ellington:	03:32:49	E- you're talking about external characteristics?
Del. Thompson:	03:32:52	Yes.
Del. Ellington:	03:32:53	Well, there are external characteristics at birth, so they develop in utero.
Del. Thompson:	03:32:57	Okay.
Del. Ellington:	03:32:57	But the secondary sex characteristics develop during puberty.
Del. Thompson:	03:33:01	Okay. Um, then, I have a couple questions too. Uh, was the WVSSAC contacted about any of this? Because I know in

committee we didn't have a rep, because I did have some questions for him but I, we never-

Del. Ellington: 03:33:16 Yes, they, they were contacted, and as was stated during the committee meeting when you asked about that, they were over on our senate colleague's side. But yes, they were contacted and they responded that they abide by Title IX, uh, regulations, uh, for the school system.

Del. Thompson: 03:33:33 Uh, but I also wanted to ask them, and I don't know maybe if you heard, ha- have they heard of any complaints across the state of anyone qu- you know, uh, saying that this is a major problem they're facing in their schools? This is something that's really happening and it's just causing a big problem?

Del. Ellington: 03:33:47 No, they, you'd have to ask them more specifically, but no, they did not point that out to us.

Del. Thompson: 03:33:52 Okay. Um, and in the bill it says that, uh, it's based on a, your birth certificate. Um, who cont- who, who authorizes birth certificates? Is it, it's the state you were born in, right? So if you're born in West Virginia, West Virginia basically, you know, has authority over your birth certificates. If you're born in Ohio, Ohio, the county or city which you're born, they'll have the control of your birth certificate, correct?

Del. Ellington: 03:34:16 Birth certificate's filled out at the time of birth, and it's authorized at the hospital or facility where that happens.

Del. Thompson: 03:34:21 Okay.

Del. Ellington: 03:34:22 By the provider that delivered the person.

Del. Thompson: 03:34:24 So, in, in West Virginia, if a person would change their birth certificate to have their name altered to their new chosen name or, and their gender through a court order, a court decision, um, despite the fact that that has been changed, they would still have to play on the sport of their birth ass- that they were assigned at, at . . . or their, their gender assigned at birth. Is that correct?

Del. Ellington: 03:34:51 They would have to, uh . . . with this bill, they would have to abide by what their gender was at birth.

Del. Thompson:	03:34:58	Even if their birth certificate has been changed to reflect their new-
Del. Ellington:	03:35:00	Well, well apparently West Virginia does not allow birth certificates to be amended on the basis of sex alone.
Del. Thompson:	03:35:09	Are you 100% sure on that?
Del. Ellington:	03:35:11	Uh, that's what counsel has here. They have a West Virginia Supreme Court ruling on July 18th, 2020, ruled, uh, that the code section in 16525, which allows a birth cert- birth certificate to be amended does not authorize the sex on the birth certificate to be changed.
Del. Thompson:	03:35:31	So even a court order, you're saying, would not allow the birth certificate to be changed?
Del. Ellington:	03:35:35	Well a court order can change that, but not by West Virginia code for the original birth certificate.
Del. Thompson:	03:35:41	Okay. Um, I have no further questions but to speak on the bill now.
Speaker:	03:35:47	Gentleman may proceed.
Del. Thompson:	03:35:49	So, here we are again. We, uh . . . Here in Charleston we've had a lot of, you know, we have bills that all affect dif- us differently. Some of us are, you know, doctors, some of us are teachers, some of us are insurance salesmen. Some of us, we come from different industries, and we deal with different bills that affect those industries. But, but, a few of us, well the vast majority of us actually have never had to have bills that address who you are as a person, who you love, how you identify. I have for the past three years. I haven't had that privilege. As my friend mentioned, West Virginia has 1%. That's the highest rate of transgender students in this n- in this country. And then you look at the demographics. I love demographics, I start looking at that stuff and analyzing it. And I look at it, and you start seeing that number, that percentage drop off significantly when they turn 18. Why? Why, is because they move away. Because we make, we enshrine transphobic language into laws.

They're not respected. They want to go somewhere where they feel safe, welcomed, loved, just left alone to live their lives. Now I, I'm personally appalled and disgusted that a little girl could potentially have to show a stranger her genitalia to, to prove what sex organs she has. Would you feel comfortable with your daughter, whether they are transgender or not, be subjected to that? Cause I wouldn't. It's disgusting.

We heard some other testimony too, of, you know, uh, this is about, you know, fairness, you know, to ensure that, you know, uh, there's no, uh, people assigned male at birth are playing in female sports and they have a better advantage. They're going to be stronger, just because they're born a male. I don't believe that. This isn't about that. This isn't about fairness. This isn't about health. This isn't about safety.

This is about putting those most at risk students, those most at risk kids who are already dealing with something so traumatizing, and telling them, "You can't play this sport." I, I, I know how this is going to go too, but to, to be honest I didn't come to Charleston. When I was campaigning I didn't come here, I didn't ask peop- people weren't asking me, "Hey Cody, please put some, uh, bills on the, the, in the law that, you know, are going to restrict, you know, rights for the LGBTQ+ movement. Please, that's what I really want."

They were asking, "Hey Cody, bring us some jobs. We need some jobs, some good careers. Let's fix our roads. Let's build our roads. Let's finish corridor H and Coalfields Expressway. Let's fix our healthcare, let's fix PEIA." Not one person ha- has ever asked me for legislation e- e- even similar to this. But, here we are. With that being said, I urge rejection to this bill. Thank you, Mr. Speaker.

Speaker: 03:40:07 Gentleman from 36th, Delegate Pritt.

Del. Pritt: 03:40:13 Thank you Mr. Speaker. Would the chair of education ye- yield once again please.

Speaker: 03:40:17 Gentleman yields.

Del. Ellington: 03:40:18 Yes sir.

Del. Pritt:	03:40:20	Just have a few questions for you. Now, with regards to the part about an examination being performed, it only applies if an original birth certificate was not provided or, if the birth certificate provided was, does not indicate the pupil's sex at the time of birth. Is that right?
Del. Ellington:	03:40:42	That is what is in the bill.
Del. Pritt:	03:40:43	And, um, to the best of your knowledge, are secondary school interscholastic athletics voluntary?
Del. Ellington:	03:40:51	Yes they are.
Del. Pritt:	03:40:52	They are voluntary, right?
Del. Ellington:	03:40:53	Yes.
Del. Pritt:	03:40:56	Okay. And so, based on this, we're not requiring that every single student undergo an examination like this, right?
Del. Ellington:	03:41:04	No, the, they just give the . . . they have to present their bir- current code pr- they have to present their cu- their birth certificate when they go enter the school system.
Del. Pritt:	03:41:14	Okay.
Del. Ellington:	03:41:14	And typically, you'll have the gender on that at the time of birth, so that's usually not an issue. Now, if they come in and they don't have a birth certificate, if they want to par- uh, participate in interscholastic sports, then they have to give evidence of what their gender was at the time of birth. And that would be from their provider that has probably seen them many times before.
Del. Pritt:	03:41:39	So it's fair to say that this provision would only apply in a very, very, very limited number of situations, and if it does apply, it, the examination would be voluntary?
Del. Ellington:	03:41:51	Correct.
Del. Pritt:	03:41:52	Okay. No further questions. Thank you, Mr. Speaker.
Speaker:	03:41:57	Gentlelady from the 35th, Delegate Young.
Del. Young:	03:42:02	Thank you, Mr. Speaker. Will the chair of education continue to yield?

Del. Ellington:	03:42:06	Yes, ma'am.
Del. Young:	03:42:06	Thank you. I've got a couple, I'm going to jump around a little bit. Um, okay, so this was a, an originating bill in education?
Del. Ellington:	03:42:14	Yes it was.
Del. Young:	03:42:15	Okay, was there a stakeholders' meeting for the, for the purpose of the bill.
Del. Ellington:	03:42:19	Um, there are stakeholders I guess, uh, citizens of West Virginia.
Del. Young:	03:42:25	But you didn't have any meetings with like, the SSAC or any sort of transgender groups?
Del. Ellington:	03:42:32	I didn't.
Del. Young:	03:42:33	Okay. Um, and did this bill go through the health committee? Cause it seems like a lot about health.
Del. Ellington:	03:42:40	No, it didn't go through health. It was originated in, uh, in education.
Del. Young:	03:42:45	Was there a second reference?
Del. Ellington:	03:42:46	No.
Del. Young:	03:42:47	Okay. And, um . . . Oh- it went
Del. Ellington:	03:42:51	[crosstalk 03:42:51] Let me correct myself. No, it went to judiciary.
Del. Young:	03:42:54	Okay, thank you.
Del. Ellington:	03:42:54	Second reference.
Del. Young:	03:42:54	And-
Del. Ellington:	03:42:54	My apology.
Del. Young:	03:42:57	No problem. Um, I'm not on either of those committees, so some of this has probably already been asked by people in those committees. Um, would you agree that this bill is about participation and eligibility?

Del. Ellington:	03:43:09	Yes.
Del. Young:	03:43:10	So why is it not in a rule?
Del. Ellington:	03:43:14	We haven't developed the rule yet.
Del. Young:	03:43:16	So is this for a rule or is this-
Del. Ellington:	03:43:18	Yeah, they're, they're, they're all rules as far as participation in sports already. This is, this would, this bill would be amending that.
Del. Young:	03:43:27	How would this amend the rule?
Del. Ellington:	03:43:29	It would state that you have to be in the gender that you were assigned at birth to participate in a single-sex interscholastic sport.
Del. Young:	03:43:36	But isn't this code?
Del. Ellington:	03:43:37	In the secondary schools.
Del. Young:	03:43:39	I mean, we're changing code, not the rule.
Del. Ellington:	03:43:41	Yeah, but the SSAC would have their rules for that, yeah.
Del. Young:	03:43:46	Okay, and, um, within the rules, so are you familiar with, uh, 127CSR2, which is the eligibility rule?
Del. Ellington:	03:43:53	I don't have it in front of me but I'll take your word on what you have on it.
Del. Young:	03:43:57	Okay, and it says, when the rule . . . um, there will be a waiver granted when the rule causes extreme and undue hardship upon the student, so would there be a waiver if this would cause an undue hardship-

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Del. Ellington:	03:44:08	Yes.
Del. Young:	03:44:08	. . . On anybody?
Del. Ellington:	03:44:09	That's what the school system has. That's what they will probably abide by.

Del. Young:	03:44:12	Good to hear. Um, okay. And also, I'm wondering what sports this applies to because like my friend from the 16th asked, there are some sports and that's in this rule too, that are everybody.
Del. Ellington:	03:44:27	This is a single-sex sports, it co-educ- co-educational sports are exempted from it.
Del. Young:	03:44:34	Okay. Um, I mean, what if the, what if the sports aren't co-educational? The rule says that if they're not like, uh, like if one school only has a sport for boys, then girls are allowed to play, so is that considered co-ed then? Like football or wrestling?
Del. Ellington:	03:44:51	Well, if, uh, if a female participated on the boys team, then I guess it makes it co-ed, but that's what Title IX requires that if there was no female team, then they are allowed to play on the male team.
Del. Young:	03:45:04	Okay. And how-
Del. Ellington:	03:45:04	It's not necessarily true the other way around.
Del. Young:	03:45:07	Okay. Would this affect that at all?
Del. Ellington:	03:45:11	No. It just says whatever gender they've designated as they get to play on that team. So it doesn't prohibit them from participating on a team.
Del. Young:	03:45:11	Okay.
Del. Ellington:	03:45:18	If it's a co-educational team, they could play on anything.
Del. Young:	03:45:21	Okay. Um, and so back to the birth certificate stuff that you and my friend over here were just chatting about. You said it's just, it's just an original birth certificate that has to be provided?
Del. Ellington:	03:45:35	Birth certificate at birth. Yeah. Your original birth certificate at birth is what this mandates.
Del. Young:	03:45:39	Do we let, um, kids participate in sports if they've changed their name on their birth certificate, maybe if they've been adopted or just change their name for whatever reason?
Del. Ellington:	03:45:49	I'm sure they do.

Del. Young:	03:45:50	So that's allowed, we're just worried about their genitals.
Del. Ellington:	03:45:56	It's allowed as far as I, if they change their name or other conditions, just this bill is just staying that it's by the gender that was assigned to them at birth.
Del. Young:	03:46:06	Okay. And, um, I, it seems like if you don't have your birth certificate, which is in the bill but unchanged, you can get an affidavit, um, explaining the ineligibility. So there are students that go into the school system without a birth certificate. Right?
Del. Ellington:	03:46:24	Um, I'm sure there are.
Del. Young:	03:46:25	Okay. So they would not necessarily have that on hand. Um, and it sounds like that this is going to apply to anybody who doesn't have their birth certificate on hand. That so anybody who maybe filled out that affidavit or lost their birth certificate throughout time?
Del. Ellington:	03:46:41	If they wanted to participate in single-sex athletics.
Del. Young:	03:46:45	Okay. So like lots of foster kids might not have that kind of stuff. Right?
Del. Ellington:	03:46:48	Right.
Del. Young:	03:46:48	So anybody, anybody who doesn't have their birth certificate is going to have to get a genital check to play sports, single-sex sports?
Del. Ellington:	03:46:56	They would have to have with their provider attest to what their gender was.
Del. Young:	03:47:02	Okay. And, um, I'm really confused how this bill fits in with the WSSAC, uh, beliefs and objectives that are on their website.
Del. Ellington:	03:47:16	Their objectives I believe, is to have, uh, provide sports or activities for the students in a safe manner.
Del. Young:	03:47:24	Yeah. It says, "The commission seeks to present proper ideals of sportsmanship so that coaches, players, authorities, officials, and spectators may combine to any activity enjoyable and productive of physical and social

benefits to both sides involved in the contest, with partisanship and prejudice eliminated as far as possible." I-

Del. Ellington: 03:47:45 You have it there. I, I'll take your word on that. Don't disagree.

Del. Young: 03:47:48 Okay. Thank you. Permission to speak to the bill.

Speaker: 03:47:52 Lady may proceed.

Del. Young: 03:47:53 Thank you so much, Mr. Speaker. Um, I think that this bill is all about partisanship and prejudice. We're not eliminating it. We're putting more in, I think it's full of bigotry, and I don't support it. Thank you.

Speaker: 03:48:07 Gentleman from the 47th, Delegate Phillips.

Del. Phillips: 03:48:12 Thank you Mr. Speaker. Um, like most issues we have in here, this engenders a lot of emotion on both sides. And I get a little emotional about this. Uh, last night, a young lady that I love very much had a breakout game in girls basketball and scored 19 points. And I've watched her work to earn her spot on that team, and work to earn her playing time on the court. And I, I know what she puts into it. She, uh, is going to the gym every day. She's out running in the rain and the cold and the heat. And it means a lot to her. And, uh, so I was feeling very proud last night.

And, uh, then I got to thinking about this bill and I, uh, sat down and did a little research and came up with, uh, the 100-meter dash women's world record holder is Florence Griffith Joyner, the United States. She set that in 1988, um, at a time of 10.49 seconds, that was eclipsed in 1989 by James Jett in 10.34 seconds. She also set the 200-meter record in 1988 at the Summer Olympics, and I'm old enough to remember that, um, her time on that was a 21.34. That was eclipsed in 2013 by Dante Price at time of 21.10.

The current world record holder in the High Jump is Stefka Kostadinova, probably mangled that, of Bulgaria, and her record set in 1987 is six foot, 10 and a quarter inches. The longest held record in the event. It was beat, beaten in, uh, 1998 by Nathan Fields with a seven foot three inches. And finally, the current female record holder in the mile is Stefan Hassan, who in, uh, July of 2019 set a new record at, uh, four, uh, four minutes, 12.33 seconds. That record was

beaten or was surpassed in 2011. And it was a time of four minutes, 8.8 seconds in the 1600 meter by, uh, Jacob Bertram.

And as we think about this, instead of feeling about it, we need to realize that there are innate physiological advantages for males. And that's why we have unisex sports, we have girls playing basketball and boys playing basketball instead of together, because it's not a fair competitive floor. And, uh, then I come in here today and we find this paper on our desk part of which says the vast majority of the people this law will harm are school kids who just want to play on a sports team. And I absolutely agree with that. That's 100% true. But it's going to harm all the kids playing on that sports team.

Um, it finishes up, it tries to address a problem that does not threaten anyone. And I don't agree with that because it does threaten the kids that, like the young lady I love so much, work incredibly hard to get their spot on the team, to get their playing time on the court. And for many of them to get a college scholarship and further their education. And we are seeing cases around the country of girls records being decimated by biological males who come in and, and wipe the rec- record books clean, and totally dominate competition.

And I know we've had, uh, some alternate feelings on that, but as long as we're thinking about this instead of feeling, I'll go back to all those records I read off. Those are women's current world records, the fastest woman in the world in three different sports and put her in the high jump. The records that I listed off that beat them, weren't Olympians. They weren't professional athletes. Those were the boys high school records in West Virginia. So if you think it's fair competition, you need to go back and tell that little girl that I love, why she's got to compete against a biological male. I'll be voting for the bill. Thank you.

Speaker: 03:52:17 Gentleman from the 16th, Delegate Hornbuckle.

Del. Hornbuckle: 03:52:22 Um, thank you, Mr. Speaker Pro-Tem. Ladies and gentlemen, there's a lot going on here today, there's a lot being said. And I personally, I really relate to the message and the great words by the Gentlemen from the 50th and the third. Now I know there's also some people in this body

that relate to the words of the gentlemen from the 47th and the 10th. But on this issue, I'm going to urge all of you, all of us, no matter what side you're on, to put the emotions on the table and to embody who all of us are, which are lawmakers.

We're lawmakers. Now, I want to share with this body that in the summer of 2020, Trump appointee Justice Gorsuch wrote the Bostock opinion. And in that Bostock opinion, talks about discrimination based on gender identity violates federal law in regards to employment. Well, with that, the Fourth Circuit, which we here in West Virginia are included in, they applied that to Virginia's bathroom bill, which was struck down.

So I would invite this body to understand that there is precedent here and upon passage of this bill potentially, it's not going to cut the muster. We're looking for a problem yet again. I would also implore our body about the good back and forth between myself and the chairman of education and also the gentlelady from the 35th. And speaking about Title IX issues. And if there is a football team and there isn't a girls football team, could the girl play on it? And she could. Then the chairman also said that, uh, that young lady would also assume the inherent risks that come with that.

And then that could also go either way. Now, in this case here, if we were to have a transgender child in this state, and they were denied the right to participate again, we're asking for a lawsuit. We're asking for extended litigation. Now that might not seem like much on the surface, but what we're going at here is we're going to hurt all the children involved. Understand we're going to hurt all the children involved, not just the LGBTQ+ community youth. Again, I want to stress the word youth, but the ones who are not a part of that community.

'Cause there could be potential suspensions of the season, Championships could be vacated, again, ongoing litigation. It could really hurt all of our youth. So I think we need to slow down here and understand, regardless of how you feel personally about this situation. Legally, we're asking for a battle and we're no longer going to be lawmakers, we're going to be law breakers. So I would urge you all to take your time and vote this bill down. Thank you.

Speaker:	03:55:28	Gentlelady from the fourth, Delegate Zukoff.
Del. Zukoff:	03:55:39	Maybe I should take that as a sign I'm not supposed to speak, but, um, I'm not going to. [inaudible 03:55:44], um, chair of education can you yield for a few questions.
Del. Ellington:	03:55:52	Yes, ma'am.
Del. Zukoff:	03:55:53	We haven't had this issue come up in West Virginia, but if it did come up prior to this law being enacted, how would it be handled?
Del. Ellington:	03:56:05	Probably by what we're doing now?
Del. Zukoff:	03:56:08	What? They wouldn't make a child sit out. I'm, I'm anticipating that they wouldn't make a child sit out until we met next year.
Del. Ellington:	03:56:16	[inaudible 03:56:16].
Del. Zukoff:	03:56:16	Who would come up, who would make that decision now, if this came up without the bill that we have before us.
Del. Ellington:	03:56:23	It would probably just be made on an individual basis by the school.
Del. Zukoff:	03:56:25	Okay. Um, and you mentioned earlier that there are some children who are born with both sex org- both hormones in both sex organs at birth. It's a very small-
Del. Ellington:	03:56:36	Uh, I said ambig- I said ambiguous, yeah.
Del. Zukoff:	03:56:38	Right. And very small group. What would happen? How would, how does that work about, um, determining the gender at birth and on the birth certificate?
Del. Ellington:	03:56:47	You, uh, you get, you could get their karyotype, which is their genetics.
Del. Zukoff:	03:56:51	Okay.
Del. Ellington:	03:56:51	And then you would assign a birth based on what they were at that time on the birth certificate.
Del. Zukoff:	03:56:57	Okay. And you said that, um, sex organs continue to flourish at puberty. What if that changed?

Del. Ellington: 03:57:05 That's second, that's secondary sex characteristics at puberty.

Del. Zukoff: 03:57:07 Okay. All right. Thank you. I just wanted to understand this is, this is all new to me. Um, like many of you on this floor, when I first saw this bill, I have to tell you that I was thinking that, "Man, it wouldn't be fair for girls to have to participate against boys." And then I did my research, as you all know that I love to do. Um, I want you to know that, uh, we heard during committee that the West Virginia Department of Education and the SSAC has not, have not received one issue, not one concern about this, this, this matter.

I called my local school district and I asked them, do we have many transgendered students? Because like many of you, I simply have never had other than one person who's a city council man who I dear. . . city council lady that who I dearly love in the city of Wheeling, who is a transgender person. I've never had contact with a chan- transgender person before. I had to educate myself about that. Now my children and my, my niece, who's a sophomore at WVU, had a lot to tell me because they accept those children for who they are. We talked about the bills and this about the bills in this, um, that we don't have, that this has really, I think, a solution looking for a problem.

One of many of the bills we've had this year. 16 states provide allowing transgender students to participate in high school sports without requiring medical proof. 10 states provide no guidance at all and allow schools to set their own requirements. We used to be all about local control in this building. That's changed. We have three states, Indiana, Kentucky, and Louisiana, that required general, gender confirmation surgery before they're allowed to play sports. And the rest of the States are all contemplating what to do about this. So at this point, we know what other states have done. We have that we have those, those options.

Um, so again, this has a s- a solution looking for a pro- a solution bill looking for a problem. Now I'm going to take my legislative hat off for a minute. I want to talk to you as a mother, a mother of two daughters. Two daughters who were exceptional athletes, like my friend talked about being his daughter's basketball. My oldest daughter was all state and two sports for two years. She was an outstanding

basketball point guard and an outstanding pitcher in softball. We traveled all around the country watching her play. I spent 25, 20, 20, 25 years of my life following my girls around to sport events. My youngest daughter is a swimmer. Made states every year.

Her freshman year through, through her senior year. And she swam collegiately. So when I talk about girls sports it's something I know a little bit about. And I can tell you that my daughter's participation in sports were because they loved it. With every essence of their being, they loved competing. They loved being on a team. They loved the camaraderie. They learned to cheer for each other. They really put their heart and soul into it because that's what they loved. And we're going to in this state allow transgendered students to participate in sports, and I don't know about you guys—we start Kitty kick and soccer at my area at three years old. We start tee-ball at three years old. We're pretty sports-oriented in the Northern panhandle.

So these children are participating by how they identify until they get to middle school. So the students that they, the children that are their friends, the children that they'd been playing with have been playing with them their entire life if they're really into sports, right? And then we're going to tell these transgender students who love to play sports, just like all of our children do, that you can no longer participate if you want to continue to play with your friends. Is that really the goal? Is that what we want to do as a legislature? Because I can tell you as a mother, I find that very difficult. And for those very reasons, I'll be voting against this bill. And I would urge you to search your soul and do the same. Thank you.

Speaker: 04:01:44 Gentlelady from the 24th, Delegate Mazzocchi.

Del. Mazzocchi: 04:01:48 Thank you Speaker of Pro-Tem. This is not about freedom. This is about protection. To protect our little girls that are in school. I don't mind everybody playing together in a league. If there is the parents there and everybody, the parents can take, can take care of their children, can watch them. That is all beautiful. But in school at that age when they start at what? 11 or 12, 13, they are at a very important age. And they feel very, as a girl, they feel very conscious about their bodies. Not to say that those transgender children are not, but to be honest, I don't want all this

mixing and matching and whatever in our, um, in these locker rooms, I'm sorry.

The, there is no adult there to supervise. I don't want all this, this, this, whatever you're saying there. You're making a big problem out of nothing. I am sorry. This is not . . . we have boys and we have girls and we have some that are somewhere in between, and it's a very small minority. And why are we making this a big, huge deal? It is not a big, huge deal that everybody can play in a league. If you have ever played soccer, and I'm telling you, we have our, my family brought soccer into Logan County and my little girl played with the boys and played against the boys.

And we had one Sunday where the mamas played against the kids. And I'm telling you I wanted to play, and I did, because I did when Marco was small. All the mamas played with against the five-year old boys, and we mamas could only win because we had a 14-year-old boy getting in our team. But when Mara was, was, was 12 and 13, and she is playing against the boys, those boys are too big, too powerful, because they knocked me off. I was out, okay? But I wanted to play. But our children in our school had, they have no, no say so. I don't want him to be exposed to something that should not even be here. So I support this bill and I want to end this discussion because it's sickening.

I'm sorry. Everybody is a human being, but don't bring it up that ev- that we are calling your names. No one would call a name, someone a name. And I appreciate all your effort. And I want you to support this because we need to protect our little girls.

Speaker:	04:05:01	Gentleman from the 36th, Delegate Barach.
Del. Barach:	04:05:06	All right. Thank you very much, Mr. Speaker. Uh, will the chairman of the education committee yield for a couple of questions?
Speaker:	04:05:13	Gentleman, yield?
Del. Ellington:	04:05:14	Yes, sir.
Del. Barach:	04:05:15	Thank you so much doctor. I didn't mean to make you get up again.

Del. Ellington:	04:05:19	All good. I need the exercise.
Del. Barach:	04:05:21	We've had a lot of questions about this. I might've missed this one, but I'm just trying to figure out why this is such a big deal right now. Why, why do we need this bill?
Del. Ellington:	04:05:29	You're asking me that?
Del. Barach:	04:05:31	Yes.
Del. Ellington:	04:05:31	I was probably going to say it in the closing statement, but, uh, there have been instances throughout the country where this has been an issue as unfair competitive advantage. And this is something that is brought up in 27 other states, uh, that have done that. And also in the U.S. Congress, there are bills related to this same, same, uh, topic.
Del. Barach:	04:05:52	But 12 states, uh, do allow it. Is that not correct?
Del. Ellington:	04:05:56	That's their freedom to do so.
Del. Barach:	04:05:57	And the NC2A, the International Olympic Committee also allow this. Oh, that's pretty heavy, uh, those are pretty heavy hitters with sports.
Del. Ellington:	04:06:04	That's beyond the purview of this bill.
Del. Barach:	04:06:06	Yes. But I'm just saying that, that, if, if they feel that it's okay, uh, that that should be something that we could use for a guideline, I would think. And, um, uh, so this, this isn't about, I think what people are afraid of this, isn't about some boy saying, "Hey, guess what? I want to win a trophy. I'm going to put on a girl's jersey and say, I feel like a girl today and I am going to race against these people." When you're talking about transgender, we're talking about people that are, from what I understand, uh, to participate in a sport like that, you have to be going through the transition process, is not, that not correct?
Del. Ellington:	04:06:42	I don't think this says that. I think it was just, if they identify as transgender, they're going to want to play on whatever team they want to do.
Del. Barach:	04:06:49	From what I understand, you have to be going through the process and that involves quite a bit of, uh, medical change. Doesn't it?

Del. Ellington:	04:06:55	This does not say that.
Del. Barach:	04:06:56	But that's, I think what we're, we're dealing with though, isn't it?
Del. Ellington:	04:06:59	That's what some people are bringing up.
Del. Barach:	04:07:00	Okay. All right. All right. Well, thank you very much. All right. And I'm just going to go down in, on the record as saying, I think this is a bill based on, on, on not what, what people, what we need. This is based on judging people that are different than the rest of us. And I think we should look out for those people. I'm going to be voting no against this measure. And I hope you'll all, uh, follow suit with me. Thank you very much.
Speaker:	04:07:24	Gentleman from 39th, Delegate Ferrell.
Del. Ferrell:	04:07:30	Thank you, Mr. Speaker. The chairman of education, please yield.
Speaker:	04:07:36	Gentleman, yield.
Del. Ellington:	04:07:37	Yes, sir.
Del. Ferrell:	04:07:39	I know you had to address a lot of questions this afternoon. Sorry to have to add one more here at least. But what would you say the spirit of this bill is?
Del. Ellington:	04:07:48	Spirit I would say is fair competition and safety for all the students.
Del. Ferrell:	04:07:52	Exactly. Only I would have said safety and then fair competition. Because the number one issue I think comes back to safety.
Del. Ellington:	04:08:00	Right, I wasn't putting in a particular order.
Del. Ferrell:	04:08:02	Uh, second question is to follow up question. My colleagues from across the aisle made several, uh, I asked several questions about comparison to sports where girls were allowed to play football, or I actually, my first year teaching, uh, teaching and coaching, I had a girl play on the baseball team 'cause we didn't have a softball team at Dunbar High School and she played over there. But actually those are, would you say those are just exceptional

situations where a girl is playing up in competition. It's not a situation where I coached girls volleyball and a boy would come down and play on the girls volleyball team, correct?

Del. Ellington: 04:08:39 Title IX does not allow that to happen.

Del. Ferrell: 04:08:41 Right. The, the SSAC has rules against that. Correct?

Del. Ellington: 04:08:44 And SSAC follows Title IX regulations.

Del. Ferrell: 04:08:49 All right. Thank you. Thank you very much. Can I speak to the bill please? After 30 years in education, most of that coaching high school sports, middle school sports, covering all high school sports with my sports media network, having a daughter and a son both participating in sports, I think I know a little bit about sports and the involvement of it, and especially the differences between girls and boys sports. So I coached high school volleyball here in Kanawha Valley. The teams that . . . the net on a volleyball court for the girls is seven foot, four inches and a quarter. This is the same for the guys? No. It's eight foot.

It's my colleague, my colleague over here at Harrison County, she's enjoying this lunch, uh, coaches girls basketball up at Lincoln County or Lincoln High School. They use a smaller basketball because her hands are smaller. And we could go on and on about the differences that are already in place in order to try to, uh, address some sense of fairness. But more importantly, a lot of times just to, just as we said with volleyball, they don't allow the boys to come over and play down in, into the girls level because in a lot of cases, it could even be dangerous. Especially at the net and the swing and the velocity of the ball as it travels, it would be dangerous against the girls.

So, you know, first thing, it's a safety issue. And then second would be fairness issue that [inaudible]. So the spirit of this all, if we look at today is a really, you know, what are we trying to do here? Are we trying to be unfair to a small group of the population? It doesn't matter how small the group it is. You know, we don't want to be unfair to any group. But when we look at the overall population of what we have and, and the group of kids that we're dealing with, we just want to be fair.

We just want to be fair and we're just following guidelines put in place for, for some time. I have a daughter as I mentioned, she's running track this year for Sissonville High School. She's 103 pounds soaking wet. And I just wonder you know, and not that we've had a case here in West Virginia, but would anybody want 185 pound that identifies as transgender to compete against her in the 200? I don't think so. I don't think we would think that's fair. Has anybody spoken up for her today? I don't think so. I haven't heard it.

It's just, (laughs) it's almost like we're upside down. And I think that's what my constituents, when they reach out to me about this bill and about what they see going on in the other states, and I think we mentioned there's 27, maybe other states that are looking into the same matter. We're looking, we're looking at this backwards sometimes as we do a lot of things. And I think people are just fed up and were upset and we might, and hopefully we'll never have a case of this. I hope it's never a situation. I don't think anybody in this body hopes that it's ever a situation.

But we're just getting out in front of it. And I know my time, I spend a little bit time too, when I was, uh, teaching as summers as a lifeguard. One of the things we always did and we worked on was making sure we, you know, we prevented things before they happened. You get out ahead of it. And I know as a physician over there, doctor, you, you know, your, your practice is about preventing the problem instead of, you know, trying to treat it after the fact.

And I think that's all this bill is trying to do, is get out of front, address it. Hey, West Virginia just wants to be fair. We're not trying to discriminate against anybody, but we certainly don't want to hurt 103 pound freshman girl, trying to run track at a high school against a senior who weighs 185 pounds. So I'll be voting yes on this, on this bill. And I would urge you all to join me.

Speaker:	04:12:35	Gentleman from the 37th, Delegate Pushkin.
Del. Pushkin:	04:12:40	Thank you, Mr. Speaker. Would, uh, my colleague from the 39th, please yield?
Speaker:	04:12:46	Gentleman yields.

Del. Pushkin:	04:12:48	Thank you, sir. So you coach, uh, you're a high school coach?
Del. Ferrell:	04:12:53	I have been. Yes.
Del. Pushkin:	04:12:54	You have been. You coach girls sports?
Del. Ferrell:	04:12:56	Yes I have.
Del. Pushkin:	04:12:57	Have you ever had a transgender student go out for any of your sports teams?
Del. Ferrell:	04:13:02	Not to my knowledge.
Del. Pushkin:	04:13:03	Okay. You never had someone who was male at birth and then identifies as a female try to go out for one of your sports teams in order to gain some unfair advantage over the girls? You ever seen that, sir?
Del. Ferrell:	04:13:13	Not to my knowledge.
Del. Pushkin:	04:13:14	Thank you for yielding. That's all the questions that I have for you. Mr. Speaker, if I may address this. Um, my, my friend, my new friend from Logan's right. You know, we're making a big deal out of nothing because guess what? It hasn't happened. Even though West Virginia has the highest percentage of transgender youth, uh, possibly the most, you know, alienated, uh, folks in our, in our, in our state who we're going to further alienate today with this, with this debate, even though we had the highest percentage of these kids, none of them are going out for sports teams. There aren't boys out there that are going to pretend to be transgender in order to get, uh, an advance, unfair advantage and excel in a, in a, in a girl sport. It's simply not happening. You know, if you truly believe it is, I suggest you do, uh, you know, a little more research than my friend from the 47th when you're, when you're looking up sports records and see it's not happening here. So the spirit of this bill is not about protection, it's definitely not about fairness. What it's about is manufacturing some phony outrage that you can put on postcards in a couple of years and say, act like he did something for somebody. But you didn't do

anything for anybody. What you did was you hurt kids, the most alienated kids in our schools. That's who you hurt with this debate. And that's why I'm angry about it. See, it's, it, it's, it is a solution in search of a problem. However, the solution we're talking about is more problematic than the perceived problem that you're making up. And that's the problem I have with this bill.

So let's talk about a binary decision that we're getting ready to make. You can either press green or you can press red. You get two choices on this bill. And I imagine that there's two different types of green votes today. There are those of you who really believe that this is an issue, and we've got to protect these girls from this perceived threat that's not happening. There are those of you who believe that it's a, this is a real issue. For those of you that are going to vote green, because you really think it's a problem, you know, I pray for you to find wisdom and to someday realize that this isn't an issue.

Now, but those of you, and I think you might be in the majority, those of you who know this isn't an issue, but you're going to do it out of political expediency. For those of you who know that it's probably, it's more problematic, uh, for a girl who might be a little bit tall, maybe a little bit muscular, who's good at sports and in the opposing parents and coaches are going to make an issue because of this debate we had today and alienate that poor little girl. For those of you who know that's the bigger problem you're creating here, but you're going to vote anyway because of political expediency, even though you know it's not really happening here.

PART 8 OF 9 ENDS [04:16:04]

Del. Pushkin:	04:16:00	Anyway, because of political expediency, even though you know it's not really happening here, I'm going to pray for you that you find half the courage of these children who you're alienating today, and you vote red and vote this mean-spirited bill down.
Speaker:	04:16:20	Gentleman from the 46th, Delegate Burkhammer.
Del. Burkhammer:	04:16:25	Thank you, Mr. Uh, Speaker Pro-Tem. And uh, I'd like the opportunity to speak to this, because e- every bill that we

take up, we have to ask ourself a question, is, is, who does it hurt? Who does it help?

And so it's been pointed out who we think this bill is going to hurt. And, uh, I'd like to thank my colleagues here that have brought up who that it's going to help. That's women. That's, that's my daughter, that, that is an athlete as well. And, and we can say, well, they don't need any help, that, that there's not an actual gap in, in gender. So as I watched Sports Center this morning, uh, yesterday was Equal Pay Day. And, uh, the U.S. soccer team, Megan Rapinoe, I think was her name, was at the White House, trying to close that gap, trying to continue to stand up for women.

You know, women didn't even have the right to vote until 1920. It's been 100 years ago, women couldn't even vote in our country. It wasn't until 1972 that Title IX was passed. And we've came so far in our country closing that gap. Our colleague from the 35th, before session started, talked about the women in this body right here.

I am proud that we've got a majority leader and an assistant majority leader woman. I'm proud of all the women that are in this body. And can you imagine in a time when that wasn't even capable? Because I can't.

And so today, I rise in support of all of the women here, of all of the little girls playing sports across this land. I stand for them. I stand for women. I support this bill. Thank you.

Speaker: 04:18:29 Are there those seeking further recognition before I recognize the Gentleman from the 27th to close debate? If not, Gentleman from the 27th to close the debate. Oh, excuse me. Gentlelady from the 51st.

Del. Fleischauer: 04:18:43 Thank you, Mr. Speaker. My daughter is different. My daughter played sports. My daughter is beautiful. My daughter's intelligent, and she has left this state. And it's this kind of bill that will ensure that she will never come back. Please don't pass this bill. You are demonizing little children, and you're demonizing my baby. Don't do this!

Speaker: 04:19:24 Are there those seeking further recognition? If not, Gentleman from 27th close the debate.

Del. Ellington: 04:19:33 Thank you, Mr. Speaker. This issue came to the surface in the United States regarding tra- transgender a few years ago, when two transgender girls were allowed to compete in state track and field meets in Connecticut. They won a combined 15 girls' state indoor and outdoor championship races from 2017 to '19. That's one of the things that started national debate. As I mentioned, there are 27 states that have put in legislation regarding this. And yes, there are 17 states and, uh, District of Columbia that require inclusion. However, there are six states that have no policy regarding gender identity, or sports, regarding sports whatsoever, and we're one of those.

Now, as was stated before, Title IX does allow girls to have, to be able to participate in sports. They wanted to have some equality. If there is not a girls' team and in school, then they would be allowed to participate on boys' team. As I mentioned, the contrary was not always the case, because there were more boys' teams typically than girls' teams.

Now of course, we talked about the inherent risks of that. And someone accepts the risk when they participate in sports, any sport, but the key is to try to make it as safe as possible. But also to make it fair as possible.

So when we looked at this bill, we were looking at what was happening in our secondary, in our K-12 and higher ed. This bill was targeted mainly toward our secondary school age children. Children under that age typically play sports together. Most of you have, maybe had kids and played so- had them play soccer on co-ed teams. Not an issue. Most of those kids are about the same size, same physique, not a big problem. However, when they reach puberty, that's when things change.

Now you can look at internal and external characteristics, but there are differences. We're not trying to be unequal according to the law. We're just trying to say that there are differences. The ability to play sports is still there, it's just a matter of what team they play on.

So this was targeted toward secondary school. That's where there were big differences. Anyone that's seen kids from middle school to high school, is a big variety in how, to what their habitus is. Some are tall, some are short, some

are heavy, some are thin, some have different abilities. Well, that's where they compete.

Once they get out of high school, on the college level, the NCAA has different rules. It also includes that they also if they are gender, trigen- transgender female, they have to have hormone levels taken for a year before they're able to participate. So there are regulations in that. We wanted to stay away from that we were just dealing with secondary school. That's where the differences in the safety was. SSAC didn't have a big issue about it. They said, "We follow Title IX, we'll do what you tell us."

That's pretty much what we were told. They were hand's distance, staying away. So we looked at what is the gender, the birth certificate is something that they have to use to enter school. That would be their birth gender. If they did not present that, then they would have to have a certi- some certification from their physician saying what gender they were at birth. Doesn't mean they're going to be sexually assaulted, as some people are claiming. Mostly pedatri- pediatricians see these people. I've seen younger girls, I've seen younger boys when I was in training. Most of them aren't a big problem. Most of us gentlemen here have been through exams, especially of the genitalia when we did sports physicals. Anyone who's done hernia exams had to do that. There was not a problem there. And I didn't see any big outcry on that.

If someone had, was it to say a transgender female that had corrective surgery, obviously, someone performed that surgery, and could attest to what the gender was of that person. And you don't even need a physical exam to do that. You can do just the karyotype. There are a number of ways. Blood work, buccal smear, whatever, tells what their gender is. Very easy, non in- relatively non-invasive. So that's not a big issue. All these things that were proposed, that we're going to be torturing these kids and everything. That's not a big problem. It shouldn't be happening.

But we do want to make sure they're in the right part. We don't want to have an unfair advantage. I saw on the news the other day, they were showing, I think it was in Indiana, a girls' basketball team with a transgender girl that was about six foot six, taller than me, playing against all these young girls that were about a foot and a half shorter. I

mean, that is not a very fair advantage. So what this is trying to do is prevent problems coming here.

We have a policy in place. It says these kids can still play if they choose to. Now, if they don't want to participate in interscholastic sports, they don't have to have anything else further done to them. That's strictly voluntary. It's just giving a more fair advantage to them.

It also has nothing to do with locker rooms. It has nothing, you know, when they mentioned Fourth Circuit Court, all that had to do with bathrooms. That was an opinion on bathrooms. Supreme Court hasn't decided anything about locker rooms or sports. That has nothing to do with this bill. Doesn't apply. Maybe it will. As I mentioned, there's legislation in the U.S. Congress, both the House and the Senate, dealing with the same problem.

But until something like that supersedes what we do, it's up to us to decide where we want to go with it. So for the safety, the enjoyment of our kids, and also, I would also say, the emotional status of our students, it goes both ways. Kids that denied the prop, the ability to obtain a scholarship to college, or to be able to participate in an, in a state event or a national event because, uh, maybe some unfair competitive advantage from previous things. Those kids suffer too. So it's not just one sided, and there's a, we're not trying to descrim- we're just saying, if that's what your gender is, that's what your ability would probably be more appropriate for. That's what this bill tends to. So Mr. Speaker, I would recommend passage of this bill.

Speaker: 04:26:27 The question before the House is shall the bill pass. Those in favor of pass the bill will vote aye. Those opposed will vote no. The clerk will prepare the machine.

Has every member voted? Gentleman of the 58th, your vote's not registered. [inaudible 04:27:04] Gentleman wishes to be recorded as having voted in the affirmative.

Clerk will please close the machine and ascertain the result on that question. There were 78 ayes, 20 nays, and two members absent who are not voting. The majority of members having voted in the affirmative, the chair declares the bill passed. The clerk will please report the title.

Clerk:	04:27:25	Committee substitute [inaudible 04:27:28] 3293, relating to single-sex participation in interscholastic athletic events.
Speaker:	04:27:34	Are there amendments to the title? If not, the title as read by the clerk will be and remains the title of the bill. For what purpose does Gentleman from the 46th seek recognition?
Del. Burkhammer:	04:27:43	Thank you, Mr. Speaker. I move that this bill be effective from passage.
Speaker:	04:27:50	Let's finish the title amendment first. If there are no, if, if, are there amendments to the title? If not the title as read by the clerk will be and remain the title of the bill. The Gentleman from the 46th, Delegate Burkhammer, moves that the bill be made effective from passage. The question before the House is the motion that the bill be made effective from passage. Those in favor of the motion will vote aye, those opposed will vote no. The clerk will prepare the machine. Has every member voted? If so, the clerk will close the machine and ascertain the result on that question. There were 79 ayes, 19 nays, and two members absent and not voting. Two thirds of members having voted in the affirmative, the chair declares the bill effective from passage. The clerk will please report the action of the House to the Senate. Next bill on third reading.

EXHIBIT D

West Virginia Senate Education Committee Discussion of H.B. 3293

April 1, 2021

Counsel:	05:42	Thank you Madam Chair. Um, House Bill 3293 as passed by the house requires each county school district to confirm that the sex on the birth certificate of every student participating in an SSAC event is a student's sex at the time of birth. If there is no original birth certificate, the student must provide a signed physician statement, and requires the SSAC to check for the county boards that every student is competing according to biological sex. The proposed committee amendment strikes out everything after the enacting clause and provides that the following be added to a new section, Section 18-2-25d. And, um, it adds legislative findings regarding the state's important government interest in ensuring equal athletic opportunity for biological females. Um, it provides definitions for biological sex, female and male. It requires all public secondary schools and public schools of higher education to designate teams according to biological sex using the male, men or boys, female, women or girls, and co-ed classifications, and, um, provides a cause of action for individuals and schools aggrieved and harmed by a violation of this section.
Chairwoman Rucker:	06:57	Thank you Counsel. Are there questions for Counsel? Senator from Harrison.
Senator Romano:	07:06	Madam Chair-
Chairwoman Rucker:	07:06	Yeah.
Senator Romano:	07:07	. . . um, who is available to speak on this issue today?
Chairwoman Rucker:	07:11	So we have four, um, speakers that have volunteered to speak on this issue, um, at the appropriate time we can call them forward. Do you have any questions for Counsel?
Senator Romano:	07:23	Well, I, I wanted to know the names. It will, it will affect my questions. Counsel, so if they can give the names and who they represent.
Chairwoman Rucker:	07:29	We have Dr. Gilbert Goliath. We have Sissy Costner Boone. We have Chase Strangio, and we have Sydney Mc-

McEl- McElroy. I, I am sorry if I mispronounced anybody's name. Sorry.

Senator Romano: 07:42 So at least we are doing it in committee, do, do you know who they rep-

Chairwoman Rucker: 07:44 And I also see Sarah Stewart up there.

Senator Romano: 07:47 Do, do you know who they represent?

Chairwoman Rucker: 07:49 Um, I don't have all of that with me. I know, um, one of these individuals is a pediatrician. We have someone who's a deputy director for transgender science with the ACLU. Um, I believe someone is from Marshall, and I think, uh, we have a parent.

Senator Romano: 08:07 Okay. Cou- I do have some questions for Counsel. Thank you.

Chairwoman Rucker: 08:09 Okay. Uh, Senator Romano is recognized for questions to Counsel.

Senator Romano: 08:13 Counsel, I'm, I'm a little concerned about the difference between the original bills that came over from the House and the committee strike and insert or amendment, whatever we're calling it. The, the, the bill from the House as I read it requires that the board of education confirm the biological sex of the student prior to allowing them to participate in, in sports, correct?

Counsel: 08:35 Yes.

Senator Romano: 08:36 And it did not allow a parent or another school to challenge the biological sex of the student had, that had been so, um, um, so approved by the school board. In other words, there wasn't an outside challenge that students, uh, um, biological sex, is that correct?

Counsel: 09:01 No, not in that bill.

Senator Romano: 09:03 In the House bill. But now the, the, the amendment is, I think it's called on this—is it a strike and insert or amendment?

Counsel: 09:13 Both.

Senator Romano:	09:14	Same thing?
Counsel:	09:14	There's a strike and insert.
Senator Romano:	09:14	Okay.
Counsel:	09:14	Strike and insert amendment.
Senator Romano:	09:16	It replaces everything, I just want to be sure.
Counsel:	09:18	Yes.
Senator Romano:	09:18	The strike and insert allows, uh, anybody to challenge the biological sex of a student playing sports in our secondary school system.
Counsel:	09:31	Um, I don't think that the language allows anybody, um, line 54 says, any individual aggrieved by a violation of this section may bring an action against the county board of education. So I think the purpose here is if there's, um, a biological female that has, you know, lost the state championship to a biological male, that is the kind of person that could bring, um, an action.
Senator Romano:	09:56	Sure. But that's going to be anybody. Take it from a lawyer, anybody can be aggrieved. And I mean, I can state an, I can state an, an aggrievement sitting here. I'm just, I'm just saying anybody can be aggrieved. It really opens it up though to individuals, correct?
Counsel:	10:10	Y- you still would have the standing requirement and you would still have to show harm, um, you would still have to show that it's your particular interest, um, that is being protected by this bill.
Senator Romano:	10:21	Sure. That case is already in court though. It's already going to be a matter of public record, it's already going to be in front of the public, isn't it in order for those issues to be decided?
Counsel:	10:30	Yes.
Senator Romano:	10:31	Okay. That's my issue with the, the whole thing, and, and I'm sure I'm going to have a chance to get into it here in a second, but, uh, um, so why the differences, do you have, do you have any idea what the change, what motivated the

		change? Let me ask you this, are we aware of any transgender student playing sports on a team that is opposite their biological birth?
Counsel:	10:54	No, I'm not aware.
Senator Romano:	10:55	Okay. Do, do you know why the change in the bill from the House bill, 'cause it really risks the bill going back. I mean, we could not get any bill if we allow this change, right?
Counsel:	11:05	I, I think there was some concern on the burden that you're imposing on these county boards to have to check every single athlete that wants to participate. Um, and-
Senator Romano:	11:17	Go ahead. I'm sorry. I didn't mean to interrupt.
Counsel:	11:17	Sorry. Um, and also not every student is going to have access to a birth certificate. So here you are asking the student to establish their sex based on birth certificate, um, and there are lots of situations in which a student doesn't have a birth certificate, and if they don't have onem that bill requires them to then go to a doctor and subject themselves to, um, a physical examination.
Senator Romano:	11:44	Well, every child, every student is subject, and correct me if I'm wrong, I'm asking you the question. Isn't every child subject to a physical examination before they can play sports in, in our secondary school system?
Counsel:	11:55	Yes. But an examination for this purpose would likely exceed the scope of a typical examination. Um, because it-
Senator Romano:	12:01	What makes you say, what do you base that on?
Counsel:	12:03	Based on the original language in the bill which asks to check basically, make the decision based on the, the students, you know, reproductive systems and genitalia.
Senator Romano:	12:14	No, no. I'm asking you, what, what makes you think that the physical e-exam would be any more invasive? You ever heard of, and I'm just asking you, is that from personal experience, or do you have something that tells you that it's more invasive 'cause I've had them, I've played sports, and trust me, they knew what gender I was when I left that doctor's office. I'm, I'm just wondering if you got some information that I don't.

Counsel:	12:34	Well, I don't want to speak on the experience in West Virginia. I do know what my personal experience has been as an athlete in another state, and I just don't know if that would be-
Senator Romano:	12:34	Sure.
Counsel:	12:34	. . . relevant.
Senator Romano:	12:45	Sure. Okay. But in this state, I mean, at least as far as I know, and I'd be interested to see if any of our speakers can speak to it. You know, I, I would, I would almost presume that the physical exam that you're required to undergo would confirm whether you were a male or female, but I, I could be wrong. But, uh, thank you counsel, good job. I'll at the appropriate time, uh, Madam Chair.
Chairwoman Rucker:	13:07	Uh, sure. At the appropriate time. Are there any other questions to Counsel? It looks like the appropriate time is now. Senator, um, from Harrison, uh, do you have someone you'd like to s- call forward?
Senator Romano:	13:25	You know, based on, on your-
Chairwoman Rucker:	13:26	List?
Senator Romano:	13:27	. . . sheet, I really don't have anybody. I, I would ask anybody that could speak to, um, whether or not, uh, there was sufficient, um, examination that the school board, that if somebody did not have a birth certificate so reflecting their gender, that through the routine examination of every athlete would be able to cover that. Is there anybody that's-
Chairwoman Rucker:	13:50	Mm-hmm (affirmative).
Senator Romano:	13:51	. . . willing to speak to that issue?
Chairwoman Rucker:	13:51	Pretty specific question there. (laughs)
Senator Romano:	13:51	What's that?
Chairwoman Rucker:	13:55	Pretty specific question there.
Senator Romano:	13:57	Well, it's, it's my pretty specific concern.

Chairwoman Rucker:	13:59	Um, I, I know, um, we have some, oh, a couple of volunteers. Okay. Um, sorry, I do not know your names. Um, is one of you a doctor? Okay. Could you please unmute yourself?
Dr. Sydney McElroy:	14:17	I am a family doctor.
Chairwoman Rucker:	14:19	Oh, okay. Um, well, so may, can you, we'll start with you ma'am, what is your name?
Dr. Sydney McElroy:	14:28	Hi, I'm Dr. Sydney McElroy. I'm a family physician with Marshall Health in Huntington.
Chairwoman Rucker:	14:34	Okay, thank you.
Dr. Sydney McElroy:	14:34	And-
Chairwoman Rucker:	14:34	Thank you for-
Dr. Sydney McElroy:	14:34	Yes.
Chairwoman Rucker:	14:37	. . . identifying yourself. Um, do you mind raising your right hand? We swear in all of our testimonies here.
Dr. Sydney McElroy:	14:42	Sure.
Chairwoman Rucker:	14:42	Please raise your right hand. Do you promise to tell the truth, the whole truth and nothing but the truth so help you God?
Dr. Sydney McElroy:	14:48	I do.
Chairwoman Rucker:	14:49	Thank you so much for joining us. Um, Senator from Harrison.
Senator Romano:	14:53	Thank you. Thank you Doctor for volunteering here. And, and Doctor, what, what I'm trying to determine, I don't know if, if you probably haven't had a chance to see these two bills we're discussing. One bill places, and I'm going to use the word burden, the burden on the school system to confirm the biological gender of the child, either through a birth certificate, and again, the other way that I always thought was relevant was the routine physical exam that every athlete's given before they participate. And the second bill, which essentially allows anybody to challenge

the biological gender of a child playing sports. I, I wondered if, can you speak to that?

Dr. Sydney McElroy: 15:34

Sure. I, I have done hundreds of sports physicals in my career as a family physician, and I can tell you that while I'm imagining what you referenced earlier in a pre-participation sports physical, um, that you went through being a, sort of an examination of your genitalia. I, I, that was probably a check for an inguinal hernia, which has been part of sports physicals for some time, although more recent evidence has actually called into question if we even need to do that. But if we're talking about a cisgendered female or the, a patient that has a vagina, uh, a labia, we would not examine that as part of a pre-participation sports physical, that's not part of the routine examination. Um, and the original language of the bill that I found very concerning that it did not just say external reproductive anatomy, it said internal and external reproductive anatomy.

In order to prove internal reproductive anatomy for someone with a uterus and ovaries, we would have to at the very least place the patient in the lithotomy position, which is when we have them in stirrups, you've probably seen that, if someone's giving birth in a movie or something. Place her in stirrups and do a speculum exam, so use a, a device to widen the vaginal canal and see the bottom of the uterus, the cervix. And if you couldn't do that, then the next option would be some sort of radiological exam, whether that be a trans vaginal ultrasound where we insert a probe into the vagina or a CAT scan or an MRI which would expose them to radiation. So no, that, it would not be part of a standard pre-participation sports physical, or I should say, frankly, any physical exam that a child would undergo as part, I mean, young girls do not have pelvic exams done just so we can look for a uterus, that would be malpractice if we did that.

Senator Romano: 17:29

I can't-

Dr. Sydney McElroy: 17:29

This would not be a standard exam.

Senator Romano: 17:31

I can't imagine it would have to go that in depth, but that's, me, believe me, I'm trying to, what, what I want to avoid is, I mean, tell me this, and, and you're family physician.

Dr. Sydney McElroy: 17:31 Yes.

Senator Romano: 17:40 What psychological effect do you think it would have on a young teenage boy or a young teenage girl to get singled out publicly as somebody who was, you know, playing a sport for which they're, um, they've crossed over from a gender perspective. I mean, what, can you tell me as a physician, what, what effect do you think that would have on them psychologically to have that kind of, of scrutiny placed upon them in their school and in their community?

Dr. Sydney McElroy: 18:09 Well, I think that if, if, are you referencing the psychological effect of a transgender athlete being harassed or, or called out by members of the community?

Senator Romano: 18:19 You know, you know, actually I'm not.

Dr. Sydney McElroy: 18:21 Is that what you're asking me?

Senator Romano: 18:22 I'm, I'm thinking back through my school years, and I'm thinking back to, uh, girls that might've been, um, you know, um, you know, built more masculine in nature than, than other girls and, and they were good athletes. And, and, you know, I'm, I'm wondering, and they're females. I mean, there was, at least when I grew up, there was never any doubt they were females, but I'm wondering what would happen if, if they were challenged because somebody felt aggrieved. You know, I w- I wonder if their-

Dr. Sydney McElroy: 18:50 Sure.

Senator Romano: 18:51 . . . if their gender was challenged, what effect do you think that would have on them psychologically?

Dr. Sydney McElroy: 18:55 Uh, I, I think, I think that what you're referencing is exactly a lot of the problem with this. I think that there are so many variations in body type and size and all of those things, especially throughout the middle school, high school years, that to unnecessarily call attention to those differences, whether the student is transgender or cisgender as in the example your giving, would absolutely be embarrassing, uh, humiliating, would put that student through a, a terrible time. I mean, yes, that could be psychologically, and, and especially when you're talking about transgender students, these are kids that already 50% of them are going to

attempt suicide in their life. So they're already under undue stress and pressure.

Um, you know, they're six times more likely to have anxiety and depression. They are 84% of them are, are, you know, afraid of attending school because they feel unsafe there. So, yeah, I think that that's the whole problem is we're trying to define something, um, that could cause great harm instead of just allowing for natural differences between kids to let them all play, let them enjoy the benefits of sports. I think what you're speaking to is the, the problem with the bill in either form-

Senator Romano: 20:06 And, and just to be clear-

Dr. Sydney McElroy: 20:06 . . . it's damaging.

Senator Romano: 20:07 I'm sorry. Go ahead doctor.

Dr. Sydney McElroy: 20:09 It, it could be damaging to children either way. It could be absolutely psychologically damaging to children.

Senator Romano: 20:14 And, and we're talking to, I mean, I'm not even getting to the transgender kids who already have tremendous psychological issues they're dealing with. I'm just talking about, you know, a young girl who, who maybe grew up a little faster than everybody else, maybe she's a little bigger than everybody else. I went to school with them. They were, you know, a couple of females in my classes I was afraid of, but, but they were females. But it would have been nothing to challenge their sexual, their gender, you know, if I wanted to, to challenge them because they were, you know, the star of the basketball team, or they were the, you know, the, the star of the soccer team, it would be nothing, and, and that would be devastating to a child that wasn't even having trans- transgender issues, that would just be a regular child, right?

Dr. Sydney McElroy: 20:55 Yes. Yes. I agree.

Senator Romano: 20:56 Well, let me see if anybody else has any other questions for you doctor. Thank you for coming on today.

Dr. Sydney McElroy: 21:01 Oh, no problem. Thank you.

Chairwoman Rucker: 21:03 Thank you. Are there any other questions for our guest? It looks like not. Thank you so much for volunteering to come on today. And I know there was, uh, another light on, I believe, it, um, sir, could you identify yourself before the committee? Yes, sir. We, we can't hear you. Can you unmute yourself? Hmm. Sorry. We still hear no sound. Okay, let me look. Um, I, I don't know whether that was, um, Dr. Gilbert Goliath. I'm sorry, there is no sound at all. Yes, um, I, sir, we can't hear you. I don't know if you could try to work out your issue and we'll try to recognize you in a couple of minutes. Thank you.

Dr. Gilbert Goliath: 22:18 Okay.

Chairwoman Rucker: 22:18 Oh, there you are.

Dr. Gilbert Goliath: 22:20 Uh, you got me?

Chairwoman Rucker: 22:21 We can hear you now.

Dr. Gilbert Goliath: 22:23 Okay, great. Yeah, no, I concur with what Dr. McElroy said, uh, the psychological issues.

Chairwoman Rucker: 22:29 Sir, sir, hold on.

Dr. Gilbert Goliath: 22:30 Oh, I'm sorry.

Chairwoman Rucker: 22:31 Please identify yourself for the committee.

Dr. Gilbert Goliath: 22:33 Oh, my, my name is Gilbert Goliath. I'm a pediatrician.

Chairwoman Rucker: 22:37 Okay. Thank you. Would you please raise your right hand? Do you promise to tell the truth, the whole truth and nothing but the truth so help you God?

Dr. Gilbert Goliath: 22:45 Yes, I do.

Chairwoman Rucker: 22:46 Thank you so much. So now you may please go ahead and give us your thoughts.

Dr. Gilbert Goliath: 22:50 Okay. Sorry about that. So yes, I concur with what Dr. McElroy said about the psychological issues that these, uh, young people would go through if they were in a situation where the gender was questioned. And back to as far as the physical exam is, she was exactly right about, we don't do an intensive physical exam during this pre- uh, sports

participation, because with the males it's very easy to determine the sex, but a little bit more difficult for female, which we don't look at that part of the body, to the genitalia of the female, we look at the external vagina, but that's about the extent of it. So, as she also mentioned about having radiological studies that would need to be performed to prove the gender identity of that young person, uh, that's involved in this, if they plan on participating in a sport.

Chairwoman Rucker: 23:43 Okay. Thank you. Um, I believe that the Senator from Harrison might want to ask you a few questions if that's okay. Senator-

Dr. Gilbert Goliath: 23:43 Sure.

Chairwoman Rucker: 23:51 . . . Senator from Harrison.

Senator Romano: 23:53 Thank you. Thank you Madam Chair. Um, and I'm sorry, could you identify yourself for me again? I apologize.

Dr. Gilbert Goliath: 23:58 Uh, Dr. Gilbert Goliath, pediatrician.

Senator Romano: 24:01 Uh, thank you doctor, and thank you for being here. Where, where are you located?

Dr. Gilbert Goliath: 24:05 In Char- South Charleston, West Virginia.

Senator Romano: 24:07 Okay. My, my sister-in-law's a pediatrician, so I know you guys all hang together, but, uh, um, I, I'm really concerned, and, and I want you to speak to this, there's two bills before us. The one that came over from the House, which simply says that the board of education will, you know, confirm the gender through a birth certificate, and if there's not a birth certificate, take other steps necessary. The one that we're considering that we call a, uh, committee substitute or a strike and insert, um, allows anybody to challenge the gender of a student who's, uh, playing in a single-sex sport.

In other words, if you're a girls basketball team and you got somebody on that team that's doing really well, but they, you know, might be, you know, reasonably questioned, anybody could bring a suit and challenge the gender of that child. Can, as a pediatrician, can, can you speak to what we're doing to our children by, um, allowing them to be subject to such a challenge, uh, really from, you know,

supposedly anybody it's aggrieved, which really means anybody could bring that type of action to try to challenge that child's gender. What would that do to that child's, um, psychological wellbeing?

Dr. Gilbert Goliath: 25:22 It can be psychologically devastating, uh, and that leads into many of the aspects, uh, leading with depression, anxiety, and just other mental health issues, because it's, being in this state, it's a small community and everyone knows everything, and that can lead to the, uh, young person being ostracized not only from community, but even family members. So I think it takes a heavy, psychological toll on the individual that has gone through the situation.

Senator Romano: 25:52 And, and would children subjected to that kind of, uh, scrutiny and distress, would, would they be, uh, more likely to have psychological issues and, and, you know, possibly leading to, you know, uh, um, depression and other, you know, psychological maladies, maybe even suicide?

Dr. Gilbert Goliath: 26:11 Oh, of course, even kids who are not participating in sports, if they have their gender identity questioned, that itself without even being in part, in the sports, it, it hampers a child's psychological, uh, whole, uh, approach.

Senator Romano: 26:25 And, and, and doctor, if we had, if we had a choice, I, I hate, you know, one of these bill is going to pass. You know, I don't, unfortunately, I, I don't have the, the power to, to, we've never had a case of, I think a, a, the wrong gender playing the wrong sport, but we're going to pass this bill today, I think. Um, but if, if you had a choice between a bill where it was left to the, to the schools to confirm the gender of a child playing in a single, uh, gender sport, or you allow the public at large to be able to challenge the gender of a child, uh, which one would you choose?

Dr. Gilbert Goliath: 27:03 Well, the one thing is that you would have to want to anatomically identify the gender of the child to make the correct decision. So that's hard to, if, how would the general public be able to do that as opposed to the school, but either, with either one you would still need some type of examination-

Senator Romano: 27:19 The schools are going to look to-

Dr. Gilbert Goliath:	27:21	[inaudible 00:27:21]
Senator Romano:	27:21	Yeah. The schools are going to look to birth certificates, and it really doesn't say what happens if there's any doubt beyond that. But the, the other bill allows the public to challenge it if they're aggrieved in any way by the, the child who they suspect is not of the correct gender.
Dr. Gilbert Goliath:	27:37	Then you would have to go with the birth certificate at the present time.
Senator Romano:	27:41	Yeah. And, and that's what the first bill does with the school, but the second one allows a, a court suit to be filed, a public court suit that would name the child, I presume, so.
Dr. Gilbert Goliath:	27:41	Right.
Senator Romano:	27:50	So all right doctor. Well, thank you.
Dr. Gilbert Goliath:	27:55	All right. You're welcome.
Chairwoman Rucker:	28:00	Thank you. Um, the Senator from Boone.
Senator Stollings:	28:01	Thank you Madam Chairman. Uh, Dr. Goliath, uh, we've shared a lot of patients over the years, uh, it's, it's good to see you. (laughs)
Dr. Gilbert Goliath:	28:08	Good to see you.
Senator Stollings:	28:10	Uh, again, we've talked about the mental health, and then in some cases also there's hormonal regulation in some of these, uh, children. These hormonal regulations are not necessarily safe, is that correct or?
Dr. Gilbert Goliath:	28:27	Yes, that's right.
Senator Stollings:	28:29	Do you, are you aware of just how big an issue this is in West Virginia, uh?
Dr. Gilbert Goliath:	28:36	I have personally not had any patients myself that have undergone through this situation, but I have been reading a lot about, in other places that they've been dealing with this.
Senator Stollings:	28:51	And again, are you, are you, do you think you're, and the, uh, other physician, do you think you are in a, uh, in the

majority or the minority of the way, uh, healthcare providers, uh, think about this issue?

Dr. Gilbert Goliath: 29:06 I would tend to believe I'm in the majority.

Senator Stollings: 29:10 Yeah. And do you know of any, any associations that have come out either for or against this as far as a medical, uh, associations?

Dr. Gilbert Goliath: 29:21 Well, as far as guidelines, of course, American Academy of Pediatrics they said we should support transgender individuals in all aspects of, uh, medical health and wellbeing, even in the area of sports. Uh, but that's not a guideline, that's just their opinion. Uh, I know personally people in both sides that feel that male is male when it comes to interacting with females because of the, just the difference in the body characteristics, the, uh, metabolism, the bone structure and the body mass. So that makes the difference regardless of what the transgender person feels they are.

Senator Stollings: 30:00 Okay. Thank you. Thank you, Madam Chairman.

Chairwoman Rucker: 30:03 Thank you Senator. Um, senior Senator from the floor.

Senator Tarr: 30:06 Thank you Madam Chair. Uh, can I have a question to counsel please?

Chairwoman Rucker: 30:10 Okay. Um, one second. Are there any other questions for Dr. Goliath? Thank you. Um, okay. Thank you so much doctor, we really appreciate you being available for the committee.

Dr. Gilbert Goliath: 30:25 Thank you.

Chairwoman Rucker: 30:29 Go ahead senior Senator from the floor.

Senator Tarr: 30:31 Thank you Madam Chair. Counsel, in the section that lands on cause of action I think that some of the, that, uh, senators having con- some concern over the physicians. There's two parts to that, um, one says any individual, and then after that, number two, it's line 58, it says, any school that suffers any direct or indirect harm as a result of violation of this section. And so if, um, would you anticipate that if, if any individual I can see where if, if somebody is, um, uh, an aggrieved parent and they're

pushing because their child lost and maybe it's by, you know, a millisecond on a race, as opposed to somebody's lap somebody, you know, that's just has, obviously, obvious physical differences.

Um, and then on the second part it says, any school that suffers. So any school I imagine would be a much more tempered approach because I can't see a school that would want to risk harming any child, whereas an angry parent I could see possibly just, I used to coach, uh, tee-ball and little league baseball and that kind of stuff. So I know there's parents that will rip your head off, or call a strike wrong. Um, the, what my question is, is that on the, any individual piece of that, is there a way that, that we can change that to protect the child for one, or does the, any school part, uh, protect that child enough from, from having an accusation that would be false and just, um, something that is, um, adversarial?

Counsel: 32:09 I think maybe for the, any individual, you could probably use language that specifies that it is a student athlete, um, that was directly impacted. Um, I don't know if just relying on schools, um, would be sufficient.

Senator Tarr: 32:31 So my concern is not, and I think I know where the conversations going about, you know, if, if we're going to take out, um, a cause of action piece. But my concern is, you know, I've, I've got to read a few emails of some of the females where states that do have this problem now going on, where we have males that are participating in female sports, and there's some real harm and real reason to be aggrieved by these individuals. And so taking out the, I assume this is the teeth of the bill, it's the only place I see any teeth. So if we, if, if that is, that whole section were to be removed, is there anything that other than just saying, hey, we hope you don't do this, that this bill accomplishes?

Counsel: 33:12 It would basically leave it as status quo if you don't provide a, a cause of action.

Senator Tarr: 33:17 Okay. Thank you.

Chairwoman Rucker: 33:21 Thank you Senator. Um, Senator from Wetzel do you have questions for counsel?

Senator Clements:	33:25	No. Uh, I think I've just basically got it answered, but it says any individual aggrieved, does that, would that prevent or allow just any fan in the stands to file an action?
Counsel:	33:41	My interpretation would be that it's an individual that's directly aggrieved by a violation, and directly meaning that, it is your interest that this bill intends to protect, and here it's clear that the interest is biological females.
Senator Clements:	33:57	Well, I'm aggrieved 'cause my team lost.
Counsel:	34:01	Well, then you might fall under the school, um, provision.
Senator Clements:	34:06	Okay. That's, I'm just curious, it's not doesn't open it up to just anybody to come in then and file some type of action?
Counsel:	34:13	No.
Senator Clements:	34:13	Okay. Thank you.
Chairwoman Rucker:	34:17	Thank you. Um, Senator Romano, questions for counsel?
Senator Clements:	34:23	Madam Chair. Counsel, did, did we look at the WVSSAC's policy with regard to challenges such as we're contemplating in this bill?
Counsel:	34:34	I did talk to someone from WVSSAC and-
Senator Clements:	34:38	But did you look at the policy?
Counsel:	34:39	Yes.
Senator Clements:	34:39	Okay.
Counsel:	34:41	So the policy is basically just, you wait until there is a, an issue, from my understanding when also talking to the WVSSAC about their policy.
Senator Clements:	34:52	Well, to me this policy achieves what I think we were looking for, um, you know, that the school makes a determination of the high school student's eligibility including gender, and then it says, any member school may appeal the eligibility of a changed gender student on the grounds of a student's participation in interscholastic athletics would adversely affect competitive equity or safety of teammates or opposing players, such an appeals

heard by the WVSSAC board of directors, which is principals.

The identity of the student shall remain confidential in all discussions, documentation shall remain confidential. And the, and, and then it goes on with some other factors to be considered. I mean, it's, it's more of an equity determination, and maybe that's not what the intent of this bill is, but I think those first two paragraphs, you know, if, if we insist on having this, uh, this, um, comp sub or strike and insert that, you know, we, we allow this to remain in the schools and remain confidential, that would at least protect children from, from unwarranted accusations that are going to destroy their lives. It, was that considered at all by the, by the committee in, in creating this sub committee substitute?

Counsel:	36:06	Yes. And I think that's actually kind of why this bill changed from the first bill, because it seemed more likely that a student would be subjected to an invasive physical examination just because there might be more students who don't have birth certificates or students from c- you know, from other states coming in that don't have a birth certificate. Um, it just seemed more likely that a student would have to end up going to a doctor just to get clearance to play a sport.
Senator Clements:	36:37	Well, but, but-
Counsel:	36:38	This allows everyone-
Senator Clements:	36:39	. . . if we-
Counsel:	36:40	. . . to compete right now, and basically in a way affirms the WVSSAC policy, um, and doesn't really, uh, change the status quo, except that it expressly provides a, a cause of action for [crosstalk 00:36:54]
Senator Clements:	36:55	Let me ask you a question. I'm just asking you individually, and you don't have to answer if you're uncomfortable. But what would you rather do to be one of a class that because you don't have a birth certificate that you get a physical examination like every other kid does, or because somebody singled you out because they saw you play a great game last week and your hair's a little shorter, your shoulders are a little broadened, they accuse you of

being a, a boy, and therefore you're publicly exposed as, you know, someone whose gender is being challenged publicly. What would you prefer?

Counsel: 37:27 I don't think my preference is relevant. (laughs)

Senator Clements: 37:29 Well, that's a good an- I guess that's a palsy question, but I mean, you know, I, I mean, I just, I just see it to be vastly different in, in a public exposure, a public outing of, of somebody who, who's probably a girl and is going to get, you know, just, I'm really shocked that we want to do this. I really am. Thank you.

Chairwoman Rucker: 37:53 Um, Senator from Mason.

Senator Grady: 37:58 Um, so I'm listening to my, um, colleague from Harrison. Um, I have some of the same concerns when it comes to that, is the, the, the last thing we want to do is to, um, embarrass or single out, you know, a young lady. Um, and, and so, you know, looking at the cause of action, my question just is, if we take out where it says any individual aggrieved by a violation, um, what if it was, if the school, so we're talking about SSAC, we're talking about NCAA, we're talking about playing for a school. So the school that that student plays for, if they could, um, you know, if they could seek, let's see, if they would allege a violation, um, with another school board.

Counsel: 38:46 Mm-hmm (affirmative).

Senator Grady: 38:46 In your legal opinion, would that keep it more discreet and more not public, meaning, it wouldn't release the name of the, the individual athlete and it would just be between school boards, um, because that's the main concern is not releasing the name of these students. Um, and, you know, would that take care of that problem if, if it was from school to school or, in your opinion?

Counsel: 39:14 I think it would definitely address that problem a little bit or mitigate that issue. Um, I don't know if there's any other lawyers in the room, but I'm not sure if necessarily a, an underage child needs to have their name on a lawsuit. Um, I don't know if they can be identified as Jane Doe in a lawsuit instead of their name. That might be relevant. Um.

Senator Grady:	39:41	Okay. Um, so, uh, I'll see if anybody else has any other questions and I'll think on this for a few. Thank you so much.
Chairwoman Rucker:	39:50	Thank you. Senator, uh, from Brooke. Sorry. Um, you guys have switched seats. Senator from Morgan.
Senator Trump:	40:01	Thank you Madam Chairman. I, I can weigh in a little bit on this because I know that when, uh, it's probably about the last 20 or 25 years, uh, our Supreme Court has adopted a practice of whenever a case involves, uh, a minor child as a party, uh, and in cases where even, uh, the parties are the adults, but it relates to a private matter involving minor children, they've adopted a practice of using first and last initials to identify the litigants. So you see cases like, uh, AB versus JM, uh, reported all the time. Those are sort of how they report divorce cases now, and the appeals, the appeal decisions in cases where children are removed in a, an abuse or neglect situation from their parents' home, the cases are in re, the children of, you know, AB and JM and that sort of thing.
Chairwoman Rucker:	41:06	Thank you very much, um, appreciate that. Um, Senator from Brooke.
Senator Weld:	41:11	Madam Chair, uh, Counsel, I'm going to go to subsection D. So, saying that a government entity, any licensing or accredited, accrediting organization, or any athletic association or organization shall not entertain a complaint, open an investigation, or take other adverse action against the county board of education for maintaining separate athletics. This is, uh, we might have, I think there's an issue in drafting here, and I'll, I'll walk you through it.
Counsel:	41:48	Okay.
Senator Weld:	41:49	So first being that, if you go up to page two and c(1), this includes higher education, so the NCAA, NAIA, and JCAA. You come down to, now let's go back to sub D on line 51 it says, "or take any other adverse action against the county board of education." So was that, was that subsection meant to only pertain to junior high and, and, and, uh, high schools?
Counsel:	42:42	No, I don't believe so. I think because we are dealing with a situation which we're asking both secondary public

schools and, uh, public higher education to comply with this, I think you would want to be able to protect public higher education from, um, any complaints for complying with this law.

Senator Weld: 43:01 So, so if we, even if, if that were changed then to reflect in addition to the county board of education to, and I don't know what proper term we would use. But, so if, if we're, if, if, if middle school and, and high school is, uh, you know, the, the athletic association or conference overseeing them is, how do we have, how would we have jurisdiction over telling the NCAA that they can't open an investigation, or that they can't take adverse action against a, a school?

Counsel: 43:53 I, I think because we're dealing specifically with a state law that applies to state institutions.

Senator Weld: 44:01 But do we have any jurisdiction at all to tell the NCAA you can't open an investigation against a school, or take any adverse action against a school? I mean, what, what jurisdiction would we have a- a- against them that they can't, that they can't open an investigation per se? And I see that, you know, on the state level, if, if, if it's a high school in West Virginia, we have the WVSSAC, or, I mean, it's, it's a different scenario, but. . .

Counsel: 44:46 It is a bit ambiguous, and so now I'm thinking whether this is meant to protect, protect against, you know, another government agency, or, um, anything that is related to the government from bringing an action against a school for doing this, and not necessarily a wholly private organization that's unrelated to government activity.

Senator Weld: 45:21 Okay. Thank you. Thank you, Madam Chair.

Chairwoman Rucker: 45:25 Thank you. Um, senior Senator from 4th.

Senator Tarr: 45:28 Thank you Madam Chair. Counsel. Um, on line 59 on the bill, and this is just, 'cause, uh, maybe this is a legal term, um, just like to have it explained. "Private cause of action," does, is private cause of action a, a certain type of cause of action, or is that just saying that the names are kept out, what does it mean by private?

Counsel:	45:47	It means that you as the citizen have, you have the right, this bill is creating a right for you, um, to, um, what's the word? Pursue a civil remedy, I suppose.
Senator Tarr:	46:06	Okay. So it just indicates a citizen?
Counsel:	46:10	Yeah.
Senator Tarr:	46:10	'Cause that one's under school. I'm just curious, or is it, or is it that it's keeping stuff confidential? That's what I'm trying to just determine between.
Counsel:	46:28	Hmm.
Senator Tarr:	46:29	It's, it's not a confidentiality thing?
Counsel:	46:30	No, it's not.
Senator Tarr:	46:31	Okay. That's what I wanted to know. Okay. That's what, that's, that's, that's, that clarifies it enough for me. Thank you.
Chairwoman Rucker:	46:37	Thank you Senator. Um, Senator from Wood.
Senator Wood:	46:40	Thank you Madam Chairman. Counsel, uh, I'm sure you did a lot of research of schools where, uh, or at least some research, schools where you have males on, on girls teams, would you have, you have read about a lot of that, seen a lot of that, you have fair amount of knowledge. So at halftime when these girls go into the locker rooms and you have boys on the girls teams, do the, do the boys generally go with them, or do they go into a male locker room?
Counsel:	47:13	I'm not necessarily sure about, I'm just not really sure about that situation, um, just because this talks about a distinction and, you know, on the playing field and not in the locker rooms.
Senator Wood:	47:25	Did you read of any situations where the males went into the bathroom with the girls, the locker room with the girls?
Counsel:	47:34	Well, there is a Fourth Circuit case that would be binding on this jurisdiction where it wasn't in a sports situation, but a biological female transitioning to male, so he identifies as male, um, with, wanted to use the males restroom, and basically the county board told him not to, um, and the

		court struck that down because they said that gender identity was not substantially related to your interest in protecting students' privacy. Um, but in the sports context, it's different because biological sex is substantially related to athletic outcomes and, um, and competitive sports and, um, contact sports.
Senator Wood:	48:21	Okay. 'Cause I have shared my memory, uh, just recently seeing a grown man on a girls basketball team. I don't know, he's 50, who identifies as a female sitting in the locker room with these girls, this bill would prevent something like that, right? I mean, if you have no males allowed onto a, a female team, they obviously logically couldn't go-
Counsel:	48:48	Well-
Senator Wood:	48:48	. . . into the locker room if they're not on a team, right?
Counsel	48:51	I see what you're saying, but this bill just speaks not to the privacy issues and entering different lockers-
Senator Wood:	48:57	But by-
Counsel:	48:58	. . . but just competing on the field.
Senator Wood:	48:59	Right.
Counsel:	49:00	Um, and I don't think that we could even speak to the bathroom situation because that is completely different as the Fourth Circuit determined.
Senator Wood:	49:08	But if no boys are on the girls team, obviously they couldn't go into the girl's locker room, am I right?
Counsel:	49:14	If a biological male, um, identified as female and wanted to go into a female bathroom, under the Fourth Circuit, you could, that, that has to be allowed if there's no, um, if that distinction doesn't serve any privacy interest. In other words, if that as- if that individual could still go into the bathroom and privacy would be maintained because there are stalls in there, because there's barriers between the urinals, um, and that's a completely different situation from competition on the field.
Senator Wood:	49:48	Right. Okay. Thank you. Thank you Madam Chair.

Chairwoman Rucker:	49:52	Thank you. We are approaching, um, the end of our allotted time. So at this time I'm going to, um, consider a motion by the Vice Chair to recess and for us to come back 10 minutes after Health Committee tonight. Um, thank you all. And our guests who are on virtually, if you want to come back, um, we will send you another Team invite. Uh, Senator from Raleigh.
Vice Chair:	50:20	Thank you Madam Chair. I move that we recess until 10 minutes after the Health Committee.
Chairwoman Rucker:	50:29	Okay. It just went blank. Um, so the motion is to recess until, um, 10 minutes after floor session and, um, the committees and after Health. All those in favor say, aye.
Speakers:	50:42	Aye.
Chairwoman Rucker:	50:44	All those opposed say, no.
Speakers:	50:45	No.
Chairwoman Rucker:	50:45	In the opinion of the chair, the ayes have it. Thank you. (silence)

EXHIBIT E

West Virginia Senate Education Committee Discussion of H.B. 3293, pt. 2

April 1, 2021

Chairwoman Rucker:	00:10	(silence). Committee on Senate Education will come to order. We will return to the order of business, which was discussion of, um, House Bill 3293, the proposed, um, strike and insert amendment. Counsel, will you please explain changes that have been made, um, since we last met.
Counsel:	00:32	Yes, so we have a new proposed strike and insert amendment and it's basically, it's very similar to the last one except that it removes protection for educational institutions against adverse action, um, it adds clarifying language to the cause of action provision, um, and addresses privacy concerns, um, and then it also requires the promulgation of rules pursuant to this section.
Chairwoman Rucker:	01:05	Thank you, counsel. Are there any questions? Is there discussion? Amendments? I will recognize the Vice Chair Roberts for a motion.
Vice Chair Roberts:	01:26	Madam Chair, I move adoption of the amendment explained by counsel.
Chairwoman Rucker:	01:31	The question is to agree on the language on the amendment as explained by counsel. All those in favor say aye.
Multiple:	01:39	Aye.
Chairwoman Rucker:	01:40	All those opposed say no. In the opinion of the chair, the ayes have it. I declare the motion adopted. I will recognize the Vice Chair Roberts for another motion.
Vice Chair Roberts:	01:50	Chairwoman Rucker, I move that the committee substitute for House Bill 3293 be reported to the full Senate with the recommendation that it be passed as amended.

Chairwoman Rucker:	02:02	The question is on the motion that the committee substitute for House Bill 3293 as amended be reported to the full Senate with the recommendation that it be passed. All those in favor say aye.
Multiple:	02:13	Aye.
Chairwoman Rucker:	02:14	All those opposed say no. In the opinion of the chair, the ayes have it. Committee substitute for House Bill 3293 as amended will be recorded. If there is no further business to come before the committee, I will ask the Vice Chair Roberts for a motion.
Vice Chair Roberts:	02:14	I move we adjourn.
Chairwoman Rucker:	02:29	The question is on adjournment. All those in favor say aye.
Multiple:	02:33	Aye.
Chairwoman Rucker:	02:34	All those opposed say no. The ayes have it. Have a good evening. (silence).

EXHIBIT F

West Virginia Senate Discussion of H.B. 3293

April 8, 2021

Clerk Cassis:	01:13:45	Engrossed Committee Substitute for House Bill 3293 relating to single-sex participation in interscholastic athletic events, third reading of the bill.
President Blair:	01:13:55	Question is on passage of the bill, Senator from Jefferson.
Senator Rucker:	01:13:58	Thank you Mr. Chairman. House Bill 3293 as amended by Senate Education provides legislative findings regarding the state's important government interest in ensuring equal athletic opportunity for biological females. It defines biological sex, female and male. It requires all public secondary schools and state institutions of higher education to designate teams according to biological sex. It prohibits biological males from competing on teams designated for biological females, where selection for such team is based upon competitive skill or the activity involved in a contact sport. Provides a cause of action for students aggrieved and harmed by violation of this section and requires the promulgation of rules. Happy to answer any questions, I urge passage.
President Blair:	01:14:49	Question is on passage of the bill, is there discussion? Senator from Harrison.
Senator Romano:	01:14:55	Thank you Mr. President, will the Senator from Jefferson yield?
President Blair:	01:14:57	Will the Senator yield? Senator yields.
Senator Romano:	01:15:01	Thank you Senator. Senator, you know, I appreciate the changes that were made to the committee's strike and insert, um, after we had some discussion, but I- I did want to kind of ask you a couple questions on what the result of that would be. An indiv- any individual and I-I think it says a student, doesn't it? A minor student or their parent 'cause the- the parent would have to the-the actual, um, challenge of a violation by somebody who may be chan- transgender, um, playing a sport. The-the challenge would come from a student, isn't that correct? I mean a student would be allowed to challenge another player as to whether they're playing in a s- a single-sex sport under the appropriate gender.

Senator Rucker:	01:16:01	I-I don't believe that it specifies it has to be a student and I want to to point out that, um, the State Board of Education and the Higher Education Policy Commission would have to promulgate rules. There is under the cause of action, it does say that a student aggrieved by a violation of this section may bring an action, but I don't think it specifies that a challenge has to be made by a student.
Senator Romano:	01:16:25	I'm going to read it, it says any student aggrieved by a violation of this section may bring an action against a county board of education or state institution of higher education.
Senator Rucker:	01:16:34	Yes, that-that's if there's a violation, um, for not following the state code, but I- were you referring to just challenging whether or not someone was of the right biological?
Senator Romano:	01:16:47	Well let me be clear, my issue is that private individuals can bring an action. It says student, but that would have to come from a parent of a student I presume 'cause most students in secondary education are minors and they would have to have an adult on their behalf represent them.
Senator Rucker:	01:17:04	I-I assume that if they're minors that their parents would have to do it on their behalf.
Senator Romano:	01:17:09	And- and, you know, I- I- again, I appreciate the fact that you've tried to add some confidentiality to this by the student not being identified in the- in the pleading, but if- if a student would be challenged, that student would have to be notified and, you know, some action taken to determine their gender, I presume, would that be accurate?
Senator Rucker:	01:17:34	That would be accurate and that would probably be specified in the rules that are developed by the Board of Education and Higher Education Policy Commission.
Senator Romano:	01:17:42	Well, I'm- I'm sticking with secondary education now 'cause I want to ask you, what effect do you think that would have on a 14, 15, 16 year old girl that might be a tomboy, but a hell of an athlete and- and an opposing, uh, player or parent of an opposing player challenges them or somebody on the same team challenges them because she's the star of the- of the- of the club and- and they want them all, they want that person off of the club. What- what psychological effect do you think that will have on that

child, on that poor girl or poor boy that might be a little bit, you know, not, maybe not, you know, manly enough for somebody and they challenge their- their gender.

Senator Rucker: 01:18:23 So, I want to to point out that, um, what we allow for in here is that a student who feels aggrieved by a violation can bring an action against a county board of education or a state institution, not against an individual.

Senator Romano: 01:18:37 But- but it's got to involve the individual. I mean, how- how's the county board of education going to defend itself unless it has that individual pulled out, sent to a physician or some other reputable person to determine what their gender is?

Senator Rucker: 01:18:52 Well, I'm- I'm not a lawyer, but if the State Board of Education and the Higher Education Policy Commission set rules for implementation and the county board of education or state institution does not follow those rules, then they won't be able to defend themselves. But if they're following the rules, I think they- they would be protected because they're following the rules.

Senator Romano: 01:19:13 But- but if that child is identified in any way, if that child is singled out, if nobody else knows but that child, what effect do you think that's going to have on that child's psychological wellbeing?

Senator Rucker: 01:19:25 I don't see where we're singling out any particular student and what I do see is that we're defending, um, women's sports for women, for girls, and we're giving an opportunity for our institutions to, um, have that as their policy, as we are told to do because of Title IX.

Senator Romano: 01:19:47 Well, let me ask you this, was there any evidence that there had ever been any transgender student play for the, uh, single-sex team opposite what their biological birth record indicated? Did we have one case in West Virginia that you know of?

Senator Rucker: 01:20:05 Not that I know of.

Senator Romano: 01:20:06 Okay, do- do you not see that- that what we've done here is open up the opportunity for unfair attacks against boys and girls who, if they're a girl, they may be a little too tomboyish, if they're a boy maybe they're a little too

		effeminate, but- but they were opening them up for attack from people who may want to embarrass them even without justification.
Senator Rucker:	01:20:42	Thank you, um, so I just want to point out two things in response. Um, one is that the, um, court still would need to determine that there's standing that, um, for that student who is making the allegation, um, so it's not like it's an automatic process. And second of all, I just want to point out that this bill is not about transgender individuals, it is about women and girls sports and our, um, our interest in protecting sports for women and girls. And, uh, like again, I want to point out Title IX actually gives the state that responsibility.
Senator Romano:	01:21:24	Is it limited to just girls sports? I thought it applied to both sexes. Am I wrong about that? It appears to be for both sexes, Senator.
Senator Rucker:	01:21:43	Yeah.
Senator Romano:	01:21:44	Unless I'm missing something.
Senator Rucker:	01:21:45	No, I'm sorry just one second 'cause before I answer you I just want to make certain that my answer's correct.
Senator Romano:	01:21:50	That's fine and it really doesn't matter Senator, you don't need to dwell on that, but if you can find it quickly, it'll be helpful.
Senator Rucker:	01:21:57	Sure, no problem. Okay, so in page 3, lines 40 to 42, athletic teams or sports designated for females, women or girls, shall not be open to students of the male sex or selection for such team is based upon competitive skill or the activity involved as a contact sport.
Senator Romano:	01:21:57	Thank you.
Senator Rucker:	01:22:17	And currently I just want to point that, um, girls have been allowed to participate in sports for men, for boys, um, in certain circumstances and that is because they do not always have access to all of the different athletic opportunities. And that is exactly the reason for Title IX and exactly the reason for why we want to protect girls and women sports.

Senator Romano:	01:22:42	Sure, sure, I do too, I- I don't-
Senator Rucker:	01:22:43	It is usually- it is usually not a problem when it comes to girls wanting to participate- participate in men's sports, but I just want to point out we're trying to protect girls and women sports.
Senator Romano:	01:22:54	And I do too and it makes it a little easier for this argument because now all we have to worry about is the poor tomgirl who grows up and, you know, might look a little boyish, do you not think she is going to be open to attack by an opposing team or a teammate for- on the ba- basis of gender? Wrongly? I mean it could be wrongly, but- but if the school board has to defend itself, do you not think they're going to have to- that- that little girl is not going to know that somebody challenged her, challenged her gender?
Senator Rucker:	01:23:25	So I- I appreciate the hypothetical situation that could occur and as someone who used to be a tomboy and had this, you know, discussion earlier with my staff, um, as the only girl and having four brothers that I grew up with, I- I was an absolute tomboy, I did not like wearing skirts believe it or not and I was very much, um, into athletics and sports. I can tell you that it is still pretty obvious if you are-
Senator Romano:	01:23:54	I'm sorry, they still what, I missed that.
Senator Rucker:	01:23:55	It is still pretty obvious if you are of the biological sex and the other issue I want to point out, it's- the way that we wrote this bill and we did it very carefully, it is only if there is, you know, a concern. One of the reasons for why, um, it is in our interest to protect women's and girls' sports is because there is a very big physical difference and advantage for biological males. Um, there's been, um, and I'm not going to be able to cite it off memory, but, you know, I was the captain of my cross-country team and I was really good. And, um, we would run together both the boys and the girls and even though I was the fastest girl on the girls' team, the slowest boy on the boys' team could still, um, beat me. So, I mean, that's just one of many examples I could cite and there is an inherent interest that we have in the state to give girls an opportunity, to give women an opportunity. It makes a difference in their ability to get scholarships, it

makes a difference in their developing of leadership and I will tell you that it was something that is, um, in- inherently of the interest of this state because we do believe in women and girls. There was a statistic that I saw somewhere that said that a high percentage of executives, women executives, CEOs were involved in athletics.

So it just goes to show you that having those opportunities for women and girls is very important in order for us to right the many ways in which women have been disadvantaged.

Senator Romano: 01:25:40 Well Senator, this isn't about opportunity for girls to play without interference from boys 'cause we've never had one of those cases. We've never had any boy try to play on a girls' team. The- the question is, how would you have felt when you were a tomboy growing up if somebody had challenged your gender, what would that have done to your self-esteem, what would that have done to your psychological outlook because there's nothing in this bill that says it has to be a serious concern, it just says that you have a cause of action if you've been aggrieved by a violation.

So you're going to get to file the case, you're going to get to file it in court and sure it's going to say, you know, Jane Doe versus MH, but that child for the school board to defend themself, they're going to have to have that child examined. That child's going to know that somebody challenged her gender.

Senator Rucker: 01:26:30 I don't think it's going to necessarily have to be an examination and that is one of the reasons to have rules be established. It could be as simple as a birth certificate, it could be as simple as an affidavit signed by the physician, I- I don't think we need to, you know, over complicate it and I'm certain-

Senator Romano: 01:26:46 Yeah, it may be-

Senator Rucker: 01:26:46 . . . I'm certain that the HEBC and the Board of Education will choose the simplest method.

Senator Romano: 01:26:50 It- it may be as simple as an affidavit, it may be as serious as a pelvic exam with a child's feet up in stirrups being examined by an OBGYN.

Senator Rucker:	01:27:01	Well, it's a really good thing that as the legislative body, we're going to be able to see those rules when they get developed.
Senator Romano:	01:27:06	Well, I- I- I'm concerned about it, the rules don't have anything to do with the court challenge section. It does say that the, but- but you know that WVSSAC already has rules in place to prevent boys from being on women's teams?
Senator Rucker:	01:27:20	Actually they do not. Um, what we have and I've been grateful, um, that we've had a member that's been able to get us all copies of it. So what this document is, is an internal policy for the board of directors to have in case there were to be a question so that they would have something to guide their decision-making, but it is not a rule and they have not established any rules regarding transgender.
Senator Romano:	01:27:46	You don't- you don't think an internal directive to the- to the board of directors is a rule that they're going to follow?
Senator Rucker:	01:27:50	No it's not and it has not been voted on or approved by their members.
Senator Romano:	01:27:54	Are you aware of any instance where there's been a situation where there's been a male on a female team in West Virginia?
Senator Rucker:	01:28:01	Well, I already answered that, that I- I did not know of- of any West Virginia, but I have heard in other states.
Senator Romano:	01:28:07	I'm sorry then how do we know they're not going to follow-
Senator Rucker:	01:28:09	I always want to point out. I'm sorry.
Senator Romano:	01:28:10	How do you know they're not going to follow their internal directives?
President Blair:	01:28:13	Gentleman will state his point of order.
Senator Trump:	01:28:17	Thank you Mr. President, I- I couldn't hear, uh, the answer that was being given to the question, I think the, uh, questioner had moved on to a second question, I don't think the Chairman had completed her answer.

Senator Romano:	01:28:31	Well, I apologize ch- Mr. President, I thought she completed it.
President Blair:	01:28:34	The- the- the Gentleman's, uh, po- the- the Gentleman's point of order is well taken, questions will be asked and answers will be given.
Senator Romano:	01:28:40	I apologize Senator, I thought you had finished. Go right ahead.
Senator Rucker:	01:28:43	No problem, I just wanted to point out that one of the considerations about this internal policy, if you read it, and it was actually highlighted in the copy that we got today, you know, it makes it in this internal policy that the school, the school, the individual school, we're talking about our public schools, would have had the responsibility of dealing with this situation if it were to arise and it would definitely open them up for legal challenge. So, this is one of the reasons for why I think it's important and we did pass a bill earlier that we have some say in these rules because we certainly do not want to put our public schools in a situation where they are going to be, um, sued. And I'm sorry, you may now, if I hope that's okay and you may now ask your second, your other question.
Senator Romano:	01:29:33	I- I think we got to the second question. Let me ask you then because this includes higher education too, doesn't it?
Senator Rucker:	01:29:40	Yes it does.
Senator Romano:	01:29:40	That's our colleges and universities around the state, correct?
Senator Rucker:	01:29:44	Yes, the public, yes.
Senator Romano:	01:29:46	The NCAA has very, very, uh, detailed rules on the handling of a situation of a male- a male participating in female sports, don't they?
Senator Rucker:	01:30:00	No, actually you're- you're not correct, um, and it's something that I did talk about, um, or at least was brought up in the committee, I have their policy with me somewhere in here. Um, it is a guidance, um-
Senator Romano:	01:30:15	It is a what?

Senator Rucker:	01:30:15	A guidance, they developed guidance for institutions who want to allow for transgender participation and it is a very, uh, they attempt to be specific and they give certain criteria if you're going to allow a transgender male to participate in women sports. But it is not a rule and it not a policy.
Senator Romano:	01:30:36	Are you aware of guidance not being followed by higher education in West Virginia?
Senator Rucker:	01:30:41	Not in West Virginia, but there are actually, um, many states that have, um, different, uh, policies and rules that are diverged from what the NCAA policy is, so it has happened before.
Senator Romano:	01:30:53	Certainly you agree that our statue isn't going to look anything like the NCAA rules or guidance, whatever you want to call them.
Senator Rucker:	01:31:04	No, it- it's not really addressing their guidance, it is actually, um, creating a protection for women's sports in the state of West Virginia and of course it is the state's authority to enforce Title IX in the state and to determine what their, um, interest is in protecting women's and girls' sports.
Senator Romano:	01:31:26	I mean I've- I've got the NCAA guidance here, it's a- it's a pretty detailed, uh, set of instructions and- and- and also includes education for our schools. And- and- and again, I'm not faulting you for trying to make sure that girls only have to play girls in single-sex sports, I'm certainly not faulting you. My overriding concern is what effect it's going to have on a 16 or 17 year old girl who may be a little tomboyish who be a heck of an athlete and who gets challenged by a parent of- of the same team or a parent of an opposing team. And- and you're right, it may be nothing more than showing their birth certificate and then the school complies, but it's going to scar that young lady for the rest of her life. Mr. President, I just want to take a second to say I do not oppose the amendment, it's a heck of a lot better than the original bill, but I will speak in opposition to this bill at the appropriate time, thank you Mr. President.
President Blair:	01:32:30	Was there further discussion? Junior Senator from the 8th.

Senator Lindsay:	01:32:33	Thank you Mr. President if the, uh, the Senator from Jefferson would yield.
President Blair:	01:32:37	Will the Senator from Jefferson yield? The Senator yields.
Senator Lindsay:	01:32:42	Thank you, thank you Senator, good morning.
Senator Rucker:	01:32:42	Good morning.
Senator Lindsay:	01:32:45	I just, I wasn't planning to address this until we- we took up the bill, but I was the individual who put the, uh, West Virginia, I'm going to go ahead and read it into the record. The transgender policy of the West Virginia Secondary School Activities Commission, this is what it says at the top, in the event a member school or its governing authority determines to permit transgender students to participate in inter sch- scholastic athletics, the WVSSAC has adopted the following policy to govern such participation. I don't, that doesn't sound like just an internal document that schools can decide to follow or not or that the WVSSAC can decide to follow or not.
Senator Rucker:	01:33:30	It's not an internal document of the schools, it's an internal document of the WVSSAC Board of Directors. And we called, um, Bernie Dolan to specifically verify because we had asked in committee, someone had asked for, you know, what is the WVSSAC policy regarding transgender and we were told there wasn't any, so we specifically looked into it. So this is an internal, um, policy for the board of directors that they created in case there were to be a situation in which they want to address this participation of transgender students.
Senator Lindsay:	01:34:05	But I read that- I'm sorry, I thought you were finished.
Senator Rucker:	01:34:05	No problem.
Senator Lindsay:	01:34:08	I read that correctly, the WVSSAC has adopted this policy, right?
Senator Rucker:	01:34:15	I don't- I don't know what to tell you, Bernie Dolan says this is an internal- an internal policy for the board of directors, it is not one that has been adopted by the WVSSAC as a rule.

Senator Lindsay:	01:34:26	Okay, what- I think we're- we're- we're playing games with language here. It does say that the WVSSAC has adopted this policy, correct?
Senator Rucker:	01:34:37	That- that is what it says on the top of here.
Senator Lindsay:	01:34:39	Okay.
Senator Rucker:	01:34:39	But above it- it says WVSSAC Board of Directors and I'm just letting you know what Mr. Dolan said.
Senator Lindsay:	01:34:47	I'm sorry? And- and as far as I know, Bernie Dolan did not testify to- to your, uh, belief as far as the significance of this policy, right?
Senator Rucker:	01:34:59	No, he did not testify.
Senator Lindsay:	01:35:00	Because we were told by the West Virginia SSAC that this is their policy and this is what they have the schools follow, so I just want to make sure the record's clear because again, we're playing with words here just to suggest to minimize the import of this policy. But regardless of what you believe this policy is or isn't, I just want to make sure I understand that number one it says the "transgender student school shall make the initial determination as to whether a student may participate in inner scholastic athletics and gender- in a gender that does not match the gender assigned to him." So the school makes that first determination, correct?
Senator Rucker:	01:35:42	According to this internal document, yes.
Senator Lindsay:	01:35:45	Sure and if there's a- if there's a conflict with, not a conflict, but if a party is upset with that determination, then it goes to the West Virginia SSAC Board of irectors on appeal, correct?
Senator Rucker:	01:35:59	I- I'm not a 100% certain, again I point out that I'm not a lawyer and I would assume that if there is a problem or a conflict that that is what would normally happen.
Senator Lindsay:	01:36:10	Well, that's what the policy says, right?
Senator Rucker:	01:36:13	Well, actually what I see here is that they would, um, give the school the authority to determine how to handle it.

Senator Lindsay:	01:36:23	Sure. But any such appeal will be heard by the WVSSAC Board of Directors, that's what it says.
Senator Rucker:	01:36:31	If there's an appeal, yes.
Senator Lindsay:	01:36:32	Okay and then the Board of Directors decision that says in- in sub-paragraph C, "the Board's deliberations will be limited to the question of whether the transgender student represents a threat to competitive equity or the safety of teammates or opposing players". You see that?
Senator Rucker:	01:36:49	Yes.
Senator Lindsay:	01:36:50	So it takes into consideration the safety of- of players and the equity of the issue, correct?
Senator Rucker:	01:36:56	Correct.
Senator Lindsay:	01:36:57	And it's specific to every circumstance.
Senator Rucker:	01:37:01	It's very similar to what we're passing in this legislation today if it were to pass.
Senator Lindsay:	01:37:04	Well then why would we take, why would this body, if it's similar, why would this body take the decisions away from the school and the- and the West Virginia SAC- AC and the appeals process?
Senator Rucker:	01:37:17	As I pointed out before, this actually opens up the schools for legal action and it is, um, as I pointed out, not a rule, it is an internal document that they are using if the circumstances were to come up. But it is in the state's interest and obviously this is a policy decision, but it is in the state's interest to protect women and girls' sports and what this bill does would essentially be following this model of protecting women and girls' sports, um, for the future of West Virginia and for the future of our girls.
Senator Lindsay:	01:37:54	Well this policy does not o- from the West Virginia SSAC does not only protect women, it protects all students. Transgender, uh, or- or- or- or- or all- all students under the sun, not just boys, girls but transgender as well, right?
Senator Rucker:	01:38:14	Are you- okay, you're asking me if I believe it's doing that?

Senator Lindsay:	01:38:17	This policy that's been adopted by the West Virginia SSAC?
Senator Rucker:	01:38:22	I believe that our state law would, if, again, this becomes law, it would also do the same.
Senator Lindsay:	01:38:28	Well then what's the purpose of the law then other than the political advantages potentially, but if we already have a policy in place as determined by the West Virginia Secondary School Activities, what are we doing here on this bill?
Senator Rucker:	01:38:42	A- again, I want to point out that this has not been adopted as a rule for the schools, the member schools to follow and it does not provide protection, um, for our schools.
Senator Lindsay:	01:38:55	Mr. President, may I speak to the amendment?
President Blair:	01:38:59	You can speak to the bill.
Senator Lindsay:	01:39:05	Oh, it's already been, oh, okay. Mr. President, I apologize, I thought we were on the amendment. Um, but I'll, may I ask unanimous consent to speak to the bill.
President Blair:	01:39:16	Yes. Approved.
Senator Lindsay:	01:39:19	Thank you, thank you, Mr. President. Um, ladies and gentlemen, let's clear as black and white as this page, I'm going to read it into the record again because I think it's worth noting why we don't need HB 3293. "In the event a member school or its governing authority determines to permit tra- transgender students to participate inner- interscholastic athletics, the WVSSAC has adopted the following- following policy to govern such participation." And actually- it's actually called the "WVSSAC transgender student policy." It's specific to the student that is seeking to play a sport, it's a process that seeks to make sure not just for female students, but for all students whether or not the transgender student represents a threat to competitive equity or safety of teammates or opposing players. So we're here discussing a bill that is already solved if- if the- if the s- if the intentions are true for this bill, a problem that's already solved. I would suggest to you a problem that doesn't exist 'cause we, as a caucus, spoke to

representatives of the West Virginia Secondary School Activities Commission and they said there wasn't a case on a high school level as far as transgender students. Then in fact if it comes up at all, it comes up in the middle school level. So we're talking fifth, sixth, seventh, and eighth grade, clearly no-one's working for a- a- a college scholarship on that level. The- if I could just share just a few things too as well in addition to that, um, you know, I've said before, like many of you, I've played sports ever since I was eight or nine years old, athletic sports, organized sports. Um, I played on good teams, bad teams, I played on teams where I was the star, I played on teams where I was a- I- I rode the bench pretty hard. One specifically was when I started playing baseball, I played junior league baseball here at Capitol Midwestern in Charleston and I was horrible. I was a horrible player, my brother and I played for Hardee's.

And we only got to play, uh, the last two innings of the game because that's the o- when you're bad, when you're not good at that pat- at- at that sport, that's what ends up happening 'cause you're- you're- you're required to play. The last game of the season, I always played right field for the la- last game of the season my coach put me on third base and I played the entire game and I couldn't catch a ball. Balls went by me all the time, I couldn't field the ball. I was so bad that the coach's wife was screaming from the bleachers to take me out of third base. That's how bad I was, honestly.

And so afterwards, obviously I went home and shed a tear or two, but then we had a, I went back to the, we had a wall in our neighborhood where I could just throw a tennis ball with a mitt because I was convinced that I would come back and play third base the next year. We actually played for an expansion team, Mario's Pizza, the next year. City Councilman Adam Noth played on the same team so we were all All-Stars.

Anyway, I started every game at third base, I completed every game at third base, I was practically an All-Star in that regard, I still couldn't hit a lick, but I was good enough to- to run the base paths. The point of this story is because sports allowed me to overcome my difference, overcome my infirmities. It challenged me for the first time in my life to show that I could overcome these barriers.

And that's a good lesson to learn. I- I like to consider myself a one, uh, uh, a great athlete, but there's no way I was ever going to be an Olympian or play in a pro sport, but that's not what sports is about, it's an outlet. It allows students to overcome challenges. That's an important lesson. Not only that, teams or the groups, if you played on teams, are usually the first groups of people that you're accepted in, that you're welcomed in, the camaraderie. That's just- that's just as important as playing the sport.

Why would we pass legislation, when there's already a policy in place that swoops down and takes that opportunity away from a student, middle school students, I add. 'Cause again, what we heard from WVSSAC was we see this is in middle school, not in high school. And let me remind the body as well because this was said in support of a measure earlier this session, the phrase "our students," remember our students, our children, they're black and white, they're rich and poor, they're abled and disabled, they're gay and straight and they're transgender. Why would we pursue a policy that separates those individuals? There's just no need for it.

PART 3 OF 5 ENDS [01:45:04]

Senator Lindsay: 01:45:02 Again, because the outlet of sports is so important to a young person's life because it allows them to overcome the challenges, because it allows them to be accepted in a group and we're talking about a specific set of students that are already having issues as- as it is. I can't imagine the pressure of a middle school student who identifies as a different gender trying to get along in their school. I'm all for women sports, but that's not what this bill is. This bill specifically says on page two, "classifications based on gender identity serve no legitimate relationship to the state of West Virginia's interest of promoting equal athletic opportunities."

So to sell it to the public, we talk about women, but what this bill does is it separates children at their weakest time and there's just no public policy and support of it, there's no benefit to it, all it does is seek to divide. And gives us, the- the public, the nation, another reason to joke about West Virginia for pursuing such a policy in the first place. Vote for our children, vote no on this bill, thank you.

President Blair:	01:46:22	Further discussion. Senior Senator from the 4th.
Senator Tarr:	01:46:28	Thank you, would the Senator yield Chair Lady.
President Blair:	01:46:31	Senator from Jefferson yield, Senator yields.
Senator Tarr:	01:46:34	All right, thank you Mr. President and thank you for yielding. So, I was just going back and forth between discussion here between what's considered policies and I think rules and regulations of the SSAC. And I understand that the policy that was laid on our desk, you're saying, is the internal policy, do internal policies or rules and regulations of the SSAC govern sports in West Virginia?
Senator Rucker:	01:46:59	No.
Senator Tarr:	01:47:01	So, the- the internal policy and the reason I was looking here is that, you know, I went to SSAC's website as this came up and I was looking, I thought, well, I want to look at this policy. What I found is it says that rules and regulations, the constitution and bylaws of the WVSSAC are the rules and regulations of the commission. So, what we had before us is an internal policy and you're saying that it's not the internal policy that governs sports, but it's the rules and regulations that governs the sport.
Senator Rucker:	01:47:33	That is correct.
Senator Tarr:	01:47:34	That's correct? Okay. Um, well, what I found, just appreciating you answering my question, I'll just speak to the bill if that's okay. Mr. President, you know, I just- I just did, um, went in and looked at the constitution and rules and regulations of the WVSSAC that is current on their website here and I did a word search for transgender and it came up zero. This policy which is not what governs sports in West Virginia in- has nothing to do with the rules and regulations that govern sports in West Virginia. Because when you look at the rules and regulations of WVSSAC, "transgender" which is mentioned in this policy, one, at least two, three, four, five and so on times is nowhere in the rules and regulations whatsoever of the WVSSAC that governs athletics. And the other thing is I think that, you know, one- the Senator that spoke here a second ago talking about having such a trouble in a sport is one of the issues we're talking about. Because you know

what, I may not be very competitive in a male sport, but what I could do is identify as female or say that I do and go dominate in a female sport because of the physical advantage that is just naturally given to a male over a female. So and which is what this bill's about, so Mr. President I rise in support of this bill.

President Blair: 01:49:09 Further discussion, Senator from Bane. Senator from Bane.

Senator Stollings: 01:49:17 Thank you Mr. President. I'm not sure if this body is concerned about what this bill does or could do to a transgender person in West Virginia. But the West Virginia State Medical Association, the West Virginia Chapter of the American Academy of Pediatrics, the West Virginia Psychological Association and the West Virginia School Psychologist Association and the American Academy of Pediatrics on a national level are very concerned about what this would do to a transgender person, student, in West Virginia. They say many trans youth already face an uphill battle in nearly every part of their lives. 84% of transgender youth feel unsafe at school. Nearly half trans youth attempt suicide, think about that. And the trans community is increasingly the target of violence and harassment. This bill will further ostracize young transgender people from their peers. The West Virginia Chapter of the American Academy of Pediatrics opposes House Bill 3293. Their organization works toward all children and adolescents regardless of gender identity or expression.

Receiving care to promote optimal physical, mental, and social wellbeing. Any discrimination based on gender identity or expression damages the socio-emotional health of children, families, and society. Again, transgender youth in West Virginia are high at risk- higher risk of suicide than their cisgender peers and this bill will only further the discrimination transgender youth experience. They again ask us to reject this- this bill. Transgender already face higher risk of suicide and depression and again it would further harm too many of West Virginia's most vulnerable.

So whether we are concerned about the unintended consequences of this bill, the people that are specialists and people that are on the frontline clearly, clearly have an issue. So it is with that regard and the fact that I think the SSAC does cover and does have a policy, should this ever

become an issue. So we're creating legislation for a problem that doesn't exist and it does have unintended negative consequences. I urge a no-vote.

President Blair: 01:52:30 Senator from Brooke.

Senator Weld: 01:52:32 Thank you Mr. President, to stand today and explain my vote on this issue. This is, it's a difficult one, it's an odd one. It's not an issue when I first ran for the legislature in 2014, if- if you had said this was a bill that you- you'd be debating and taking up, but I- I wouldn't have even understood the concept to be honest with you, Mr. President, it's- it's a tough issue. We're talking about young kids, high school kids, and college athletes, just a tough issue.

And so I understand the concept as I've started to research it, I still don't understand the whole transgender issue, I don't, I'll fully admit, it's- it- it's just not something that I fully understand. But what I do understand, Mr. President, is the law and so I started to do some research on this issue 'cause it's just something that I didn't know about. So one of the things that I found was that recently, uh, South Dakota had a- a similar piece of legislation and their- their governor Kristi Noem who was a- a- an ardent supporter of- of the legislation before it- it came to her, had to send it back to the legislature.

And- and- the- the bill that they had pertained to higher education, to NCAA, uh, National Junior College Athletic Assassination, NAIA and so, but I- I'm going to read Kristi Noem's statement. The NCAA is a private association, that means they can do what they want to do. If South Dakota passes a law that's against their policy, they will likely take punitive action against us. That means they can pull their tournaments from the state, they could pull their home games, they can even prevent our athletes from playing in their league.

South Dakota's chances of winning a lawsuit against the NCAA are very low. Competing on the national stage means compliance with the nation governing bodies that oversee college athletics. While I certainly do not always agree with actions these sanctioned bodies take, I understand that college- collegiate athletics requires such a system, a 50-state patch work is not workable. The

NCAA's policy is that after a year of hormone suppression therapy, which is something that I do not understand Mr. President, an individual can then play the sport that they want to play and so it's a policy of inclusion after that year.

This would be a policy that at no point becomes inclusionary in the higher education levels. And so we would be against the policy of the NCAA. And- and Governor Noem was accused of catering to the NCAA when she- on that- when she took the veto action and I may likely be accused of doing the same. But I'm not, but I'm a realist and I know the law and I can understand the law.

And the last thing that I want to do Mr. President is have this negatively affect any of our college athletic teams here in the state of West Virginia. I was a college athlete myself, it's hard, it's a lot of work. It's not like high school, there's much more into it, you get one day off, you get Sundays off. And so I couldn't take any action here that would potentially put into jeopardy the hard work that our college athletes put into a season. Because the NCAA, right or wrong, could say WVU, West Liberty, Fairmont, Marshall, whomever, you're no longer in the league, you can't play in the game or we're not going to- you're not going to be a tournament host site.

They could and I don't agree with it, but they could because they're a private entity, we have no jurisdiction over them whatsoever. We don't. And another thing Mr. President is a particular part of this bill that legally I think presents a lot of challenges, could present a lot of challenges for our colleges and universities and I'll read from the bill. "Any student aggrieved by a violation of this section may bring an action against the county board of education or state institution of higher education allegedly responsible for the alleged violation."

"The aggrieved student may seek injunctive relief and actual damages as well as reasonable attorney's fees and court costs if the student substantially prevails." So West Liberty State University, the girls' basketball team plays Notre Dame College, it's- it's in Ohio. So that team has a transgender female on it and she's complied with the NCAA's policy the year. So she comes to- to West Virginia to play West Liberty, well she can't because of the state's policy. So she has been aggrieved by this law, so does she

now have a c- a cause of action, she's an aggrieved person. She's a student who's aggrieved by this section, does she now have a cause of action against West Liberty State University?

On the other side of that, they don't play the game at all. On high school it's- it's a lot different, we've got a lot of high schools in the state of West Virginia. If- if- if Brooke High didn't play Soonbill Big Red, I'm sure they could pick up another school in- in West Virginia to play against. But we only have so many Division I colleges in the state of West Virginia, we only have so many Division II colleges in the state of West Virginia.

We're going to have to start dropping games because the policies don't align and that's my concern here Mr. President is I'm looking down the road prospectively of what could happen by the inclusion of higher education in this. And again, don't get me wrong, I don't think that- that people who have a- a distinct physical physiological advantage who are members of an opposite sex should be allowed to play sport with them. It's unfair. But by including higher education in this, we've added another layer of complexity to an issue that is already extremely complex, extremely difficult, Mr. President, this is something that I couldn't have- have ever imagined that I would deal with as a legislator. When I moved to Washington D.C. in 2003 from- from Wellsburg in Fairmont, the world was a completely different place, it's a lot different than anything I was used to.

And while that kinda prepped me for- for something like this, it really, it- it didn't to the point where I was going to have to make decisions on it. So I don't- I don't make this decision lightly because I agree with the concept, but I also take it as someone who has to look at the reality based in law and that's what's happening underneath this piece of legislation. Thank you, Mr. President.

President Blair: 02:01:07 Senator from Harrison.

Senator Romano: 02:01:10 Thank you Mr. President. You know, I- I like the Senator from Brooke struggle with this bill 'cause, you know, I don't have any desire for a 250 pound boy to be playing girls sports, but let me be clear, this isn't about men and women's and girls' locker rooms or any of that stuff, this is

just a bill about sports. And it's not even about transgender kids from my perspective, it's about your daughter, it's about your niece, your grandniece who might be a little tomboyish and who's going to get called out because we have a provision in here giving private citizens a right to challenge their gender. Can't imagine how devastating that would be to a 14, 15- or 16-year-old girl. You know, I used to get called sissy sometimes, it- it was hard, you know, you get bullied, it's hard when- when people pick on you, imagine if it's the authority. Imagine if it's your school authority that has to bring you in, question you, question your parents, perhaps submit you to a physical examination because some jealous parent who has a kid on your team doesn't like that you get all the accolades and all the newspaper clippings.

Or an opposing team who thinks they can vie for a state championship if you're not on the girls' basketball team and wants to put a little wrench in the winds of a certain school. That's what we're going to allow here, that's what we're going to encourage people to do, we've given private individuals the opportunity to challenge the gender of our children. How reckless. You know, and I hear everybody mincing words about policies and rules and, you know, is it in place, you know why it's only a policy of the WVSSAC, 'cause we've never had one case of a boy trying to play sport, women's sports in- in our high schools.

Not one case, but yet they've gone as far as to write detailed policies on how they're going to handle it if that ever becomes an issue. I don't even want to get started into what we're doing to the outside world, my God we look as backwards as the states that have lost the All-Star games and- and all kinds of sporting and- and entertainment events because we're backwards. We look like a bunch of rednecks from West Virginia and this feeds right into it. You know, I was always proud to be from here, I always used to tell people when I lived in DC and they'd make fun of my drawl or something that, you know, no better place to live than West Virginia 'cause if you need something, your neighbors are going to help you, if you're in trouble, your friends are going to back you and it's a great place to live.

It's not getting like that anymore, we're pushing anybody different than us out, we're telling the world we don't want

you here. We only want who's left here and it gets to be fewer and fewer every year. Now I know somebody salivating in some election room right now, oh we're going to beat them to death, beat them to death with the boys and the girls bathroom advertisement if they vote against this bill. I can assure you that I will spend any amount of money in this state to make sure that everybody know that this bill's about their daughters, it's about their grandchildren, it's about their nieces, it's about them getting attacked because they may be a little tomboyish in high school.

And that that's what the outcome of this bill is going to be and that it was a bill to try to set people up in an election. We're not worried about boys playing girl sports, it's never happened here, how can we be worried about something that's never happened? How could we have a bill that is this bad, makes us look this backwards on- about something that has never happened? In a- in an issue where there's policies written and ready to be employed if it ever does come up and we have the audacity and the arrogance to tell the NCAA what we should be doing in our higher education's scholastic athletics, they're probably chuckling right now listening to this debate if they even bothered to take the time to tune in.

Mr. President, this bill isn't going to do anything to move West Virginia forward, it's going to move West Virginia directly to the back of the room, I urge a no-vote.

President Blair: 02:06:13 Senator from Marion.

Senator Caputo: 02:06:16 Thank you Mr. President, uh, I wish I could be as eloquent sometimes as my friend from Brooke and my friend from Harrison, but I had been sitting here listening to this debate and I'm sorry, I don't struggle at all with a no-vote on this, Mr. President. I struggle none. I have really come to the conclusion that this is a solution looking for a problem. I've sat here and listened to possible challenges, possible court hearings, possible production of birth certificates and gender challenges and maybe even up to and including a physical exam to determine someone's gender.

You know, businesses and professional teams all over the country are shying away from places that have policies like we're looking at in this chamber. Now it's- it's a solution

looking for a problem, Mr. President, but you know, I think one thing we're all losing sight of here is the problem's not the kids, the problem's not the student athletes. I look around this room and there's not a whole lot of youth in here, I hope I don't offend anybody, but there is not a whole lot of youth in here.

When's the last time you sat down and talked to the young people in this state? Are you still campaigning at the McDonald's, having coffee in the mornings with our wonderful retired folks in our neighborhood or are you talking to the kids? They want a more inclusive society, my kids don't give a rat's behind what color you are, what your sexual orientation is, what you do in your personal life. The youth of today want to put that behind us, maybe that's the problem. We're the representatives here, but maybe that's problem, well maybe we're talking to the wrong people.

Maybe we're not talking to the future of West Virginia, maybe we ought to start wondering why our kids want to leave here. And maybe we ought to start admitting to ourself why nobody's coming here. We gotta be honest with each other, we talk a- a pretty big game, we talk about moving West Virginia forward and Mr. President I believe you were sincere when you said you want 400,000 people to move to West Virginia. I've known you for a long time and I believe you were sincere.

But here's a news flash, we're not going to get there by telling people if you don't look like us, if you don't love like us, if you don't think like us, you got a problem in West Virginia. I think we gotta be honest with each other, we're telling people they're not welcome here. I think that may be ought to be on the sign, not welcome to West Virginia but not welcome to West Virginia if you don't think like us because that's what the message is we're sending. You know Mr. President, Tina and I worked really hard raising our kids to treat everybody the same and not look at the differences maybe of what we do and what we look like, but to treat everybody the same but more importantly, our kids taught us to be that way.

Our kids think it's crazy that we're having this debate right now. My daughter tells me all the time, I can't believe you guys are still talking about this kind of stuff and she's right, she's absolutely right Mr. President. Mr. President I know

you don't get out on the West Wing much, at least clear out there where I'm at, but there's a sign in my office and it says all kinds welcome here. But more importantly, Mr. President, that sign lives in my heart, lives in my heart that all kinds of people are welcome in my beautiful state, I just wish that the rest of the members that I serve with would welcome people here in the same fashion. Thank you, Mr. President.

President Blair: 02:11:35 Senator from Ohio.

Senator Ihlenfeld: 02:11:37 Thank you Mr. President. I want to share with you all words from a very successful businessman. Quote, our purpose is changing business for good and that means using our business to make a positive impact in the lives of our employees as well as our customers. Businesses are starting to see that they have important roles to play in standing up for LGBTQ rights, especially, especially in places where those rights are being violated. This CEO went on to say that he believes making sure customer bases are as diverse and inclusive as possible will help businesses to thrive.

And I think the same thing can be said about state economies, the more inclusive we are, the more likely it is that our economy will thrive. You want to know what CEO said those words? It's a gentleman by the name of Richard Branson, Sir Richard Branson. Y'all know who he is? He's the CEO of Virgin Atlantic, Virgin Galactic, Virgin Mobile, Virgin Oceanic, Virgin Radio, and the owner and CEO of Virgin Hyperloop. You know what Virgin Hyperloop is? Think if you're from Grant and Tucker County you do. I know the man downstairs knows what Virgin Hyperloop is.

They plan to build a certification center on an 800-acre track in Grant and Tucker Counties that will bring thousands of construction jobs here and millions of dollars in economic impact to our state. Richard Branson is one of the most pro-LGBTQ CEOs in the entire world. And I point this out to you because I don't know how to reach some of you. Some and I don't want to paint too broad of a brush, but some in this room don't seem to care that this bill is cruel, that it's narrow-minded, that it's mean spirited, that it's unnecessary, that it's purely political. Maybe you do care about that part of it.

So I'll go back to a point I've tried to raise in this room this session that might resonate- might resonate and it's purely economical. And I don't like doing that because the economic reasons aren't the first, second, or third reasons why this is a bad bill, but it might resonate with some of you. By voting yes for this bill, you are willing to risk a project that WVU's Bureau of Economic and Business Research predicts will have an annual $48 million impact on our state, annually, $48 million with that Hyperloop project. You're willing to risk that, you're willing to risk that Sir Richard Branson is going to see what we do here and change his mind about building that certification center.

On top of that you're willing to risk all that the NCAA does for us to add on to what the Senator from Brooke said. Two years ago, one of the greatest sporting events that I've witnessed in West Virginia occurred in Morgan Town, the NCAA baseball regional. We were able to host it at that brand new beautiful stadium, there were record crowds. Over 4000 people which is big for a baseball game packed that stadium on the first night, they had sell-out crowds throughout that tournament. The economic impact on the Morgan Town region was in the millions of dollars.

We won't be able to host events like that anymore if we pass a bill like this. The head of the NCAA just made a statement the other day that made it very clear that states that pass bills like this are not ones where he wants to hold tournaments and we can't control what they do. At the tournament level or below. And besides the risk of losing all that I've mentioned, we risk businesses that might want to have a retreat here, that might want to open an office here, that might want to have a headquarters here.

Do you realize what a hard job you're making for Chelsea Ruby, Mitch Carmichael, Ed Gaunch, Michael Grany, you're making their job so difficult to promote tourism and economic development with bills like this. And I think some of you are probably thinking, well, the governor will just veto it so I can vote for it and then he'll take care of it. That's not how it works, number one, we don't know what the governor's going to do with this bill, gosh I hope he would veto it if it passes. But number two, we're still sending a message that this body, this Senate and also the House supports policies like this.

So, I would ask you, Mr. President, are we pro-business, are we really pro-business, are we really trying to grow this state? I'm not sure that we are when we have bills like this running, I'm surprised this bill is even running. I don't have control over what hits committees, I don't have control what hit- about what hits the floor, but you do Mr. President, you could stop bills like this if you cared enough to look the future, if you really wanted 400,000 people to come here, you could do something about it. You yourself could stop it, but you've decided to let this bill run and put it up on the board and ignore what it would do to our state if it passes.

Let me finish by saying this on a more personal note. I have a lot of friends and relatives, loved ones who have moved away from West Virginia because they're gay, because they don't feel welcome here, because they have felt ostracized and I don't blame them, I probably would do the same and that's sad to say. My loved ones who fit into that category not only are wonderful and caring people, but they're also really smart people, they've got really good jobs and they have nice houses, they drive nice cars, they make good money.

But guess what, they don't pay real estate tax in West Virginia, they don't pay sales tax in West Virginia, they don't pay income tax in West Virginia, they pay it in the state where they feel welcome, where they have felt like they needed to move, uh, where they feel love and accepted and- and part of the community. And that's part of the problem, the more people that we say are not welcome, the fewer are going to come here, the harder it's going to be to fulfill the dreams that I think we all have that, uh, the- these bold plans that we have and as I've said before I respect these bold plans, but the more we discuss and vote and pass bills like this, the harder it's going to be to get out of the- the economic slump that we find ourselves in.

And so just like my friend from Marion said, I would challenge you all when you make your vote to think about the younger generation, to think about millennials, to think about Generation Z. I think about my kids many times when I place a vote, to think about whether what we're doing would want- cause them to want to stay here and live here and work here or not. Uh, we can certainly campaign at the McDonald's, uh, with people that our age, uh, but we

need to think about those who are up and coming, 16, 18, 25, think about what's important to them and I- I would suggest that they care about inclusion very much so and I would ask all of you to consider that when you place your vote. Thank you, Mr. President.

President Blair: 02:19:57 Thank you.

PART 4 OF 5 ENDS [02:20:04]

Senator Maroney: 02:20:03 Thank you Mr. President. Um, this bill has nothing to do with gay people or those that are gay, and to imply that is, I think, misleading. The bill, the bill it talks about, it's about transgenders. It's about, there's a safety issue involved here in sports. Uh, the Senator from hi- or from, uh, Brooke stood up, uh, half hour ago, and I didn't, I've never spoke to him about this bill. And basically everything he said was things I was thinking. He said it better. He did more research, but they're all, they're all along the lines of my thought process. And from, from a high school sport standpoint or, or middle school standpoint, thi- this bill makes sense. We, I think we need to step in as a state. Uh, I don't, I've heard five or six times with a solution for a problem we don't have. Well, it, it's becoming a problem. Okay. It's, it's, it's happening in other places. I, I'd prefer to have solutions proactively than reactive. I think, I think it's time we address it. It's a tough issue to address. I think we address it. Uh, the, the, the high school component of this bill in, in the middle school, that everything below the college level of this bill, I agree with wholeheartedly. Uh, and I don't have a problem with voting yes for that part of the bill.

Uh, I have a big problem with, uh, with the college part of this bill. I think it's shortsighted and doesn't look into the depth of the issue, uh, as far as the, uh, potential ramifications. See, they've, they've solved their problem or, or they've, by addressing it, they've addressed the problem directly. They have a policy. It requires, the policy includes medical therapy, a year long, a hormonal suppression therapy. And for us to step in and, and, and try to dictate that when we don't have to, because they've already handled it and including that part, that's enough to make me vote no for the bill. We don't have this.

We don't have this, we don't have a case in, or, or no, no one can cite an example of this in West Virginia as of now. So therefore, maybe we can, we've got six months, eight months before we're back down here. They wouldn't get it right next time. Uh, well, this needs to be addressed at the scholastic level in my opinion. I would vote yes all day long. Uh, I think we, I think sometimes, uh, our emotions or our strong feelings on issues cloud sometimes real impact in judgment and in, in, in carrying it out a little bit too far.

I think we carried this too far further than we had to by including the colleges. Uh, you know, again, and I'm going to to close the way I started this. This bill has nothing to do with gay people or homosexuality. Uh, I have a cousin that's gay. I have, I know plenty of friends. I mean, I, there was no way at all that, that should be misinterpreted as with a vote on this bill. That was, that was misleading. Thank you.

President Blair: 02:23:10 Junior Senator from 4th.

Senator Grady: 02:23:13 Thank you, Mr. President. I'm standing here, um, with my makeup on my face and my jewelry shining, and, and I look, uh, you know, really, really girly. And I wasn't always that way. I was a tomboy that I've heard several of my colleagues talk about up until I was about 19-years-old before I ever decided that I would try makeup. And I'd like to fix my hair up and maybe wear dresses. Um, I used to, uh, play, uh, I played any sport that I could get my hands on. Uh, if you gave me a ball, I could beat almost all the boys in my class, all my friends in my neighborhood.

Funny story, just real quick. Um, my guy friends, my, they were in my neighborhood and I went to school with would call my brother to play home and derby or something, and they would say, "Don't tell your sister, but we're going to meet at the school at three o'clock." You know, and I would drive down the road and, and see, uh, on my bicycle and see that they were there and thought, "I wasn't invited. Why wasn't I invited?" And they said, "It's because you always beat me."

You know, and that's it, but I was a tomboy and, and I, and I had a lot of friends that were tomboys, you know, and, and making that as, those insinuations of it's going to

expose, uh, make tomboys feel out of place, just different things like that, I think that's incorrect. Um, I think I'm sti- you know, now I'm, I'm looking at it as a mother of girls, a former athlete. I'm a former athlete who has state championships, national championships, world championships under my belt in different sports, and a coach of girls.

You know, and I, and I look at it and, and I've talked to girls, I've talked to girls who are high school athletes, I've talked to girls who are college athletes, and they're in support of this. You know, when we look at sports, every implement that we use in sports, from the governing rules, um, of the games to tape measures, clocks, um, the court or field dimensions, um, all those things, they're all used to define the boundaries of fair play.

The most basic and fundamental of such of those requirements is age and sex. It has been less than one generation. One generation since women won the hard fought battle of Title IX. What that means is my mom didn't have the fair, the f- the fairness that Title IX supplied. One generation. You know, Title IX was important because it created equal sports programs for women at the high school level and the college level. Mr. President, this bill is not anti-LGBTQIA. It does not discriminate. It simply ensures that our female com- competitors will continue to have those protections, and it protects the integrity of women's sports. For my girls, your girls, and all the girls in West Virginia, I fully support this bill, and I hope that you will too. Thank you.

President Blair: 02:26:14 Senator from Greenbrier.

Senator Baldwin: 02:26:16 Thank you. Thank you, Mr. President. I'm not standing up to speak in hopes to change anybody's mind about their vote. Um, and I'm not standing up to speak expecting to affect the outcome of the vote at all. I'm just speaking as a coach and as a dad and as a pastor, because I got a couple things that I just feel compelled to say, and we've had a good debate here today. I appreciate that out of the body. The first thing that I just have to say, it's been said here, but it was said briefly, and I think folks need to be sure they heard this.

As the Senator from Boone said before, half of trans kids strongly consider suicide. Half of trans kids strongly consider suicide. That's reported by Forbes magazine based on the 2020 study by the Trevor Project. 60% of trans kids physically harm their own bodies. 60% harm themselves. Half strongly consider suicide. Why? Why? Why would so many trans kids harm themselves and attempt suicide? I would echo what the Senator from Brooke said, this is not something I understand, this is not something that I have lived through, but what I understand from talking to folks who have lived through it is that it's because they don't feel like they fit in. They're bullied, relentlessly. They are not included in anything other kids are included in because they're so obviously different. A lot of people wear their shame on the inside. Trans kids don't have that luxury. They look different. They live in bodies that they often hate, and the isolation that causes leads half, one out of every two trans kids to strongly, to strongly consider suicide. The other thing that I just feel compelled to say is that I've heard people make a religious argument for this bill, and I've heard people say, "Well, God doesn't make mistakes." And I fully agree. God does not make mistakes, but we do all the time.

Every person was made in the image of God, and God didn't make a mistake when God did that. Every person is made in the image of God, and God compels us to love one another just as we've been loved. Even those who are different, I might go s- go so far as to say, especially those who are different from us. And we've just come through Holy Week, we've just come through Easter, spending a lot of time back home in our churches, talking about the way that Jesus spent his time in ministry. And you all know the stories. Jesus didn't hang out with people like us. He didn't really like people like us. He hung out with sinners and outcasts, people that the world's shamed and ridiculed.

In particular, Jesus spent a lot of time with lepers, people who looked different, and because they looked different, they were despised. They were despised so much that they were outcast. The lepers of today's society are transgendered citizens. They are mocked, they're beaten, they are ridiculed, just for being different. People have basic needs. Kids have basic needs that are amplified even further because they are kids. You've got to have support

and acceptance at base. If you don't have that support and acceptance, you're not going to be able to move forward.

You know, we read some of those stories this past Holy Week of, um, Jesus healing the lepers by restoring them to their community. He made them physically well, but what he really did for them is he allowed them to go back home and he allowed them to be accepted for who they were. Mr. President, I thank you for the time to just share some things that are on my heart. Again, not speaking trying to influence anybody. Just had some things that I needed to share, but I have to say, I not only cannot support a bill that further alienates trans kids, but I am compelled to stand on this floor, even if nobody else is listening and having their side conversations and they've already decided about this a long time ago, to stand up and say that our children deserve better.

When we debated the Tebow bill, I supported that. I stood with my colleagues from the other side of the island, supported that because it gave all, all kids an opportunity to play. I don't see how this is any different. We need to let kids be kids. Half of trans kids strongly consider suicide, half. And if this bill passes, I shudder, I shudder to think how that would impact this incredibly vulnerable segment of society. So, let's err on the side of kindness to those who are most vulnerable, let's err on the side of grace, let's err on the side of inclusion. Thank you, Mr. President.

President Blair:	02:32:52	Is there further discussion before I recognize the Senator from Jefferson to close debate. Senator from Monongalia[inaudible 02:32:59].
Senator Beach:	02:32:59	Mr. President, I move we table the bill, please.
President Blair:	02:33:02	Motion is tabled the bill. Those in favor we'll vote aye. Those who've opposed will . . . Excuse me. Those who wish to table the bill will say aye.
Audience:	02:33:15	Aye.
President Blair:	02:33:16	Those who oppose say no.
Audience:	02:33:18	No.

President Blair: 02:33:20 The no's appear to have it. The no's do have it. The motion is rejected. Senator from Raleigh.

Senator Roberts: 02:33:31 Thank you, Mr. President. I think that the narrative shifts around from the actual bill itself. The bill is designed to protect girls in women's sports. It is not something that is designed to hurt people, it's designed to protect people. I received a couple of emails that kind of lay it out and people should understand. These are actually both from Raleigh County. The first one says, "I am a lesbian in favor of the sports bill. Dear West Virginia legislators. I am a US citizen originally from the Philippines, living in West Virginia with my wife and child. I am urging you today to vote for the sports bill and uphold one aspect of what it is to be born female.

There are too many groups on both sides of the aisle, trying to politicize a subject that should be 100% science and common sense. Due to the trans movement, what it is to be a female and to be safe in this country is being erased. The entire trans movement is an attack upon woman—womanhood. I urge you to save our young women from allowing biological males into sports locker rooms, et cetera with our girls. I don't understand why we cannot create a third category for the trans to compete with each other instead of harming and taking away opportunities from females."

A second email says, "Dear West Virginia legislators. My name . . . " Oh, and I shouldn't say her name, uh, but she lives in West Virginia in Raleigh County. "I am a married lesbian in the process of adopting my daughter. Please vote yes today to protect my daughter from having to compete against boys. This is a needed bill and large segments of the LGB community support the bill." She makes some other statements there, but I think you get the sentiment.

And I think that the focus is not on the potential or the hypothetical of what might happen that hasn't apparently happened already in West Virginia, but the focus is upon the thousands of girls in sports at all levels in West Virginia that are at risk for injury based on the differences between the biological sexes. And that is very important that this is to protect them, it is not meant to harm others and it's the right thing to do and I support this bill. Thank you.

President Blair:	02:36:49	Further discussion. Senior Senator from the 6th.
Senator Maynard:	02:36:53	Thank you Mr. President. Voting no on this bill is a vote to disintegrate school sports as we know it. Today lines are no longer being drawn, no boundaries. They say, so it's all inclusive. But Mr. President, if this bill is not passed, it will not prepare future generations when, because of the lines will be blurred. Besides religious reasons, besides safety issues, if we sell out to the national, uh, sports associations in sanctioning bodies, uh, if that's the price we put on our, um, safety issues and what we think is right, then, uh, I think we're just selling ourselves out. Mr. President, I'll urge passage of the bill.
President Blair:	02:37:35	Is there further discussion before I recognize the Senator from Jefferson. Senior Senator from the 17th.
Senator Takubo:	02:37:43	Thank you Mr. President. I, um, uh, you know, I think we, we've, we've blurred the lines quite a bit on this one. Um, you know, at the end of the day, uh, the LGBT, everybody tries to make this about, uh, all kinds of different issues. I think it's well-known, I've always been a sponsor, uh, actually lead sponsor of the fairness bill. Uh, you know, I put a flyer on everybody's, um, desks about tonight. Uh, there's going to be a, um, a thank you to legislators at 5:30, Bible Center Church. Come have dinner, no asks. Um, can I have church afterwards? Well, the church I go to says, "Hey, listen, everybody's broken. And, and the Bible clearly says, there's nobody without sin more than me." So, uh, I'm not getting on any moral high ground and people are trying to take this bill and turn it into that. I don't think that's it at all. Um, it, it comes down to basic, uh, science, like many comments have been made. There's a bigger body mass, you know, up to 10, 11, you know, probably, probably girls have a advantage over boys, but you know, when you get to junior high and high school, there's a reason why you have varsity and JV even amongst the boys because the body mass, uh, is larger and, and people can get hurt. There are clear advantages. And so, um, to me, this bill is just a clear definition now. Is it a solution looking for a problem? Yes, I think it is. Do I think that any of this has really happened in West Virginia? Do we probably need any this bill for anything in West Virginia? Probably not. Um, but do I 100% firmly believe

that boys should play boy sports and girls should play? Absolutely. Now, uh, to be honest, I really have no issue with a girl playing a boys' sport because again, the body mass issue is not there.

If you've got the athletic ability for a girl to play, uh, boys baseball or, or I really wouldn't have any issue with that. But the, the fact of the matter is, you know, where the masters tournament is on, uh, you know, the top, uh, female golfer, I remember just few years ago, tried to play against the guys in the tournament got killed, and she had, she was like the number one women's golfer eight or nine years in a row. So there's a clear difference. And so that's what the bill does.

Now as a Senator, I have to look at all aspects of the bill and how it relates to my state. Um, when the college aspect got put into this, that's what gave me the heartburn because colleges, the NCAA, they already address this. They do have policies for this. And, and I think Kristi Noem, uh, is probably in the exact same boat that I am. She's 100% in agreement that, that the policy should be boys don't play girls athletics. However, NCAA is trying to do that patchwork of 50 states. They have to be compliant. I don't think that they're some crazy organization. They're having to deal with a lot of different personalities across the country with all these 50 different states, and, and they just want to run a good athletics program for the students, for the athletes, for the country.

And so as a Senator, do I look at this section of the bill and say, could that cause some major problems? I could see somebody trying to pull us out as an example and come football season for W and Marshall and all the college athletes in our state that are trying to move forward, that this could create some major hiccups again for a problem we really don't have. And so I can also see us coming back here and having to try to unwind all of this in some kind of special session or something.

So for that reason, uh, I am going to be a no vote, but I want to make it very clear that the principle of the bill I'm 100% in favor of. I just think we should have left it to the high school athletics alone if a bill was going to be ran. I certainly wouldn't have done it, but, uh, it is my duty as a senator when a bill comes up and, and, uh, I have not been,

uh, voted by my constituents to, to take a pass, I'm expected to vote. So my vote will be read. I just want to make it clear as to the intent of why I'll be voting nay today. Thank you, Mr. President.

President Blair: 02:41:53 Is there a further discussion? Senator from Jefferson to close debate.

Senator Rucker: 02:42:00 Thank you, Mr. President. And I appreciate, um, the robust debate and everyone's expressing their opinion. This is obviously, you know, something that touches people. Um, and before I get to just a final explanation of what this bill does, I just need to, you know, respond to some of the things that were said, and I'm going to start, if that's okay, with the claims about the NCAA. So I have here before me a printout of their, um, transgender policy, and this is going to be from the very first page.

It says, "The purpose of this resource is to provide guidance to NCAA athletic programs about how to ensure transgender student athletes fair, respectful, and legal access to collegiate sports teams based on current medical and legal knowledge." It provides best practice and policy recommendations. It's a recommendation. It's giving them guidance, and further in this policy, it talks about how the science is not settled. There is ongoing research and, you know, this issue of transgender athletes is something that can change based on the science that we, um, as we do more research, as we find out more and as more of this is happening.

In terms of science, because folks really like to point out how we should follow the science, males have larger lungs and denser alveoli in the lungs enabling faster oxygen intake, uptake. They have larger hearts and per stroke pumping volume and more hemoglobin per unit of blood, and increased number of muscle fibers and increased muscle mass. And I'm not going to go through all this. They have larger bones, longer bones, increased mineral density in their bones. U.S. adult males on average are five inches taller than U.S. adult women, and I have pages of this, but I'm not going to read through all of that.

The reality is that the reason for why we're having this discussion Mr. President is because it matters. It matters. There is a difference between men, biological men and

biogo- biological women. This bill does not target transgender and it is not about prohibiting transgender. It does not affect male sports, it does not affect coed sports of which there's a lot of those. It only talks about women's sports and the history of women's sports in the United States. It's a very short one.

Historically, the NCAA had zero interest in women's sports. It wasn't until Title IX that they became interested. The first NCAA men's basketball tournament was in 1939. Do you know when the first NCAA women's basketball tournament was? Not till 1982, 10 years after Title IX was adopted, and nearly 50 years after men. The only reason for Title IX is because women deserve a chance to participate. And there were folks making that point from the side that doesn't plan to support this bill. They were making the point about how s- athletics is about overcoming challenges.

If you pair men and women together, there is a difference in how well they can compete against each other. It doesn't mean they can't do it, and they do. And we have coed sports and we have women participating in men's sports, but there is a difference. And these athletic opportunities, these opportunities to be part of a team, these opportunities to shine, they make a difference in their lives forever, and we've already mentioned it. And others have actually said the same thing. You know, you're talking about scholarships, you're talking about opportunities to get into schools, you're talking about opportunities to demonstrate leadership and cooperation and be part of a team. It is exactly that, that we are wanting to protect for our women and our girls.

This isn't against anyone. It is for, for the policy of helping our girls, helping our women have the opportunity. That is what Title IX was about and that is what the policy has been. This bill does nothing more than codify what is already well-established under federal and state common law. The biological females and biological males are not similarly situated in certain circumstances, and one of those circumstances is in sports.

One of the things I want to make sure I respond to is the discussion as to whether or not where it might be hurting our state somehow, by having this policy of protecting our

girls and our women. I must tell you that to me, if you say that you do support women, that you do support our girls, if you say that you want to give them an opportunity, and we have bills, we have bills even this year have been introduced about trying to provide an opportunity for a class that has been historically disadvantaged. Well, this is, this is one of these bills. This is one of the bills that you can support because you want to ensure continued opportunities.

We cannot direct the NCAA. We have no authority over them. We don't. This bill doesn't do that. This bill is about our state institutions, and it is actually our authority to enforce Title IX. That is our authority. We the states are supposed to enforce Title IX. The only student who could bring a cause of action are those who are aggrieved and who have standing. So in conclusion, we really have talked this a lot and we have brought in a whole bunch of different issues into it. But what the reality of this is, is that it is the best interest of the state to protect women and girls and protect the opportunity for them to participate in sports. Supporting this is simply doing that. I urge passage.

President Blair:	02:49:30	Question for the Senate is shall the bill pass, all those in favor will vote yay, those who oppose will nay. The clerk should prepare the machine. Has every member voted? Has every member voted? If so, the clerk close machine and ascertain the results. On this question, 18 yays, 15 nays, one absent, not voting. More than a majority of those present voting, having voted in the affirmative. I declare the bill passed. The clerk has a Title Nine.
Clerk Cassis:	02:50:10	Senator Rucker move to amend the title of the bill.
President Blair:	02:50:13	The questions on adoption of the title amendment, all those in favor say aye.
Audience:	02:50:16	Aye.
President Blair:	02:50:17	Those who oppose, no. The ayes appear to have it, the ayes do have it, uh, declare the title amendment adopted. The clerk will communicate the action of the Senate to the house. Senior Senator from the 17th.
Senator Takubo:	02:50:29	Thank you Mr. President, and I move the Senate stand in recess until 3:00 PM.

President Blair:	02:50:32	Senior Senator from 17 means repeat recess till 3:00 PM. All those in favor say, aye.
Audience:	02:50:37	Aye.
President Blair:	02:50:38	Those who oppose, nay. The ayes have it. We'll recess till 3:00 PM.

PART 5 OF 5 ENDS [02:50:50]

APPENDIX TO DEFENDANT-INTERVENOR'S MOTION FOR SUMMARY JUDGMENT

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IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA
CHARLESTON DIVISION

B.P.J, by her next friend and mother, HEATHER JACKSON

Plaintiff,

v.

WEST VIRGINIA STATE BOARD OF EDUCATION, HARRISON COUNTY BOARD OF EDUCATION, WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION, W. CLAYTON BURCH in his official capacity as State Superintendent, DORA STUTLER in her official capacity as Harrison County Superintendent, and THE STATE OF WEST VIRGINIA

Defendants,

and

LAINEY ARMISTEAD

Defendant-Intervenor.

Case No. 2:21-cv-00316

Hon. Joseph R. Goodwin

DECLARATION OF LAINEY ARMISTEAD

I, Lainey Armistead, under penalty of perjury, declare as follows:

1. I am a twenty-two-year-old resident of Charleston, West Virginia, in Kanawha County, and have personal knowledge of the information below.

2. I am a junior and female athlete at West Virginia State University (WVSU) in Charleston, West Virginia, where I am a member of the women's soccer team. Soccer is my passion and life-defining pursuit.

Athletics Background

3. I come from a family of talented athletes. My dad was a multi-sport athlete in high school and an All-American soccer player in college. He later coached club soccer. My

mom was a high school and collegiate cheerleader. Two of my brothers went on to play soccer in college.

4. Soccer was like the air I breathed growing up. I first kicked a soccer ball at three years old—almost as soon as I could walk. I grew up playing pick-up soccer games with my brothers, being coached by my dad on technique, and cheering at soccer matches alongside my family.

5. I started playing on club soccer teams in my home state of Kentucky at age seven and continued competing on club teams through the end of my high school career.

6. I was excited to enjoy success on those club soccer teams. When I was just nine years old, my club soccer team won the indoor U.S. Youth Futsall National Championships—which is the largest and most prestigious indoor youth soccer competition in the country. It was an unforgettable experience.

7. I later went on to help my club soccer team win state championships during my freshman and sophomore years of high school. Those wins pushed me to try even harder.

8. Also during my sophomore year of high school, I had the honor of being selected from my club soccer team (Kentucky Fire) as one of only 20 girls in the nation to be invited to compete in a showcase soccer event in Las Vegas.

9. In addition to club soccer, I also competed on my school's middle school and high school soccer teams. One of my favorite memories from that time was helping my high school soccer team win the state championship during my freshman year of high school.

Competing in Women's Collegiate Athletics

10. It was my dream to play soccer in college. And I hoped my hard work would pay off with a college scholarship. I know, however, that athletic scholarships are limited and competitive.

11. After visiting approximately ten different colleges, I decided to visit West Virginia State University (WVSU), a public state university. I immediately knew this was where I wanted to attend college and I committed the same day.

12. WVSU offered me a soccer scholarship to compete on its women's soccer team. That scholarship helps pay for my education and brings me one step closer to my dream of being a lawyer someday.

13. Without a scholarship, I likely would have attended a college in my hometown and been saddled with school loans. My athletic scholarship opened the door for me to attend the school of my choice.

14. WVSU is an NCAA Division II soccer team and competes in the NCAA Mountain East Conference.

15. There are 11 players per team (22 players total) on the soccer field at any given time, though teams may have two or three times that many players total. Those 11 starting positions are highly coveted and competitive.

16. Team players are grouped into four general categories:

a. the front, or attacking positions, which are called strikers;

b. the midfielder positions;

c. the defender positions;

d. and the goalie.

17. I play starting left wingback on the soccer field, which is a defender position. But I "attack" a lot, which means I run up and down the field much of the game.

18. I also have the privilege of serving as team captain. This is a leadership position that is voted on by both players and coach, and has responsibilities that include organizing the team, determining what jerseys to wear, serving as liaison between the players and coaches, and also serving as liaison between the players and referee.

19. In 2020, I received the Stinger Award for "Female Teammate of the Year" in WVSU women's soccer.

20. Due to the COVID-19 pandemic, I currently have three years of NCAA eligibility left.

21. My teammates and I train hard to win. We do running drills, weightlifting, and watch replay videos of our prior games to evaluate how we can improve.

22. But it is not always easy. I have made many sacrifices over the course of my athletic career to play the sport that I love. I have missed school dances and spring breaks; family events; and friends' birthdays. I have given up my weekends and free time. I stay at school late for practice and get up early to train.

23. But I make these sacrifices because I want to be the best that I can be. I want to win—not just for myself, but also for my teammates. And it is that love of winning that helps me press through when the going gets tough.

24. I love my sport. It's exhilarating to see all the training and hard work that we put in at practice pay off on the field.

25. Soccer is called the "beautiful sport"—and for good reason. It is the most played sport in the world. Like music, soccer transcends culture. You can play a pick-up game of soccer with anyone regardless of language or background.

26. But soccer is also beautiful because it takes incredible teamwork to achieve a win. Soccer is a 90-minute game. It is much more difficult for women to run nonstop for a full 90-miuntes than it is for men. As a result, women's soccer games are different than men's. We have to be more cohesive. We pass the ball more, communicate more, and rely on our teammates more. But rather than a downside, I see teamwork as a thing of beauty. I love accomplishing things as a group. And when I step on the field with those ten other women, I know they have my back and I have theirs. We play hard for each other. As a result, my teammates have become some of my closest friends.

27. Soccer also taught me life skills like mental and physical toughness, perseverance, and good sportsmanship. It taught me that hard work and discipline pay off. It taught me the value of teamwork. It provided leadership opportunities that will benefit my future career. It opened new financial opportunities, such as benefitting from my image and likeness. It has given me lasting friendships with my teammates. And it has given me something to strive for. I would not be the person I am today without soccer.

Safety Concerns in Soccer

28. Soccer is a rough contact sport, and injuries are common among female athletes.

29. From my own observations, concussions, knee injuries, and ankle injuries are the most common injuries incurred by soccer players. In the first couple games of the WVSU fall 2021 soccer season alone, members of my team suffered all three of these injuries.

30. Playing a rough contact sport with other girls is one thing. But having played pick-up soccer games with my brothers and street soccer with men, I have realized that playing a rough contact sport with men is entirely different.

31. Males are generally stronger, fitter, faster, and have a bigger stature than women, which gives them advantages of strength, speed, and size in soccer. They compete at a faster pace. They kick the ball harder. They have physical frames that are generally larger.

32. Thankfully, I can enjoy a casual pick-up game of soccer with men because they take it easier on me. They do not go "all-in" because they know they could hurt me. But it would be a different story if a male was seriously competing and making full use of his strength, speed, and size in a soccer match against me. Based on my long experience playing competitive team soccer, I would be more worried that I could be injured by a male than a female competitor in a game in which players are trying their hardest to win.

Fairness in Women's Sports

33. A couple years ago, I heard about female track athletes in Connecticut who lost to biological males competing in their races. I learned that these two males won 15 women's state championship titles in girls' high school track and field. I was appalled and heartbroken for those girls. It felt so unfair. But I was thankful that those athletes had the courage to stand up.

34. I also heard that a male who competed on the University of Montana men's team track and cross-country team began competing in women's cross-country and track events and displaced collegiate female athletes.

35. So when I heard that West Virginia's legislature passed the Save Women's Sports Act to protect the integrity of women's sports, I enthusiastically supported it.

36. I never dreamed this would be an issue in West Virginia. And I never thought this issue could personally impact my competition till I learned a lawsuit had been filed against the new West Virginia law to protect women's sports.

37. Getting involved in this lawsuit was a weighty decision. I sought a lot of counsel and considered my options carefully before deciding to become involved in a case of this public importance and controversy. It's not always easy standing up for what you believe in.

38. And I know from experience in friendly competitions against men that facing a male in a soccer game changes the entire dynamics on the field and poses not just fairness but safety concerns, as well.

39. If forced to compete against a male athlete, I would have to face the hard decision of competing on an unfair playing field with heightened safety risks, or not competing at all.

40. A single male on my team could displace me or one of my teammates from a starting position—or a position on the team.

41. Even if the male athlete was on my team—arguably giving my team an advantage—I would treat that individual with respect and kindness, but it would still be unfair to displace a female athlete from her place on the field or from that position. And it also would not be fair to the female players on the opposing team.

42. Allowing males into women's athletics allows a person with a male body to take opportunities away from female athletes—whether that is a spot on the team, a starting position on the field, an athletic scholarship, the opportunity to benefit from her likeness, or recognition and awards—and is contrary to the entire purpose of women's sports.

43. Women's sports exist to give girls like me a chance to compete in sports on a level playing field.

44. Women have worked so hard to be taken seriously on the athletic level.

45. I fear that too many women feel pressured to remain silent about their beliefs.

46. I want other little girls in the future, or my own daughters, to not have to worry about competing against males. I also fear that girls in the future might consider not playing at all if they feel they cannot win against a physically superior male. Winning is the motivation for a lot of us who played sports for years.

47. I believe that protecting fairness in women's sports is a women's rights issue. This isn't just about fair play for me: it's about protecting fairness and safety for female athletes across West Virginia. It's about ensuring that future generations of female athletes are not discriminated against but have access to the same equal athletic opportunities that shaped my life.

48. Being an athlete in college has made me even more passionate about the sport that I play. I want fairness and equality in sports. And I want to ensure those standards are protected for other girls, too.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

Lainey Armistead

Lainey Armistead
Dated: April 20, 2022

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA
CHARLESTON DIVISION

B.P.J, by her next friend and mother, HEATHER JACKSON, *Plaintiff,* v. WEST VIRGINIA STATE BOARD OF EDUCATION, HARRISON COUNTY BOARD OF EDUCATION, WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION, W. CLAYTON BURCH in his official capacity as State Superintendent, DORA STUTLER in her official capacity as Harrison County Superintendent, and THE STATE OF WEST VIRGINIA, *Defendants* and LAINEY ARMISTEAD, *Defendant-Intervenor.*	Case No. 2:21-cv-00316 Hon. Joseph R. Goodwin

DECLARATION OF CHELSEA MITCHELL

I, Chelsea Mitchell, declare as follows:

1. I am a nineteen-year-old graduate of Canton High School in Canton, Connecticut, and a sophomore student athlete at the College of William and Mary in Williamsburg, Virginia.

2. As an elite female athlete, I had the deflating experience of competing against and losing to male athletes in the girls' category throughout all four years of my high school career. I personally lost four state championship titles, two All-New England awards, medals, points, placements, and publicity due to an unfair state athletic policy that permits males to compete in girls' sports in Connecticut.

3. I hope that by sharing my experience, no other female athlete will have to face the heartache and loss that I did.

Athletic Background

4. Sports are a big part of my family. My sisters and I each started playing organized sports in kindergarten and later became multi-sport athletes. My oldest sister was captain of her high school soccer and track teams and went on to run collegiate track. My younger sister plays high school soccer and runs track, and also played lacrosse and basketball for a time. And I played basketball until eighth grade. I was the leading scorer on my varsity soccer team and a four-year starter. And I am a short distance sprinter and long-jumper.

5. My dad dedicated 15 years to coaching our soccer and basketball teams. My mom was our number one cheerleader, driving us to and from games, and volunteering her time so that we could play the sports we loved.

6. I started running track in middle school. My older sister ran it, and I decided to give it a try. I loved it: the competitiveness, how it makes me feel, and the opportunity to win.

7. I'm quite proud of my high school athletic achievements, which include:

- High School All-American for Long Jump, 2020 – NSAF (top 6 nationally)
- Girls Outdoor Track Athlete of the Year, 2019 – Connecticut High School Coaches Association
- Bo Kolinsky Female Athlete of the Year, 2019 – Hartford Courant (soccer and track)
- New England Champion in 100m
- 3 State Open Championships – 55m, 100m, Long Jump
- 8 State Championships – 55m, 100m, 200m, 300m, Long Jump x3, 4x100 relay
- 20 Conference Championships
- Hold the Conference Meet Records in all my events – 55m, 300m, LJ, 100m, 200m, LJ
- MVP award for track every season of high school career.
- Most goals scored in school history for girls' soccer.
- Most championship titles in school history for any athlete, male or female.

- Being the only female in school history to win a State or New England Championship in track and field. Thirteen different male athletes have won titles.

8. I am proud of what I've accomplished. But it hasn't been easy.

9. I have made a ton of sacrifices to compete—giving up what many would consider the "normal" teenage life by watching what I eat, skipping the parties, and going to bed early. I spend several hours a day at the track and in the weight room. Track meets are all-day events that start early and end late. I usually train or compete six days a week, with Sunday often my only day off when we are in-season. I do all of this to strengthen my body and improve my technique in hopes of running just a few tenths of a second faster or jumping just a few inches farther.

10. I do not mind the early mornings and long, tiring days when I know the competition is fair. Because when the competition is fair, I know I have a decent shot at winning. But my high school experience was anything but fair.

Males competing in Connecticut girls' track

11. During my freshman year of high school, my mom informed me that a male would be competing in the girls' category.

12. Later, we learned that the Connecticut Interscholastic Athletic Conference (CIAC) —the athletic association that set the rules for school sports in Connecticut—had passed a policy allowing biological males who identify as female to compete in the girls' category.

13. From the Spring 2017 outdoor track season through the Winter 2020 indoor track season[1]—six track seasons—I competed against biological males in my track and field athletic events due to the CIAC policy.

[1] The Spring 2020 outdoor season was cancelled due to the global COVID-19 pandemic.

14. Over the course of my high school career, I competed head-to-head with male athletes 27 times. I never won a race in which both male athletes were running.

2016-2017 Freshman Year

15. I first competed against a male in girls' track and field as a fourteen-year-old freshman at the Spring 2017 State Open Championship.

16. On the way to this meet, I was instructed by my coach to respond "no comment" if asked about the issue of males competing in the female category.

17. In the 100m final at the 2017 outdoor State Open, I placed 7th overall. The top six receive a medal and qualify to advance to the New England Regional Championship: one of those top six spots was taken by male athlete Andraya Yearwood:

Table 1: 2017 CIAC State Open Women's Outdoor Track 100m Results (June 5, 2017)[2]

Place	Grade	Sex	Name	Time	High School
1*	12	F	Caroline O'Neil	12.14s	Daniel Hand
2*	12	F	Kathryn Kelly	12.36s	Lauralton Hall
3*	9	M	Andraya Yearwood	12.41s	Cromwell
4*	11	F	Tia Marie Brown	12.44s	Windsor
5*	12	F	Kiara Smith	12.59s	Jonathan Law
6*	11	F	Kate Hall	12.62s	Stonington
7	9	F	Chelsea Mitchell	12.69s	Canton
8	12	F	Tiandra Robinson	FS	Weaver

* Qualified for the New England Championship.

18. If not for Yearwood's participation in the girls' category, I would have medaled and had the honor of advancing to the prestigious regional championship as a freshman.

[2] AthleticNet, https://www.athletic.net/TrackAndField/meet/306453/results/f/1/100m, last visited June 2, 2020.

2017-2018 Sophomore Year

19. During my sophomore year, I learned that Andraya Yearwood's school was reclassified to the Class S division for indoor track events—which was the same class as my school.

20. This news was upsetting for me because I would now be racing against a male competitor at both the Class S championship and the State Open championship.

21. At the February 10, 2018, indoor Class S Championship in the 300m, I was knocked out of advancing to the State Open by just one spot—a spot was taken by Andraya.

22. As a competitive person, I often check Athletic.net, a website that lists high school track rankings. One day, I noticed a new girl, named Terry Miller, at the top of the charts. Terry was running times better than I ever hoped to run. But my coach told me later that it must be some mistake—perhaps Terry was entered in the wrong race. Terry had competed as a boy for the previous three seasons.

23. On April 27, 2018, at the first invitational race of the Spring 2018 outdoor season, I was seeded in the 100m in a lane beside not just one, but two male athletes: Terry Miller and Andraya Yearwood.

24. I distinctly remember seeing Terry look over to Andraya and say: "You and me, one and two." At fifteen years old, I felt extremely intimidated to run against bigger, faster, and stronger male competitors.

25. But Terry was right. I should have won that 100m race; but instead, Terry and Andraya took first and second place, while I placed third.

26. Similarly, at the Spring 2018 outdoor State Open Championship, Terry won the women's 100m event by a wide margin, while Andraya finished second.

27. But for CIAC's policy, I would have won second place statewide:

Table 2: 2018 CIAC State Open Championship Women's Outdoor Track 100m Results (June 4, 2018)[3]

Place	Grade	Sex	Name	Time	High School
1*	10	M	Terry Miller	11.72s	Bulkeley
2*	10	M	Andraya Yearwood	12.29s	Cromwell
3*	11	F	Bridget Lalonde	12.36s	RHAM
4*	10	F	Chelsea Mitchell	12.39s	Canton
5*	11	F	Maya Mocarski	12.47s	Fairfield Ludlowe
6*	10	F	Selina Soule	12.67s	Glastonbury
7	12	F	Tia Marie Brown	12.71s	Windsor
8	11	F	Ayesha Nelson	12.80s	Hillhouse

* Qualified for the New England Championship.

28. Bridget Lalonde beat me by just three-hundredths of a second, but I was so relieved that she did. Emotionally, it was less of a loss to be denied runner-up status than to be denied a first place State Open Championship—a feat almost unheard of for a high school sophomore.

29. At the 2018 outdoor New England Regional Championship, I placed seventh in the 100m. Only the top six medal and receive the All New England award—one of those top six spots was taken by Terry.

30. Had I earned the title of All New England, I would have made Canton High School history as the first Canton female athlete to win this prestigious award.

2018-2019 Junior Year

31. In the fall of my junior year, I learned that male athlete Terry Miller transferred to Bloomfield, another Class S school.

32. I was devastated, fearing that with two males competing in my division, my chances of ever winning a state championship in sprints were now over.

[3] AthleticNet, https://www.athletic.net/TrackAndField/meet/334210/results/f/1/100m, last visited June 2, 2020.

33. I trained harder than ever, spending countless hours to shave mere fractions of seconds off of my times. I never missed a practice, squeezed in extra workouts where I could, and saw my race times consistently drop.

34. But it was not enough. And my fears of losing championship after championship were realized in the Winter and Spring 2019 seasons.

35. At the February 7, 2019, indoor Class S State Championship, Terry finished first in the 55m. I placed second. But for the CIAC's policy, I would have been named the Class S State Champion in the 55m.

36. The February 16, 2019, indoor State Open Championship saw similar results and a similar impact. Terry and Andraya finished first and second respectively in both the preliminary and final Women's 55m races, each time defeating the fastest girl by a wide margin. I placed third in the final.

37. But for CIAC's policy, I would have won the 2019 State Open Championship in the 55m dash:

Table 3: 2019 CIAC State Open Championship Women's Indoor Track 55m Preliminary Results (February 16, 2019)[4]

Place	Grade	Sex	Name	Time	High School
1*	11	M	Terry Miller	7.00s	Bloomfield
2*	11	M	Andraya Yearwood	7.07s	Cromwell
3*	12	F	Cori Richardson	7.24s	Windsor
4*	11	F	Chelsea Mitchell	7.27s	Canton
5*	12	F	Kate Shaffer	7.27s	Conard
6*	12	F	Ayesha Nelson	7.29s	Hillhouse
7*	12	F	Maya Mocarski	7.34s	Fairfield Ludlowe
8	11	F	Selina Soule	7.37s	Glastonbury
9	10	F	Kisha Francois	7.41s	East Haven

* Qualified for the women's 55m final.

[4] AthleticNet, https://www.athletic.net/TrackAndField/meet/352707/results/f/1/55m, last visited June 2, 2020.

Table 4: 2019 CIAC State Open Championship Women's Indoor Track 55m Final Results (February 16, 2019)[5]

Place	Grade	Sex	Name	Time	High School
1*	11	M	Terry Miller	6.95s	Bloomfield
2*	11	M	Andraya Yearwood	7.01s	Cromwell
3*	11	F	Chelsea Mitchell	7.23s	Canton
4*	12	F	Kate Shaffer	7.24s	Conard
5*	12	F	Ayesha Nelson	7.26s	Hillhouse
6*	12	F	Maya Mocarski	7.33s	Fairfield Ludlowe
7	12	F	Cori Richardson	7.39s	Windsor

* Qualified for the New England Championship.

38. Instead, I was not named State Open Champion in the 55m, I received a bronze medal instead of a gold medal, and I did not make Canton High School history as the first ever Canton female athlete to be named a State Open Champion.

39. However, after the 55m race, I returned to the finals of the long jump, which had no males competing. While listening to them announce Terry as the winner and new meet record holder in the 55m, I won the long jump event to solidify my place in the Canton record books as the first Canton indoor track athlete—male or female—to be named a State Open Champion.

40. State Champions are recognized as All-State Athletes, an award listed on college applications, scholarship applications, and college recruiting profiles. State Champions are invited to the All-State Banquet, and get their name celebrated on a banner in their high school gym. I did not receive any of these awards for the 55m. But I was able to receive these awards for my long jump championship.

41. After the State Open Championship, I was repeatedly referred to in the press as the "third-place competitor, who is not transgender." I was the fastest biological girl in the 55m race at the State Open Championship, but the press did not mention my name—I felt invisible.

[5] *Id.*

42. At the March 2, 2019, indoor New England Regional Championship, Terry took first and Andraya took third place in the 55m dash. I missed medaling and being named All New England Champion by just two spots—two spots that were taken by male competitors.

43. Following Terry Miller's sweep of the CIAC's Indoor Class S, State Open, and New England titles in the 55m dash and 300m, Terry was named "All-Courant girls indoor track and field athlete of the year" by the Hartford Courant newspaper. This felt like an injustice to my fellow female athletes.

44. In the Spring 2019 outdoor season, I competed against both Terry and Andraya in the Class S Championship. At this event, I ran the fastest biological female times in the 100m and 200m across all state class meets.

45. But because of the CIAC's policy, being the fastest biological girl just was not good enough to experience the thrill of victory. Instead, at the 2019 Class S Championship, Terry placed first in the 100m and 200m, while I placed second in both events. I won the long jump and received a state title. But because of the CIAC's policy, I took home only one state title instead of three.

46. The trend continued at the 2019 outdoor State Open Championship as Terry easily won the women's 200m race. But for CIAC's policy, Cori Richardson would have won the state championship, Alanna Smith would have finished runner-up, and Olivia D'Haiti would have advanced to the New England Championship:

Table 5: 2019 CIAC State Open Championship Women's Outdoor Track 200m Final Results (June 3, 2019)[6]

Place	Grade	Sex	Name	Time	High School

[6] AthleticNet, https://www.athletic.net/TrackAndField/MeetResults.aspx?Meet=364088&show=all, last visited June 2, 2020.

1*	11	M	Terry Miller	24.33s	Bloomfield
2*	12	F	Cori Richardson	24.75s	Windsor
3*	9	F	Alanna Smith	25.01s	Danbury
4*	11	F	Chelsea Mitchell	25.24s	Canton
5*	12	F	Nichele Smith	25.38s	East Hartford
6*	12	F	Bridget Lalonde	25.55s	RHAM
7	12	F	Olivia D'Haiti	25.63s	Kolbe-Cathedral

* Qualified for the New England Championship.

47. But I did receive one opportunity to compete on a more level playing field. At the Spring 2019 State Open Championship in the 100m, Terry, the top-seed in the race, false-started and was disqualified. This opened the door for me: I was able to relax, focus on my race, and win. I set a personal record of 11.67 seconds, made Canton High School history as the first sprinter to be a state open champion in any sprint event, medaled, received significant media publicity, and advanced to the New England Regional Championships.

48. I went on to win the New England Regional Championships in the 100m dash and was named All New-England. Here, too, I made Canton High School history as the first female to win a New England Championship.

49. Thereafter, I was awarded Track Athlete of the Year by the Connecticut High School Coaches Association, and the Hartford Courant named me 2019 All-Courant Girls Outdoor Track and Field Athlete of the Year and the Bo Kolinsky Female Athlete of the Year (across all sports).

50. My new personal record, State Open Champion and All New-England awards put me in a much better recruiting position for college scholarships—all because a false start that prevented a male from competing against me in the women's division leveled the playing field.

2019-2020 Senior Year

51. A similar scenario played out in the Winter 2020 season. At the indoor Class S Championship 55m race, Andraya Yearwood—the top seed in the race and the individual ranked

number one in the state for the women's 55m dash—false-started and was disqualified. That false start opened the door for me to not only win the CIAC Class S Championship in the 55m dash, but also to advance to the 2020 Connecticut State Open Championship in the 55m event and win.

52. To my disappointment, the 2020 Spring outdoor season—the final track season of my high school career — was cancelled in light of the global COVID-19 pandemic.

53. It feels defeating to know that records at my high school, CIAC, AthleticNet, MySportsResults, CT.Milesplit.com, and others do not reflect the four state titles and two All New England awards I should have earned. It is upsetting to know that the meet records of many great female athletes before me have also been wiped from the books.

54. Competing against males makes me feel anxious and stressed. And stress has a negative impact on my athletic performance.

55. I try to stay positive, to take support from family and friends, but it is hard when I know that I must compete against those who have a biological advantage because they were born male.

56. I hope that future female athletes will not have to endure the anxiety, stress, and performance losses that I have while competing under a policy that allows males to compete in the female category.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

Chelsea Mitchell

Dated: April 13, 2022

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA
CHARLESTON DIVISION

B.P.J, by her next friend and mother, HEATHER JACKSON, *Plaintiff,* v. WEST VIRGINIA STATE BOARD OF EDUCATION, HARRISON COUNTY BOARD OF EDUCATION, WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION, W. CLAYTON BURCH in his official capacity as State Superintendent, DORA STUTLER in her official capacity as Harrison County Superintendent, and THE STATE OF WEST VIRGINIA, *Defendants* and LAINEY ARMISTEAD, *Defendant-Intervenor.*	Case No. 2:21-cv-00316 Hon. Joseph R. Goodwin

DECLARATION OF CHRISTINA MITCHELL

I, Christina L. Mitchell, under penalty of perjury, declare as follows:

1. I am a forty-eight-year-old resident of Canton, Connecticut, in Hartford County, and have personal knowledge of the information below.

2. I am the mother of three female athletes. My daughters are now ages twenty-three, nineteen, and fifteen and have competed in soccer, basketball, and track. Our family life has been centered around sports since the girls were just little, spending most nights and nearly every weekend at the soccer field, in the gym, or at the track.

Family Athletics Background

3. I ran track and played basketball in high school. My husband played many sports and was the star of his high school basketball team. We have a competitive spirit that we have

passed on to our girls. Whether it's board games, March Madness brackets, or a pickup game of soccer in the yard, our family enjoys a good competition.

4. My husband volunteered his time as a youth soccer and basketball coach for the town of Canton for fifteen years. He would race home from his office job to try and make it to the field or gym in time for practice. Some seasons he coached two of our daughters' teams, which meant practice four nights a week and four games each weekend. It was exhausting but he loved every minute of it.

5. I volunteered on the Board for the Canton Youth Soccer Association for eight years. As registrar, I had to enforce strict age categories for the teams. Kids were allowed to "play up" on an older team but were never allowed to "play down" on a team for younger kids. Soccer teams were also separated by sex beginning in first grade. Boys' teams were designated as co-ed so that girls who wanted to sign up for the boys' team could "play up". Girls' teams were restricted to females in the registration system.

6. When my oldest daughter reached high school, I turned my volunteer efforts to the Canton Athletic Booster Club. I worked to get a concession stand built and stadium lighting installed at the high school track and field. In 2017, I was presented with the Dubuc Service to Canton Award in recognition for my years of volunteer service to the school and community.

7. All three of our daughters have excelled at sports. Our oldest daughter, Emily, was a varsity soccer and track athlete in high school. She was captain of both teams in her senior year and went on to compete on the women's track team in college.

8. Our youngest daughter, Kennedy, is a sophomore in high school and competes in soccer and track as well. She plays outside defensive back in soccer and her team made it to the

state championship this year. She is a long jumper and sprinter in track. She hopes to continue with one of these sports in college.

9. Our middle daughter, Chelsea, has proven herself as an exceptional athlete. Like her sisters, she had success in both soccer and track in high school. As a little girl on the soccer field, you could see her natural ability to run – she could come from 20 yards behind and beat anyone to the ball. When she got to high school, she added a heavy dose of hard work to that natural gift and made the most of it on the track.

2017 Outdoor Track Season – Freshman year

10. In April of 2017, the outdoor season of track and field in Connecticut was just getting started and Chelsea was ranked among the top sprinters in the state. She was coming off the indoor season where she set school records in the 55m and 300m at her very first meet.

11. There was one other freshman posting times in the top ten, Andraya Yearwood. I soon learned from an article in the Hartford Courant that Yearwood was a male identifying as female and running for Cromwell. I was confused by the piece, which seemed to celebrate this, and found it hard to believe that the schools, coaches, and state officials would allow it to continue. I saw it as a clear violation of women's rights under Title IX.

12. Chelsea worked hard that season and placed 2nd at the Class S state championship in all three of her events - the 100m, 200m, and 4x100 relay. The top five in each event advance to the State Open Championship to compete against the top twenty-five athletes in the state. Making it to the State Open is a huge accomplishment and Chelsea had qualified in all three events as a freshman. We were very proud and excited for her.

13. I knew that one of the other twenty-five competitors at the State Open would be Andraya Yearwood. The CIAC had allowed Yearwood to compete at the Class M state

championships and take the girls' title in the 100m and 200m races. One of the girls who placed second, Kate Hall, was interviewed following the race – "I can't really say what I want to say". The silencing of the girls had begun.

14. I had shielded Chelsea from much of the news up to this point, but the night before the race we felt we needed to prepare her for what she would face the next day. I told her there would be a boy who identified as a girl in her race and that she had to try to focus on herself and block out the rest. We knew that this would be a blow to her mental game but didn't want her to be surprised by it at the start line.

15. Chelsea's first race against a biological male was on a really big stage. The State Open is held at New Britain stadium, one of the biggest outdoor tracks in Connecticut. It is always packed with spectators and many college coaches attend to see potential recruits in action.

16. For me, it was my first time watching this unfair policy play out in person. As someone who has now watched my daughter race against males more than twenty times, I can attest to how difficult it has been every single time. The girls are forced into a race that they know is rigged against them. They are told to be quiet and be a good sport. They watch as officials casually ignore the foundational principle of sport – fair play. They see the media there, waiting to celebrate the travesty and daring the girls to speak against it. The message to these girls was very clear – nobody cares about your rights. As a woman it was infuriating and as a mom it was heartbreaking. I can only imagine what it felt like to be one of the girls in the race.

17. The 2017 Outdoor State Open was Chelsea's first tangible loss to a biological male. She took 7th place in the finals of the 100m. She missed advancing to the New England Championship by one spot. Yearwood had placed 3rd.

18. In a stroke of luck, one of the six automatic qualifiers to New England, Caroline O'Neil, had to decline her spot. We got the call later that night that as the 7th place finisher, Chelsea could go and compete. We were so grateful.

19. A few days later at the New England Championships, I watched as Yearwood's 2nd place finish in the 100m again took something tangible from female athletes. Madison Post from Maine didn't make the finals. Katya Levasseur from New Hampshire missed the top six and lost out on the All-New England designation. Kyla Hill from Massachusetts took home a 3rd place medal instead of silver. The ripple effect of Connecticut's policy had spread to our neighboring states.

2018 Indoor Track Season – Sophomore Year

20. I hoped that common sense would prevail, and this would work itself out before the next season. It didn't. Yearwood took home the 2018 Indoor Class S State Championship title in the 55m and placed 2nd in the 300m. Chelsea recorded another lost opportunity due to the policy as she missed advancing to the State Open in the 300m by one spot. Patricia Jurkowski should have taken home the 55m title and other girls lost opportunities to advance to finals or score points for their team. With every race, the list of female sprinters impacted by the policy grew longer. I knew I couldn't remain silent about it any longer.

21. Following the 2018 Indoor State Championships, I began to advocate for a change in policy. I first spoke to the Assistant Superintendent of Canton Schools, Dr. Jordan Grossman. I asked if he thought the Board of Education could help, but he advised against taking the issue to them. Instead, he gave me the name of the CIAC Executive Director so I could follow up with them directly.

22. I went to work on a letter to the CIAC asking for a solution to protect the rights of the female athletes in our state. I included the Canton principal, athletic director, coach, and assistant superintendent on the email. The CIAC replied that they were unwilling to consider changing the policy and listed various reasons. I addressed each reason with my own points – I was thorough and respectful – but I received no reply.

2018 Outdoor Track Season – Sophomore Year

23. The night before the first big meet of the outdoor season, we realized that a second male was competing in girls' sprint events. It was hard to believe at first, I remember thinking that surely this wasn't really happening. Terry Miller had competed for three seasons on the boys' team. Looking at the race results online, it was clear that Miller was an average runner that hadn't even qualified to compete at the boys' state championships just a few weeks earlier. After switching to the girls' team, Miller was suddenly ranked first in the state. I reached out to Chelsea's coach immediately. It seemed it was true; this was really happening.

24. The two male athletes took first and second in the 100m race the next day – Chelsea finished 3rd. With two males competing, it was clear that the number of lost opportunities for Chelsea and female sprinters across the state would now be double.

25. I again wrote to the Canton athletic director and principal to let them know that there were now two male athletes competing in girls' track. I asked them to urge the CIAC to change the policy before more harm was done but nothing changed.

26. Miller swept the sprint events at the Class M championship, taking three state titles. Yearwood was close behind. Girls were sidelined, missing finals and advancement to the Open. Anyone who tried to speak out was quickly silenced. Chelsea was thankfully in Class S

and took home three state titles of her own. But she would again head to the State Open to compete against males.

27. The State Open was a circus. Miller and Yearwood took 1st and 2nd in the 100m. The media was out in full force, waiting to ask the first female finisher how she felt about taking 3rd place. We were glad Chelsea took 4th and didn't have to deal with the emotions of being the one to lose a state title and her banner in the gym. Bridget LaLonde was the unlucky girl this time. Other girls lost points for their team, medals, and opportunities to advance to the New England Championship. The list of females impacted was very long at this point.

28. There was more of the same at the New England Championship. The top six athletes from Maine, Vermont, New Hampshire, Massachusetts, Rhode Island, and Connecticut were there to compete for the title. It was a sunny day at a beautiful track and field facility at the University of New Hampshire, an incredible experience. But a cloud hung over the event as the female athletes were again denied a fair race.

29. I watched as Miller swept the 100m and 200m races at the New England championship. Chloe Alfieri, a senior from Massachusetts, took second place in both events. Miller was interviewed after each win, as is customary for the champion. Chloe missed out on those titles and that recognition. It was awful to watch.

30. Chelsea took 7th place in the 100m. The top six are given the All-New England designation, so it was another tangible loss that she directly felt. Athletes set goals for themselves—they don't expect to achieve the top spot right out of the gate. It is a progression. Being named All-New England was the goal she had set for the day and she hadn't reached it because they allowed a male to compete in her race.

31. Following the New England Championship, I called my state senator, Kevin Witkos. He urged me to seek help from the school administration, as he did not agree with the CIAC that Connecticut law required this policy. He felt that if asked by member schools, CIAC could change the policy and restore fairness for the female athletes.

32. I immediately followed up with an email to Canton school officials including Chelsea's coach, the athletic director, the principal, the assistant superintendent, and the superintendent. I asked them to contact the CIAC and urge a change in policy. Nobody responded to my email.

33. At the end of June, Senator Witkos reached out to me and said that he would work with the Connecticut Speaker of the House to draft a letter to the superintendents of all schools, but not until after the November elections, five months away. That letter never happened.

34. In July, I scheduled an in-person meeting with the principal, Drew DiPippo. I asked what the process was to formally request a change in CIAC policy. He said he would look into it and let me know. He noted that there would be a new CIAC Executive Director starting in August and that perhaps the policy would be revisited. I never heard back from him on the process to request a change.

35. During the fall, we learned that Terry Miller had transferred to a Class S school. Chelsea cried as I drove her home from soccer that night. She knew that meant she would now face males not just at the State Open, but at the Class S championship as well. In her mind, it meant she would never win another state championship race.

2019 Indoor Track Season – Junior Year

36. A few weeks before the state championships arrived, I drafted another letter to CIAC Executive Director, Glenn Lungarini, to again ask for fairness for female athletes and a

change in policy. The CIAC responded that they would not consider my request for a rule change because I was just a parent. I soon learned there was a new "gender committee" commissioned by the CIAC that would make a recommendation in the summer. It was an endless game of shifting responsibility and delaying any meaningful discussion.

37. As the championships drew near, I dreaded what was to come. I had watched many other girls lose the state title they deserved. This time it was Chelsea's turn. As a junior, she was stronger, more experienced, and her times had improved significantly. She was the fastest female in the 55m at both the Class S championship and the State Open. But Miller went home with both of those titles. Jillian Mars was the fastest female in the 300m – she too was robbed of her titles. And, of course, more girls lost the chance to advance to finals, or the Open, or the New England Championship. Female athletes lost out on podium spots and medals and points for their team. Chelsea lost out on another All-New England designation after finishing 8th at the championship in Boston.

38. The list of girls who had been directly harmed was pages long by now, but the CIAC did not care. They showed so little regard for the rights of the female track athletes in our state it was staggering. The coaches and administrators remained silent, no doubt fearful for their jobs. But there was one girl who was not afraid to speak up, Selina Soule. We watched her bravely tell her story on national television one night and knowing that we weren't alone in our fight made all the difference.

39. I asked my principal to schedule time for me to meet with CIAC director, Glenn Lungarini. As we sat in the principal's office at Canton High School and I shared the list of the girls who had been directly harmed by the policy, it became clear that they had no intention of changing anything. I expressed my concerns that the CIAC policy was violating the rights of my

daughter and the other female athletes under Title IX. Mr. Lungarini's response was that my daughter had only the right to participate, not to win.

40. The CIAC director was not interested in alternative solutions or fairness for females. He did not seem at all bothered that the CIAC's unwillingness to address the issue had placed all of these kids directly in the center of a highly controversial international political debate. He tossed about slogans like "transwomen are women" and his arguments lacked any logical consistency or regard for the rights of females. I left feeling angry but resolved to advocate for Chelsea and all of the girls being harmed.

41. Following that meeting, I asked to meet with our school's Title IX coordinator, Lori Devito. I called the State of Connecticut's Title IX Coordinator, Dr. Adrian Wood, to discuss my options for filing a Title IX complaint. I spoke with an attorney, Robin Cecere, at the Connecticut Department of Education. I called the Office of Civil Rights for the U.S. Department of Education in Boston. Multiple times I was told by these government officials that girls have the right to participate, not to win. I began to believe it must be part of the talking points being circulated on this issue or in some presentation somewhere. It certainly didn't stem from any regulation or case law on Title IX that I had found.

42. I contacted the Canton Board of Education and the topic was added to the agenda for their next meeting. I was given three minutes to speak about something that had been impacting us for two years. I followed up with more emails to the Board of Education but would seldom get a reply. The one-way dialogue was not an effective means of discussion.

43. I continued to send research papers and information to Glenn Lungarini at the CIAC. He abruptly notified me that he would no longer receive my emails because I was just a parent. Everything would have to come from a member school. I went back to the Board of

Education and asked them to contact the CIAC to request a public forum be held so that parents could bring their concerns forward. Canton Superintendent, Kevin Case, assured me he would ask for one, but it never happened.

44. I emailed my state representative, Leslee Hill, and my state senator, Kevin Witkos. I contacted two female coaches from the Connecticut High School Coaches Association (CHSCA) to ask for their help requesting a rule change. In all of these cases, I explained the devastating impact this was having on female athletes in our state. And yet, at the end of the day, not a single person would help us get the policy changed.

2019 Outdoor Track Season – Junior Year

45. The Outdoor season added more names to the list of girls impacted by the policy. It was Chelsea's fifth season competing against males. My efforts to convince school and state officials to fix the policy had failed. I felt sure that nobody was going to take steps to change things unless their hand was forced.

46. The state championships should have been an exciting day, but I dreaded watching the injustice play out again. I understood how demoralizing and disrespectful it was to these girls and felt sickened by the whole thing. Chelsea lost the Class S championship in the 100m and 200m to Miller– her tally was now at four state titles lost to biological males. She headed to the State Open expecting more of the same.

47. It was her third year in a row competing against males in the 100m at the State Open. None of us were looking forward to watching males break the female records, take home the title, and give their post-race interviews. This year would be different though.

48. In what I often describe as a gift from above, there was a false-start in the 100m by Miller. Chelsea saw the playing field leveled a bit, and she was going to make the most of it.

Her win in the 100m that day was extraordinary for so many reasons and I will be forever grateful she had that moment. What unfolded at that stadium was emotional not just for us, but many in the crowd. We had so many strangers come up and hug her and tell us how happy they were for her. She ran a time that is still her personal best, even three years later.

49. Other awards and opportunities flowed from her success that day, and I often think of how sad it would have been if that false start hadn't happened and she had never had those experiences. It shouldn't need to be said, but girls shouldn't have to hope for a false start to get their chance at fair competition.

50. I continued to pursue opportunities to advocate for the girls. I had a meeting with Connecticut Deputy Attorney General Peggy Chapple and three other members of the AG's office. I met with Governor Lamont's General Counsel, Bob Clark. I spoke with several state lawmakers and asked them to pass legislation. I wrote letters to my U.S. Representative, Jahana Hayes, and my U.S. Senator, Richard Blumenthal. And while some were sympathetic to our position, they were unwilling to do anything to help.

51. I also looked for support from well-known feminist organizations such as Women's Sports Foundation, National Women's Law Center, and National Organization of Women. It was just unbelievable to learn that these organizations did not support our advocacy for fairness in women's sports. They issued statements to publicly say so. They completely ignored the impact it was having on our female athletes and seemed shockingly uneducated about the harm that will flow from eliminating sex-based rights in law. Thankfully, many other women's organizations are taking their place and stand with us in this fight.

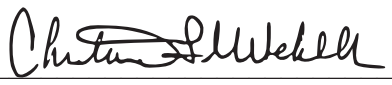
2020 Indoor Track Season – Senior Year

52. After years of asking school, state, and federal officials for help, we did what we felt was our last resort. Two days before what would end up being Chelsea's final state championships, we filed a federal lawsuit. Chelsea was taking a public stand for herself and other female athletes. We hoped that this might finally make a difference and that what she went through wouldn't have to happen to anyone else. It took a great deal of courage, and I was very proud of her.

53. Since then, many more people are aware of her story. We have submitted testimony on both state and federal legislation. Several states have successfully passed laws to protect female sports and many more are now debating the issue. She has bravely given interviews and told her story in national publications. There was a time when she was afraid to speak out, and I was afraid for her future if she did. But we are no longer afraid.

54. We will continue to fight for policy and laws to be based on facts about science and biology, not ideology. We will exercise our right to speak out on issues that affect us without fear. We hope that in the end, the sex-based rights of females will be acknowledged and respected and fairness will be restored in our sports.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.



Christina Mitchell

Dated: April 12, 2022

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA
CHARLESTON DIVISION

B.P.J, by her next friend and mother, HEATHER JACKSON, *Plaintiff,* v. WEST VIRGINIA STATE BOARD OF EDUCATION, HARRISON COUNTY BOARD OF EDUCATION, WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION, W. CLAYTON BURCH in his official capacity as State Superintendent, DORA STUTLER in her official capacity as Harrison County Superintendent, and THE STATE OF WEST VIRGINIA, *Defendants* and LAINEY ARMISTEAD, *Defendant-Intervenor*.	Case No. 2:21-cv-00316 Hon. Joseph R. Goodwin

DECLARATION OF ALANNA SMITH

I, Alanna Smith, declare as follows:

1. I am an eighteen-year-old senior at Danbury High School in Danbury, Connecticut.

2. Though I am an elite female track athlete, I have personally experienced the devasting impact of competing against—and losing to—male athletes in my sport.

3. Though I only competed against these athletes during my freshman year of high school, they still impacted my placements, public recognition, medals, records, and how I physically and mentally prepared for competition.

Athletic Background

4. I was born into a family of athletes. My dad is a Major League Baseball Hall of Fame relief pitcher. My mom ran track in high school and still runs recreationally. One maternal uncle played professional football. Another played professional baseball. My twin brother is a three-sport athlete.

5. Sports was a big part of my world from a very young age, as I attended my dad's MLB games and events and ran with my mom. Having a twin brother who is naturally athletic helped instill a competitive drive in me, because as a little girl I loved to beat him in foot races at every opportunity.

6. The sports legacy that surrounds me was not something I consciously thought about—it just became a part of who I am. And without thinking about it too seriously, I knew I had the potential to excel athletically.

7. It wasn't until I started running with mom and developing endurance and strength that I considered competitively running track. So, in middle school, mom enrolled me in the local middle school track program. Between 2015 and 2018, I tried shot put, the long jump, the 55-meter dash, the 100-meter, 200-meter, 400-meter, and 800-meter races.

8. As I tried different track and field competitions, I realized that I enjoyed and excelled at running shorter distances. That's when I knew I wanted to concentrate on the 100-meter, 200-meter, and 400-meter distances. I wanted to run and get it over with!

9. During middle school, I became a three-peat 100-meter Connecticut State Champion. In eighth grade, I was also the 400-meter state champion.

10. My freshman year of high school I was a varsity cheerleader in the fall and winter and made it to the 2019 Connecticut High School Coaches Association All-State cheerleading team.

11. After cheerleading finished, I started outdoor track in the spring of 2019. I was nervous. The first few practices were hard. I felt that my teammates had high expectations based on my middle school track performance. And it didn't help that the first few track meets were outside in cold or rainy weather, courtesy of New England.

12. But I won. And it felt amazing. I had proven to myself, the coaches, and my teammates that I could be a contributor to a winning season.

13. As my freshman season played out, I set personal, conference, state and regional facility records; improved my personal strength and technique; and accomplished personal goals. I contributed to the Danbury High School sweeping the 2019 outdoor FCIAC, Class LL, State Open, and New England Regional Championship competitions, and received numerous honors such as The Ruden Report Player of the Week, The Ruden Report Player of the Year, the 2019 All-FCIAC First Team in the 100-meter, 200-meter, 400-meter, 2019 CHSCA All-State Girls' Outdoor Track, and was a recognizable component of the 2019 CHSCA Connecticut Team of the Year award.

14. Excelling on the track and setting personal records gives me a sense of personal achievement and confidence that carries over into all parts of my life. I love training, I love competing. Competing against girls like myself who work hard is rewarding. I compete to be the best, to be the fastest, to be a champion.

Competition Against Males

15. In spite of my focused, diligent practice and training, my success on the track has been limited by biological males competing in the girl's high school track in Connecticut.

16. I first competed against a male at the New York Relays in April 2019. My team was invited to attend, along with teams from approximately seventeen other states. I knew going in that there would be a male athlete named Terry Miller from another Connecticut school in my race, and I was upset. I knew I wouldn't win, and I knew we girls were competing for second place and beyond. As expected, Terry won the 100-meter dash. I placed fourth. Had Terry not competed in that race I would have been recognized as third place.

17. I learned later that Terry had competed for three seasons in Connecticut boys' high school track before switching to girls' track.

18. Later that season, I found out I would be racing against Terry Miller and a second male athlete, Andraya Yearwood, in the 100-meter dash at the 2019 Connecticut State Open that.

19. After learning this news, I thought "I don't stand a chance to win." I felt defeated before I even got set in my blocks. Terry was in the lane next to me in the 100-meter finals, and I assumed going in that Terry would win. Terry was disqualified from the race due to a false start. I felt badly for Terry as an athlete, but I could tell the rest of us girls were a bit relieved that the race would now be a little more fair.

20. Also at the 2019 Connecticut State Open, I raced Terry Miller in the women's 200-meter dash. Terry placed first. Because of a male in my race, I was pushed from second place to third place.

21. Thus, at the 2019 State Open, I had one fair race: the 400-meter dash. I won that event.

22. From the State Open Championship, I advanced to the New England Regional Championship meet, which is quite an accomplishment for any athlete, but especially a freshman.

23. I won the 400-meter title at the New England Regional Championships. It was exhilarating, not only because I won, but because my race was free of male athletes. It was a level playing field.

24. The 200-meter dash was a different story. I would have also been runner-up in the 200-meter and received a silver medal and earned my team more overall points, but Terry Miller placed first and pushed me down in the rankings to third. Third place is nothing to be ashamed of if it is won fair-and-square, but my race was anything but fair.

25. My story is not unique. Girls across Connecticut have experienced similar displacement, loss of recognition, and even championship title losses solely because my state allowed two biological males to compete against biological females. Between 2017-2020, these two male competitors won 15 women's state championship titles and set 17 new meet records in track and field. These statistics are in the back of my mind no matter how hard I train and how well I perform

26. Even though the males have graduated now and are no longer competing against us girls in Connecticut, we still feel the effects of their participation. For example, in the 2022 Connecticut indoor track and field season—long after Terry Miller and Andraya Yearwood graduated—I ran a 6:96 time in the 55m dash. This would have set a new Connecticut girls' state record. But back in 2019, Terry Miller set a record of 6.95 in the 55m dash, eclipsing my best time. If not for Terry competing in the girls' category three years ago, I would have been

recognized for my accomplishment—setting a new record for female athletes in my state.

Fairness in Women's Sports

27. It has taken me years to develop the personal confidence and sense of belonging I now feel on my track team. The addition of males to girls' sports fills me with a sense of defeat before I even set up in the blocks. I deserve the opportunity to be confident, to be running against girls who have the same biological makeup that I do.

28. The addition of males in girls' sports is frustrating and disappointing to me. So often I go to the blocks and know that I am the fastest girl on the line. But I also know that my best effort will not be enough when I'm faced with a competitor who is bigger, faster, and stronger than me simply because he was born male.

29. I want to make sure that female athletes of today and tomorrow do not have to face the same sense of defeat, disappointment, and lack of support that I have felt. So many girls across my state believe the situation is unfair but are afraid to stand up and speak out for fear of retaliation from coaches, schools, the media, and strangers.

30. I am proud of all female athletes who stay strong and do their very best when rules and laws put unfair challenges in their way. I am proud to be a voice for female athletes who are surrounded by unfairness in their sport.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

Alanna Smith

Alanna Smith

Dated: 04/12/2022

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA
CHARLESTON DIVISION

B.P.J, by her next friend and mother, HEATHER JACKSON, *Plaintiff,* v. WEST VIRGINIA STATE BOARD OF EDUCATION, HARRISON COUNTY BOARD OF EDUCATION, WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION, W. CLAYTON BURCH in his official capacity as State Superintendent, DORA STUTLER in her official capacity as Harrison County Superintendent, and THE STATE OF WEST VIRGINIA, *Defendants* and LAINEY ARMISTEAD, *Defendant-Intervenor.*	Case No. 2:21-cv-00316 Hon. Joseph R. Goodwin

DECLARATION OF SELINA SOULE

I, Selina Soule, under penalty of perjury, declare as follows:

1. I am a nineteen-year-old resident of Boca Raton, Florida, in Palm Beach County and have personal knowledge of the information below.

2. I am a sophomore and female athlete at Florida Atlantic University (FAU) in Boca Raton, Florida. Competing in track and field is my passion.

Athletics Background

3. Sports are a huge part of my family. Both of my parents were multi-sport athletes. My dad competed in track, cross-country, baseball, and football. My mom was a competitive runner and figure skater, and now coaches figure skating.

4. My mom first coaxed me onto the ice rink at Rockefeller Center when I was just three years old. At age five, I started taking figure skating lessons. During elementary school, I began entering figure skating competitions—something I continued through my sophomore year of high school.

5. Figure skating was something my mom and I did together. We spent a lot of time on the ice, as she not only helped me learn to skate but even skated with me at times. By age thirteen, I was a volunteer figure skating coach helper, which turned into a paid coaching position at age fifteen. I continued coaching figure skating until I moved away for college.

6. The axel jump—a figure skating showstopper!—is my favorite figure skating element. Figure skating is not only a beautiful, graceful sport, but it is athletic too. It requires strength, speed, balance, and skill to execute those jumps and spins.

7. But I remember one thing very distinctively about figure skating: I did not like the scoring. Scoring was subjective; it was harder to clearly measure my achievements. (This is one reason I love track. My race times clearly show how fast I run so scoring is objective, not based on the subjective opinion of an individual judge.)

8. My mom introduced me to running when I was just five years old. I began running in our community's summer mile-long "fun runs" with my mom. Even at that young age, I knew two things with certainty: I loved to run, and I hated running long distances!

9. When I was around eight years old, my mom signed me up for my first Hershey Track and Field meet that was held in our town in the spring. It was the first time I set foot on a track—and I loved it. I realized that I was fast, and that I enjoyed competing to win. Running became my passion. And I enjoyed some success in the Hershey events as I competed there in

third through sixth grade. For example, I qualified twice for state level meets. In sixth grade, I won all three of my events.

10. After the Hershey events, I competed in the Nutmeg State games, the largest amateur multi-sport sporting event in my home state of Connecticut. These meets were ones my mom and I could do together. My favorite memory of the Nutmeg games was that my mom taught me how to long jump just a couple weeks before my first competition. And I went on to *win* the long jump that year for my age category.

11. But my freshman year at Glastonbury High School in Connecticut was my first school opportunity to compete in track and field. It was my first time on a school team with organized team practices and workouts—and I loved it.

12. Track and field competitions involve a variety of races and events. In track there are sprints, middle distance races, long-distance races, relay races, and hurdle races. And field events include long jump, triple jump, high jump, pole vault, shot put, discus throw, javelin throw, and hammer throw.

13. I am a short-distance sprinter and long-jumper. During high school, I competed in the 55-meter dash, 100-meter dash, 200-meter dash, the 4x200 and 4x100-meter relays, and the long jump. I also ran the 300-meter dash a handful of times.

14. When I joined my high school track team in my freshman year, I quickly became the school's best long jumper. And after only a few competitions, I became the permanent starter for the 4x200-meter relay.

15. I am proud of my high school athletic accomplishments. I was a ten-time All-Conference Honoree recipient, a five-time state title holder, three-time All New England award

recipient, a four-time National qualifier, and set five new Glastonbury high school records (including one that was previously set in 1976).

16. Track means everything to me. It is my passion and my happy place. When I run, I set aside everything else in life and just run.

Facing Male Competition in Girls' Track

17. But my high school track and field experience was not without frustration. During all four years of high school, I had the deflating experience of competing against male athletes in the girls' category.

18. The first time I competed against a male athlete in the girls' category was during my freshman year of high school at the May 2017 Middletown Invitational in the 200-meter dash. The gun went off at the start of the race, the male athlete left most of us girls in the dust. I knew immediately that this was not right and that girls would miss opportunities to succeed. Just days later, that same male went on to win the 2017 Connecticut Interscholastic Athletic Conference (CIAC) Class M Women's outdoor track championship in both the 100-meter and the 200-meter sprints.

19. The losses happened again and again. During my sophomore year, another male athlete joined girls' track and I had to face two male competitors at the 3rd Greater Bristol outdoor track and field invite in the 200-meter dash. The males took first and second; I crossed the finish line third. Had the males not been competing in the girls' category, I would have won that race.

20. These two males, Terry Miller and Andraya Yearwood, impacted my placement at statewide championship meets. At the 2018 CIAC State Open Championship in the Women's Outdoor 100-meter dash, the males again took first and second. Because of their participation in

the women's category, I was bumped down to sixth place when I should have earned fourth place.

21. But one of my more painful memories of loss involved the 2019 Connecticut State Open Championship. I missed qualifying for the state championship 55-meter final by just one spot, and the chance to qualify for the New England Regional championship by just two spots. The top two spots were taken by males. If not for those two male competitors in my race, I would have had the opportunity to compete in the championship final and for a coveted spot at the New England Regional championship.

22. While I was in high school, these two males collectively won 15 Connecticut women's state championship titles in girls' high school track and field and set 17 new individual meet records.

23. It is demoralizing and frustrating to compete against someone who has unfair physical advantages over you, because no matter how hard I train or how hard I try, there is nothing I can do to overcome that disparity. We girls train to win; not to win second place or receive a participation trophy. Some girls I know were so demoralized by the experience of losing to males that they abandoned certain track events and changed sporting events entirely. Other times coaches tried to convince girls to change their events just so the girls would have a chance to succeed.

24. Because of male competition, I have lost opportunities to compete at world class tracks. I have lost opportunities to compete in front of college coaches and scouts. I have lost opportunities to win titles and public recognition of my achievements. I have lost opportunities to win recognition and event points for my school.

25. And the heartbreaking thing is that my story is not unique. Many other girls across the state of Connecticut lost out on similar opportunities.

26. It felt so unfair. I knew I had to stand up. My parents and I reached out to school administrators and coaches. We reached out to CIAC officials to ask for a policy change. But no one would listen to us. Instead, they silenced us.

27. My parents and I were left with no other option but to file a federal lawsuit to protect the integrity of women's sports under Title IX. It was a huge step, a scary step. But someone needed to speak out for girls in Connecticut. That lawsuit is still ongoing.

Competing in Women's Collegiate Athletics

28. It was my dream to run track in college. Despite the unfairness of my high school track experience, I hoped to put that experience behind me and have a fresh start and level playing field in college.

29. After visiting several colleges, I decided to attend the College of Charleston in South Carolina. I attended the College of Charleston in 2020-21 for my freshman year. However, it was a tough school year with COVID and at the end of the year, I re-visited my options.

30. I received an offer to run for Florida Atlantic University, and I immediately knew that was the right fit for me. My dream has always been to attend college and run in Florida, and I finally have the opportunity to fulfill that goal. And I had always hoped to end up somewhere warm with lots of sunshine, so competing in Florida was a dream come true.

31. FAU has a NCAA Division I track and field team and competes in the East Division of Conference USA.

32. Being part of the team is quite an honor. And there are many additional side benefits to being a collegiate athlete: access to top-tier coaching, facilities, and equipment;

consultation with nutritionists and dieticians; paid travel to games, academic support services; medical and wellness care; access to psychologists; access to the NCAA Student Assistance Fund; team gear and apparel; and the opportunity to make money on my own name, image, and likeness.

33. For example, the Florida Panthers, a professional ice hockey team, recently announced that they were sponsoring FAU female athletes and giving us an opportunity to partner with them. I do not yet know all that will entail, but we receive tickets to home games, team apparel, the opportunity to partner with their brand. As athletes, we also have the opportunity to make money on our name, image, and likeness by appearing in ad campaigns for brands like Nike and Adidas.

34. At the end of the 2021-22 academic year, I will still have four more years of NCAA eligibility due to COVID.

35. My teammates and I train hard to win. We weightlift, complete running drills, and run sprints time and time again. It takes incredible work and dedication to win a race determined by hundredths of a second. I have trained much of my life striving to shave mere fractions of seconds off my race times.

36. I had to make many sacrifices over the course of my athletic career to play the sport I love. I have missed school dances and spring breaks, family events and holiday trips, and friends' birthdays and vacations. I have given up weekends and free time. I stayed late after school for practice. And the commitment to track has only increased during my time spent training in college.

37. But I make these sacrifices because I want to be the best that I can be. I want to win—not just for myself, but also for my teammates. And the motivation to win is what compels me to train as hard as I can.

38. I love my sport. I get on the track and I can let everything in my life go and I can be free to focus on running. It's exhilarating to see all the training and hard work pay off on the track.

39. But track has taught me more than just how to run fast down the track. I have also learned life skills. It has taught me physical and mental toughness. I have learned perseverance and good sportsmanship. I have learned that hard work pays off. And that making sacrifices to excel at something reaps future benefits. It opened new financial opportunities, personal development opportunities, and even academic opportunities. And it has given me something to strive for.

40. I am currently majoring in criminal justice with the goal of being a lawyer. But I always have my eyes on the track, and I would love to go pro after college if the right door opens.

Fairness in Women's Sports

41. When I heard that Florida's legislature passed the Fairness in Women's Sports Act in late April 2021 to protect the integrity of women's sports, I enthusiastically supported it.

42. In fact, it was my incredible honor to be invited to attend the bill signing ceremony in early June 2021 because my own personal story had played such a role in motivating lawmakers to pass a bill protecting Florida's female athletes. Little did I know at the time that Florida's Fairness in Women's Sports Act would later protect me, too, as I start competing for a public university women's team in Florida.

43. When that law was later challenged in federal court, I decided to speak up for girls who are afraid of retaliation from the media, school officials, and coaches and filed a motion to intervene in the lawsuit. I fear that too many women feel pressured to remain silent about their real views. And if someone does not speak up for women, I fear that we could see the end of women's sports. There will be boys' sports and co-ed sports. But women's sports as we know it will be gone.

44. I know from my own past experience in high school that males competing in women's sports takes away opportunities from women—whether that is a spot on the team, a spot on the podium, an athletic scholarship, the ability to benefit from her likeness, or recognition and awards—and it defies the entire purpose of having separate women's sports.

45. Woman have fought hard for many years to have equal athletic opportunities. I want to make sure that girls in the future can continue to compete in the sports they love. If girls do not have equal opportunities, I fear they may choose not to be involved in sports at all if they feel they cannot win or possibly even get physically hurt competing against a stronger, faster male.

46. I believe that ensuring an equal playing field for women to be champions in their own sport is a women's rights issue. But this isn't just about fair play and winning for me. I want to protect the fairness and safety of women's sports for female athletes everywhere. I want to ensure that future generations of women have access to the same equal athletic opportunities that shaped me and my love of sports.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

Selina Soule

Dated: 4/13/2022

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA
CHARLESTON DIVISION

B.P.J, by her next friend and mother, HEATHER JACKSON, *Plaintiff,* v. WEST VIRGINIA STATE BOARD OF EDUCATION, HARRISON COUNTY BOARD OF EDUCATION, WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION, W. CLAYTON BURCH in his official capacity as State Superintendent, DORA STUTLER in her official capacity as Harrison County Superintendent, and THE STATE OF WEST VIRGINIA, *Defendants* and LAINEY ARMISTEAD, *Defendant-Intervenor.*	Case No. 2:21-cv-00316 Hon. Joseph R. Goodwin

DECLARATION OF DARCY ASCHOFF

1. I am a 2 year resident of Lehi, Utah, and have personal knowledge of the information below.

2. As a former collegiate athlete, high school varsity volleyball coach, and mother of two competitive high school volleyball players, I have observed the mental and psychological toll on female athletes of being forced to compete against a male.

Athletic Background

3. Volleyball runs in my family. My mom played as a youth, I competed in college, and now my daughters are star high school volleyball athletes with dreams of competing in college.

4. I began playing competitive volleyball as a freshman at Delta High School as a middle blocker. During my senior year, my volleyball team won the 1995 Utah State Championship, and I was awarded MVP (most valuable player) for our team.

5. Throughout my sophomore, junior, and senior years of high school, I also played club volleyball.

6. I was recruited and given a scholarship to play varsity volleyball at Dixie State College (now Dixie State University), an NCAA Division I school. From 1996 to 1997, I played for Dixie State College.

7. After my sophomore year of college, I transferred to Hawaii Pacific University, an NCAA Division II school, where I was also offered a volleyball scholarship. From 1998 to 1999 during my junior and senior years of college, I played volleyball for Hawaii Pacific University.

8. In 1998, during my junior year of college, my Hawaii Pacific volleyball team won the NCAA Division II Nationals Championship. This was the highlight of my volleyball career.

9. In 2016, my entire Hawaii Pacific University volleyball team was inducted into Hawaii Pacific's Hall of Fame to honor our 1998 Nationals Championship.

10. I continued to play volleyball recreationally after college. My two daughters, Ajah and Jahslyn, have said that one of their earliest memories is watching me play recreational volleyball at a park across the street from our home. I would bring my daughters with me, and Ajah would beg whoever was on the sidelines not playing volleyball to pass the ball with her.

11. Both of my daughters went to volleyball summer camp at young ages, and eventually began competing in school and club volleyball.

12. As my girls reached high school, I started coaching their school and club teams.

13. In 2015, I coached Lanakila club volleyball for the 14 and under team, and in 2016 I coached Lanakila club volleyball for the 12 and under team, respectively.

14. From 2018 to 2020, I also coached girl's Hawaiian Style Volleyball, a competitive club volleyball team on Maui. In the 2018-2019 season, I coached the girls' 14 and under team, and in the 2019-2020 season I coached the girls' 16 and under team.

15. I served as assistant girls' varsity volleyball coach at Maui High School during the 2018 and 2019 seasons. Maui High School competes in the Maui Interscholastic League of the Hawaii High School Athletic Association.

My Daughters' Experience Competing Against a Male Athlete

16. The 2019-2020 volleyball season was my girls' final volleyball season at Maui High on our beloved island of Maui. Ajah was a sophomore and a team captain, and Jahslyn was a freshman. The Maui High team was a young team in a building season.

17. Ajah and Jahslyn worked so hard to develop their volleyball skills to become their best. They attended summer camps, participated in daily practice during high school season, and then continued to play volleyball year-round with highly competitive national club teams. These teams travel nationally and practice 2-3 times per week.

18. But despite my daughters' hard work, the 2019-2020 varsity girls' volleyball season was unusually tough: they were forced to face a male athlete on another team.

19. Both of my daughters knew this athlete, Jhene Saribay, from summer volleyball camps because training is co-ed. From what I learned, this male competed on the Kamehameha boys' volleyball team for several years, and only recently switched to competing on the girls' team.

20. My daughters heard rumors from other girls on the Maui High team that this male athlete was planning to play on the Kamehameha High girls' varsity volleyball team, but at first they didn't believe it.

21. I first heard about the situation from the Maui High head coach. Initially I thought it was a joke: this could not be happening. But it was. And our coach's hands were tied—the Maui High athletic director made clear that our head coach could not make waves about this situation, or he would lose his job. Other parents at Maui High were upset but were not willing to act.

22. My daughters competed against this athlete 3 times and their volleyball team lost every match.

23. Based on my observations as a mother and assistant coach at my daughters' volleyball games, this male athlete dominated Maui varsity girls' volleyball in the 2019-2020 season. He dominated playing time. He jumped higher. He spiked the ball harder and faster and further. From my perspective, he was one of the best hitters on Maui, despite his average stature.

24. The girls, on the other hand, were nervous and intimidated by the male on the other side of the net. They seemed mentally defeated before stepping onto the court. They would often "duck and cover" or assume a defensive position rather than prepare to respond to his spikes. My daughters said they were afraid of getting hurt. My daughters' teammates told us that they felt demoralized. Some wondered why they should even bother playing in matches against Kamehameha that season, because they knew the male athlete's team would beat them.

25. Volleyball is a very physical sport. And a male competing in girls' volleyball is a safety issue. I'm concerned that one of my daughters could be hurt, or that a male could take away their scholarship opportunities to compete in college.

26. Both of my daughters love the friendships they built through volleyball, as well as the comradery and competitive nature of the sport. They grew stronger and more powerful in hitting and jumping. They gained self-confidence and poise. I am proud of their hard work and drive to be the best they can be at their sport. Volleyball is all about testing your limits—how high you can jump, fast you can run, hard you can swing—and knowing that males have an advantage makes it hard for girls to compete.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

Darcy Aschoff

Dated: 4-19-22

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA
CHARLESTON DIVISION

B.P.J, by her next friend and mother, HEATHER JACKSON, *Plaintiff,* v. WEST VIRGINIA STATE BOARD OF EDUCATION, HARRISON COUNTY BOARD OF EDUCATION, WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION, W. CLAYTON BURCH in his official capacity as State Superintendent, DORA STUTLER in her official capacity as Harrison County Superintendent, and THE STATE OF WEST VIRGINIA, *Defendants* and LAINEY ARMISTEAD, *Defendant-Intervenor.*	Case No. 2:21-cv-00316 Hon. Joseph R. Goodwin

DECLARATION OF CYNTHIA MONTELEONE

I, Cynthia Monteleone under penalty of perjury, declare as follows:

1. I am a forty-six-year-old resident of Lahaina, Maui County, Hawaii, and have personal knowledge of the information below.

2. I am a mother, a coach, and track and field athlete for Team USA. Both my daughter and I have had the frustrating experience of competing against a male athlete in our sport.

My Competition Against a Male Athlete

3. In September 2018, I competed at the World Masters Athletics Championships in Malaga, Spain. I was eager to put my hard work to the test. And it paid off: I took bronze in the W40 400, along with USA golds in the 4x100 and 4x400.

4. But I was shocked to find out that one of my competitors was a biological male from Colombia who had just recently started identifying as female. The athlete had a much larger build than any of the female athletes.

5. I began to ask questions as to the fairness of this issue. The European officials stopped the track meet, conferred, and decided that the race had to continue and urged me to file a complaint with the Team USA managers.

6. Not only did the Team USA managers refuse to file a complaint or inquiry, they warned that for my own safety, I should not speak up about this issue.

7. My freedom of speech is important to me. I will not be silenced. I continue to defy this directive and speak up because I see firsthand the harm being done to my fellow female athletes.

8. This is not about being a sore loser—I beat the male athlete by just a few tenths of a second. This is about fairplay for all women. The same male athlete just a year later beat my USA teammate in the hurdles for a place on the podium at the 2019 World Masters Athletics Championships in Poland.

9. I see the psychological and emotional heartbreak of women. After training so hard to be the best that they can be at their sport, and spending so much time away from their families, they are devasted to see that sacrifice wasted because they were beaten by a biological advantage that no amount of training or sacrifice can overcome.

10. Many of the girls I coach suffer from anxiety over having to compete against male athletes. We all know the powerful scientific neurotransmitter connection between our minds and our bodies: When you *think* you can win, you have a better chance of doing it. It's proven.

11. Science and common sense tell us that male and female bodies are different. No amount of testosterone suppression can change the amount of myonuclei in a male body, making it easier at any point in their life to build more muscle than the female sex. Not only that these cellular level advantages dictate that male bodies will be more powerful with faster twitch fibers than those of the female sex.

12. Women are not just hormones. Our athletic performance is impacted by our cycle, birth control, and pregnancy—something no male who identifies as female has to address.

13. As a masters athlete, I am especially concerned because female hearts shrink as we age, while the male hearts enlarge, all of this despite any "hormone treatment."

My Daughter's Competition Against a Male Athlete

14. But it was not just on the world stage that I experienced the demoralizing trend of males displacing females in their own competitions; it was also on my home island of Maui, Hawaii.

15. A year and a half after my experience in Spain, my daughter, Margaret, lined up for her very first high school track meet. I had watched proudly as my strong and determined girl did all the right things – made personal, difficult sacrifices to train her body to be as fast and fit as possible for her first race.

16. Yet all her hard work seemed for naught as she raced against a male-bodied athlete who had just transferred from the boys' volleyball team to the girls' team the season before. The athlete breezed right by Margaret to win first place, pushing her into second place.

17. My daughter lost her very first race to this athlete who ran so fast in the first 100 meters of the 400-meter race that the individual could have set a state record.

18. The Maui athletic community is small and tightknit. I learned that this biological male had grown up wrestling and had just injured a girl during volleyball, giving her a concussion with a powerful spike. This individual was casually trying out track and had trained only two weeks before running next to my daughter who had trained all year.

19. This athlete also raced against the girls I coached. One senior girl was crying because she told me she knew there was nothing she could do to win the conference championship that she had dreamed of winning since she was a freshman. She told me, right after that male athlete raced, that she was quitting track, even though I told her she had what it took to possibly run in college. She turned to me and asked, "What's the point, if it's not fair?"

20. COVID cancelled the rest of our season, but these horrible memories were never cancelled from my mind. We must consider the mental and physical health and safely of the biological female athletes and provide an equal and level playing field for them to achieve all of the opportunities the male sex has.

21. We must not hold the feelings and mental health of one group as more important than another. The mental health of our daughters, granddaughters, sisters, and teammates matter.

22. All of the lessons I teach as a coach about hard work paying off: these lessons fall apart when a mid-level male athlete doesn't have to work as hard and can beat our hardest working, most talented females.

23. In 2019 in Hawai'i, about 350 out of 700 male athletes ran faster than the fastest female in Hawai'i. Quite literally, a mediocre boy could beat the best girl. Tens of thousands of high school boys could run faster than the most decorated Olympian in history, Allyson Felix. If we do not protect women's sports, our girls will see their athletic dreams crushed.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

Cynthia Monteleone

Dated: April 19, 2022

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA
CHARLESTON DIVISION

B.P.J, by her next friend and mother, HEATHER JACKSON, *Plaintiff,* v. WEST VIRGINIA STATE BOARD OF EDUCATION, HARRISON COUNTY BOARD OF EDUCATION, WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION, W. CLAYTON BURCH in his official capacity as State Superintendent, DORA STUTLER in her official capacity as Harrison County Superintendent, and THE STATE OF WEST VIRGINIA, *Defendants* and LAINEY ARMISTEAD, *Defendant-Intervenor.*	Case No. 2:21-cv-00316 Hon. Joseph R. Goodwin

DECLARATION OF MADISON KENYON

I, Madison Kenyon, declare as follows:

1. I am a twenty-year-old resident of Pocatello, Idaho, and have personal knowledge of the information below.

2. I am a junior and female athlete at Idaho State University in Pocatello, Idaho, where I compete in women's cross-country and track. Running is my passion.

Athletics Background

3. Athletics has been my world from a very young age. Both of my parents were high school athletes, so competition—especially among my siblings—was like the air I breathed growing up.

4. I first kicked a soccer ball at age three, and I was hooked. That first encounter with a ball led me to compete for 15 years on various club soccer teams.

5. Through playing soccer, I learned both that I am fiercely competitive and that I love to run.

6. Admittedly, I hated running at first, because it is hard work. But the more I ran, the faster I got and the more I enjoyed it.

7. In 6th grade, that love of running and competition led me to try cross-country—a sport I have competed in every fall since. In my freshman year of high school, I also started running track.

8. Running is my happy place. I love pushing my body to its limits, spending time outdoors, and doing it all with a sense of camaraderie and fun alongside some of my closest friends.

9. I'm proud of my accomplishments. In high school, I set five different school records, and as a sophomore was even voted unanimously by our coaches for the honor of "athlete of the year."

Competing in Women's Collegiate Athletics

10. I decided to attend college at Idaho State University (ISU) because it is a big university nestled in a small town with plenty of opportunities for outdoor activity and track competition. The athletic scholarship I received from ISU has not only helped finance my athletic career but has also helped finance my dream of becoming a nurse someday. I am currently pursuing a degree in nursing.

11. As an ISU freshman in the 2019-2020 academic year, I made the cross-country team and competed in the 4-kilometer (2.49-mile), 3-mile, 5-kilometer (3.12-mile), and 6-kilometer (3.73-mile) events. I was thrilled.

12. But that enthusiasm turned into confusion when, at the start of the fall 2019 cross-country season, I was informed that I would be competing against a male athlete.

13. At first, I was incredulous that any biological male would be allowed to compete in the women's category. This couldn't be happening.

14. So I researched the student. I found out that June Eastwood competed on the University of Montana's men's cross-country team for three years, before switching to compete on its women's cross-country team. I also learned that while competing as a man, Eastwood ran times in at least one event that was faster than the NCAA collegiate women's record. My heart sank.

15. So as I got into position at the starting line of my first ever collegiate cross-country race, I faced a hurdle I never expected to encounter: a male athlete.

16. In the 2019 cross-country season, I lost to Eastwood three times:

a. 2019 Montana State Cross-Country Classic in the 3-mile event.

b. 2019 Big Sky Cross-Country Championships in the 5k event.

c. 2019 NCAA Division I Mountain Region XC Championships in the 6k event.

17. In all three races, Eastwood not only beat me by a significant margin, but also bumped me down to a lower placement than I would have received had I only competed against other women. That may not seem like a big deal to some, but placements matter to athletes. I want to know that I earned my placement fair and square. Fair competition pushes me to better myself and try harder; unfair competition leaves me feeling frustrated and defeated.

18. It was discouraging. My heart sank as I watched Eastwood placing and medaling in the women's cross-country races in meet after meet.

19. Cross-country athletes, like me, usually also compete in indoor and outdoor track. So, during the winter 2020 indoor track season, I competed in the 3k (1.86-mile), the mile, and the distance medley relay events.

20. Again, I raced this male athlete during the indoor track season. At the 2020 Stacy Dragila Open Women's Indoor Mile, Eastwood took 2nd place and I took 8th. Eighth place is nothing to be ashamed of if won fairly—especially as a freshman competing in a race dominated by juniors and seniors—but the competition is not fair when one of the athletes in the women's category is a male with the strength and speed advantages that come from male physiology.

21. And at the 2020 Indoor Big Sky Championship I, along with three other ISU teammates, competed in the distance medley relay against Eastwood's relay team. A distance medley relay is made up of a 1200-meter leg, a 400-meter leg, an 800-meter leg, and a 1600-meter leg. Montana State's relay team was in 6th place before Eastwood began the final 1600-meter leg of the race. During Eastwood's leg, Eastwood advanced Montana's relay team not one or two, but *four* positions to finish in 2nd place. My team took 5th, though we would have placed 4th if not for Eastwood's participation. We lost not only a placement, but team points as well.

22. Also at the Big Sky Championship, I watched in disbelief as one of my teammates lost her bronze medal and place on the championship podium because Eastwood took first place in my teammate's women's mile event and bumped her to fourth place. It was heartbreaking to watch.

Fairness in Women's Sports

23. I believe that allowing males to enter women's sports defeats the entire idea of fair competition. Sex segregation in sports helps maintain fair competition so that no athlete has an unfair advantage over another. And it helps ensure that if women like me work hard, we have a shot at winning.

24. I am studying nursing and plan to enter the medical field. In my biology coursework, it is clear that the biological differences between male and female are not matters of personal opinion, or features that can be changed or chosen. I *am* female, not because I chose to be female, or identify as female, but because every cell in my body is marked with XX chromosomes and my entire body developed in alignment with those female markers.

25. But you do not need to be a medical expert to understand this. I know from everyday experience that since the boys in my class went through puberty, the males around me are generally bigger, faster, and stronger than the females, simply because they are male. Even the rules of sport implicitly acknowledge this. For example, men's cross-country races are longer than women's cross-country races.

26. In March 2020, Idaho became the first state in the country to pass a law to protect women's sports. H.B. 500, the Fairness in Women's Sports Act, protects women's sports by ensuring that only female athletes compete in sports designated for women or girls. I intervened in a lawsuit to help defend that law because I want my races to be fair and a test of skill and hard work. I do not want to wonder whether I am training countless hours for inevitable defeat, or whether I will even have a chance to win against a physically advantaged male athlete.

27. I fear that if we are no longer allowed by law to recognize the objective existence of women, that it will be a huge loss to women's rights.

28. Sports was like the air I breathed growing up, and I want my kids to have that same experience. And as hard as my teammates and I work to be competitive, I do not want to see women's sports fade away as a separate category because males compete in women's divisions, and women give up trying to compete because they do not think they can win. I fear that we will soon effectively have men's sports and co-ed sports, but no dedicated category for females only.

29. And I do not want to see women lose their legal protection and progress under the law because we can no longer identify what a woman is.

30. To my knowledge, June Eastwood has graduated. But I learned through my involvement in defending Idaho's Fairness in Women's Sports Act that another male, Lindsay Hecox, wants to compete on the women's team at Boise State University—a university that my team competes against. And if Title IX and Idaho's law aren't upheld, other males will almost certainly follow.

31. I believe everyone should be able to compete, but it must be done fairly. It is not fair for women's competitions to be open to male athletes. And women's sports itself will lose its meaning, and its specialness, if males can be redefined as females.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

Madison Kenyon

Dated: April 14, 2022

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA
CHARLESTON DIVISION

B.P.J, by her next friend and mother, HEATHER JACKSON, *Plaintiff,* v. WEST VIRGINIA STATE BOARD OF EDUCATION, HARRISON COUNTY BOARD OF EDUCATION, WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION, W. CLAYTON BURCH in his official capacity as State Superintendent, DORA STUTLER in her official capacity as Harrison County Superintendent, and THE STATE OF WEST VIRGINIA, *Defendants* and LAINEY ARMISTEAD, *Defendant-Intervenor.*	Case No. 2:21-cv-00316 Hon. Joseph R. Goodwin

DECLARATION OF MARY MARSHALL

I, Mary Marshall, declare as follows:

1. I am a twenty-one-year-old resident of Twin Falls, Idaho, and have personal knowledge of the information below.

2. I am a senior and female athlete at Idaho State University in Pocatello, Idaho, where I compete in cross-country and track and field.

Athletics Background

3. I first started playing basketball at 7 or 8 years old, and I continued through my sophomore year of high school. I enjoyed the competition, the adrenaline rush, and the sheer fun of the game.

4. In 8th grade, I started running track. My sophomore year of high school I started running cross country to get in shape for basketball. But to my surprise, I found out that I loved running *more* than playing basketball! So, I kept running races. And my sophomore year of high school, I dropped basketball altogether and started focusing on cross country and track.

5. I discovered that I am good at running. In two back-to-back years, my high school medley relay team won the State championship in our division. My junior year I won the state championship in the 300 intermediate hurdles. And in my senior year of high school, I won the State championship in the 800m for my division.

6. I love to run. It gives me confidence, improves my mood, and allows me to explore the great outdoors on foot. But being a competitive female athlete is about more than just running long distances. It is about community. My teammates have become my closest friends. We push each other to be our best, help one another through disappointments and losses, and cheer one another on as we celebrate victories. We travel together for sporting events and share overnight lodging: it's like a sisterhood. We enjoy one another so much that we even spend our free time together. Through running competitively, I have made some of my closest lifelong friends.

Competing in Women's Collegiate Athletics

7. I chose to attend college at Idaho State University (ISU) because it is close to home and I really liked my track coaches. And I am grateful to be one of the lucky ones to benefit from a women's track scholarship.

8. In college, I am primarily a mid-distance track athlete, focusing on shorter distances like the 800-meter and the mile. But I also compete in cross-country to stay in shape. In cross-country, I generally compete in the 5k.

9. Training is hard work. On Tuesdays and Thursdays, I usually have a two-hour workout with my team. On alternate days, my teammates and I get together for a five-to-six-mile run. Additionally, we have an hour-long weightlifting session on Mondays and Wednesdays.

10. But in the fall of my sophomore year of college, I learned that I would be racing against a male athlete who was competing on the University of Montana women's team because he identifies as female. I was appalled. I do not know how anyone could think this was fair to female athletes. Males are naturally fitter and faster than females.

11. I raced against this athlete, June Eastwood, not once, but twice. First, I competed against Eastwood in the Montana State Cross-Country Classic 3-mile event in the fall of 2019. And then I competed against Eastwood again in January 2020 at the Stacy Dragila Indoor mile event.

12. I lost both times. I was displaced and pushed down to a lower spot in the rankings than I would have earned had the playing field been level.

13. When I lose to another woman, I assume that she must train harder than I do and it drives me to work harder. If I lose to a man, it feels completely different. It's deflating. I wonder whether he works as hard as I do, whether he was even trying, or was that an easy race for him. It makes me think that no matter how hard I try, my hard work and effort will not matter.

14. Members of the men's track team sometimes do easy runs with me and my teammates on the women's track team. But we women are under no illusion that we would be competitive in a race against these men. Even our easy runs are at different paces. For example, an easy run for women is usually at an 8:30 pace, while an easy pace for men is around 7:30.

Fairness in Women's Sports

15. When I first heard about Idaho's H.B. 500 Fairness in Women's Sports Act, I was really excited. I hoped that this would be the solution we needed to keep men out of women's sports. And that's why—when the law was later challenged in court — I chose to stand up and intervene in the lawsuit to defend the law. I wanted to make sure that the voices of women were heard.

16. I have personally seen the negative impact on women when Eastwood was allowed to compete against women's teams, and I fear that as men realize they only need to "identify" as women in order to compete in the women's category, others might follow suit. In fact, I learned through my lawsuit that a male athlete, Lindsay Hecox, wants to compete on the Boise State women's track and cross-country team—a team that I compete against. I want to stop this before it becomes popular.

17. I want to preserve the camaraderie and sisterhood that comes from competing with an all-female team. There is no way that I would feel comfortable sharing a hotel room with a male athlete, regardless of how that person identified.

18. And I want other young women to benefit from sports as I did. I did well in high school sports. But if a boy had decided to compete against me in basketball, or track, or cross-country, I am not sure that I would have kept on competing. Success drives endeavor. And if I knew that I could not win, I might have dropped out of sports altogether.

19. That very idea concerns me. Sports has played such an important role in my life. It taught me how to work in groups and as a team. It taught me how to persist through disappointment. It taught me that if I put in the work, I will get the results. It has taught me how to interact with people I do not know, and how to respond to those in authority over me. It has

given me the confidence to study business, marketing, management, and economics at ISU because I hope to be an entrepreneur and own a business someday. These are the benefits that I want to preserve for the next generation of women.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

Mary Marshall

Mary Kate Marshall

Dated: 4/19/22

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA
CHARLESTON DIVISION

B.P.J, by her next friend and mother, HEATHER JACKSON, *Plaintiff,* v. WEST VIRGINIA STATE BOARD OF EDUCATION, HARRISON COUNTY BOARD OF EDUCATION, WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION, W. CLAYTON BURCH in his official capacity as State Superintendent, DORA STUTLER in her official capacity as Harrison County Superintendent, and THE STATE OF WEST VIRGINIA, *Defendants* and LAINEY ARMISTEAD, *Defendant-Intervenor.*	Case No. 2:21-cv-00316 Hon. Joseph R. Goodwin

DECLARATION OF HALEY TANNE

I am a 22 year-old senior at Southern Utah University and have personal knowledge of the information below.

Athletic Background

1. I have always loved running. As a kid, I was fast and could outrun a lot of people. But I didn't get into running seriously until the summer before my freshman year of high school. My older sister (who later ran in college) "forced" me to get up early with her and run. Once I got into shape, I loved it.

2. As a high school freshman, my coach pulled me aside and said that I had the potential to run in college. I was surprised!

3. And I started training harder. My family wasn't financially well off so I worked hard to earn the participation fees and gear fees to run in high school. I worked in my coach's woodshop over the summer, and later transitioned to be a pool instructor to earn money.

4. It was a lot of work. I worked throughout my summers, went to bed early and missed out on the typical teenage experience of my peers.

5. In high school, I was our school's top ranked female athlete. I felt a lot of pressure being at the top. But the desire to be the best and potentially earn a scholarship for college kept me pushing to stay at the top.

6. Being a female athlete is not easy and requires sacrifice. To get faster and hold my spot required a lot of self-discipline in my diet, bedtime, and homework.

7. My teammates say I'm fiercely loyal. I'm hardworking, smart, reliable, and I invest deeply in relationships.

8. I love racing! I love the feeling when my legs are burning, almost numb, lungs are burning, arms are burning and so fatigued. But when you cross that finish line, all the pain melts away.

9. There are never "days off" in the life of a distance runner. You have to really love running to excel in this sport. I have many favorite runs near the Southern Utah University campus. I love the Canyon Run, Dikes Run, and the Main Street Run. I love running in this part of Utah and losing myself to the scenery. It gives me temporary relief from stresses or negative emotions I'm facing.

10. When I was deciding on which college to attend, I looked all throughout Utah. I had many options, and many schools were interested. But I ultimately decided to go to Southern Utah University because of the team dynamic and the kind, caring, and capable coaches.

11. Going to college was something that was not a likely option for me because of the low-income status I came from. Gratefully, running allowed me to earn a scholarship and attend college. Running has completely shaped my college career. It has taught me even greater discipline than I had in high school. I have learned mental toughness from hard workouts and practices. I have also developed many leadership traits from being on a team, and even though I am one of the youngest runners on the team as a sophomore, I still have a position of leadership.

12. My teammates have made my college athletic career worth it. We are with each other through anything and everything. My teammates have seen me at my lowest lows and my highest highs. It is a special bond, and we are all so close. While we have a lot of personalities on the team, we all mesh together so well. I love my teammates and every one of those girls means the world to me.

13. One day I want to be nurse and nursing school will be my next step. I've always been interested in the human body and medicine and I have always wanted to be involved in a health career. After nursing school, I would like to settle down and move forward in my career and have a family.

Competition Against a Male Athlete

14. I remember learning that there was a male signed up to compete on the women's cross-country team at the University of Montana. My coach sat us all down before the season started and informed us that there was a male who transitioned and would be racing against us. I remember being so shocked. I never imagined this would happen in my lifetime.

15. This male, June Eastwood, had competed on the men's team for three years and was not an exceptional athlete. But even as a mid-level runner, Eastwood posted times that were faster than women's NCAA records.

16. I competed against Eastwood twice and I lost to Eastwood both times. The first time I competed against Eastwood was in the 2019 Big Sky Cross Country Championships. I also competed against Eastwood in the NCAA Division 1 Mountain Region Cross Country Championships.

17. One of my teammates, Madison Fruchey, was also knocked off from being an All-Conference athlete because of June Eastwood's involvement. Eastwood was in the top-10 and Madison was 11th. You can mentally exclude Eastwood from the top 10, but when the All-Conference list was published, Madison's name was not on it.

18. Eastwood's participation is frustrating. My teammate lost opportunities for accomplishments she worked hard to achieve. I do not want to have anger towards Eastwood, but when I see Eastwood lining up in a women's race, it just feels wrong.

19. Eastwood has an advantage when competing. Us women are already at a loss once Eastwood stands at the starting line. Eastwood's presence is intimidating, and it is hard to mentally compete at our best when we know we can't win.

20. Males run track with more physicality than women. They throw elbows and compete with a more aggressive strategy. They are especially more aggressive in college and when they progress to more elite races.

21. Like I mentioned earlier, obtaining an athletic scholarship was vital to pursuing my dream of being a nurse. Running was the only way I could afford to participate in academic programs at my school. When I heard Eastwood was participating on the University of Montana's girls' team through a girls' scholarship, it was frustrating. There is a limited number of athletic scholarships that each school can distribute, and Eastwood took an opportunity from

another woman. It makes you wonder if there may have been another female athlete in my shoes that may not have been able to afford school without an athletic scholarship.

Fairness in Women's Sports

22. Title IX was created to provide a space for women, like me, to compete on a fair playing field and be a champion in my own sport. But allowing males to compete in women's sports destroys that opportunity and sets women back half a century.

23. Generally speaking, males are stronger, faster, and bigger than woman. June Eastwood towered over the female competitors like me. And if men take over, I fear that women will lose the drive to compete in the sport altogether.

24. Eastwood displaced women in races and in scholarships. Because of Eastwood's involvement, a woman missed the opportunity to receive an athletic scholarship and may have impeded her ability to attend school at all. Women should not have their opportunities taken by biological males.

25. I decided to stand up and speak out because I don't want my daughters to have to deal with what I've had to deal with. I want to protect women's sports for all the women that will come behind me.

26. I know what I'm doing is right and I know what we're fighting for is right.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

Haley Tanne

Haley Tanne

Dated: April 19, 2022

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA
CHARLESTON DIVISION

B.P.J, by her next friend and mother, HEATHER JACKSON, *Plaintiff,* v. WEST VIRGINIA STATE BOARD OF EDUCATION, HARRISON COUNTY BOARD OF EDUCATION, WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION, W. CLAYTON BURCH in his official capacity as State Superintendent, DORA STUTLER in her official capacity as Harrison County Superintendent, and THE STATE OF WEST VIRGINIA, *Defendants* and LAINEY ARMISTEAD, *Defendant-Intervenor.*	Case No. 2:21-cv-00316 Hon. Joseph R. Goodwin

DECLARATION OF LINNEA SALTZ

I, Linnea Saltz, declare as follows:

1. I am a resident of Washington, D.C., and a former elite track athlete at both Southern Utah University and Georgetown University.

Athletic Background

2. Growing up, I loved cheer, gymnastics, and dance. But with a brother who ran cross-country and a mother who ran triathlons, I decided to try out for track my sophomore year of high school. I surprised everyone—including myself—by running the fastest time of my high school tryouts in the 400-meter.

3. That initial success on the track led to a love of running. I joined my varsity girls' track team and even competed on a club team. By my senior year, I gave up all other

extracurricular activities and focused on getting faster and stronger in order to be the best version of myself.

4. That hard work paid off with an athletic scholarship to run track for Southern Utah University. I received offers from bigger schools, but ultimately chose to attend SUU because I could tell they really cared about their athletes.

5. Being a student-athlete opened doors for me to make connections on campus and provided a ready-made support and friendship network in my teammates.

6. But being a collegiate athlete is not easy. It involves early morning workouts and afternoon practices; weekend travel for meets; and lots of self-discipline in diet, bedtime, and homework. I missed out on sleeping in, spring break, and social events.

7. But it was absolutely worth it. Every time I earned a new Big Sky Championship medal or put my name on the record book for my school, it made all the sacrifice worth it.

8. I am proud of what I achieved in my time at SUU. I am a two-time Big Sky Champion in the 800-meter, once in outdoor and once in indoor. And by the time I graduated, I held seven school records:

- indoor 4x400-meter relay,
- indoor distance medley relay,
- indoor 400-meter,
- indoor 600-meter,
- indoor 800-meter,
- outdoor 800-meter,
- outdoor 4x4 relay.

Competition against a male athlete

9. My senior year of college, I learned about a male athlete at the University of Montana who would be competing in women's cross-country and track.

10. This male, June Eastwood, had competed for three years on the men's team and was not a stand-out athlete. But even as a mid-level male athlete, Eastwood still posted times as a man that were faster than multiple women's NCAA records.

11. In the fall of 2019, Eastwood bested some of my teammates in cross country competitions. I thought it was so unfair. Why would someone who knows they have a physiological advantage over these women compete against them?

12. After my teammates' experience, I spent weeks reading the NCAA's transgender handbook. The NCAA policy at that time—which had been in place since 2011—required males to undergo one year of testosterone suppression before competing on a women's team. I thought this could not be true. I could see for myself that testosterone suppression did not eliminate the male advantage. (Thankfully, the NCAA scrapped that old policy in late 2021, but did not replace it with any policy that actually protects female athletes.)

13. In the winter of 2020, I learned that Eastwood would be competing in the indoor Big Sky Conference Track and Field Championships.

14. As the defending 800-meter Big Sky Conference Champion, I immediately jumped online to see what I was going to have to be competing against this season. All hope was lost when I realized that the male athlete was going to be competing against had a personal best time of 1:55 in the 800-meter, not only 10 seconds faster than the best time I had posted the season prior, but faster than the NCAA women's record in the event.

15. I took a step back and realized that my senior year was no longer going to be about the sacrifices, hard work, pain, and dedication I had put forth the last four years. It was going to be about fairness in women's sports being stripped away right in front of me. Title IX was passed in order to create an equal and fair playing field for all—yet allowing male athletes to

compete in women's sports discourages young women and deters them from their sports. Sports that encourage independence, strength, strong will, and give you the confidence of being a competitive athlete.

16. Instead of looking forward to my races, I was anxious. I could not bear the thought of losing my Big Sky Championship title to a former male athlete. I tried hard to focus on my training, but it was mentally exhausting to anticipate racing a male athlete with all the advantages of male puberty.

17. To my relief, Eastwood did not enter the 800-meter race. But I competed against Eastwood in the distance medley relay (DMR). In the middle of that relay, after finishing my leg, I overhead the University of Montana coach cuing this athlete from the sidelines, telling Eastwood to do something I had never heard in competition: to slow down. Eastwood took the University of Montana's relay team from nearly the bottom of the pack to a 2nd place finish.

18. Eastwood also bested some of my SUU teammates in the women's mile at Big Sky. Remarkably, this athlete finished four seconds ahead of the next competitor—a massive amount of time in an elite track competition.

Fairness in Women's Sports

19. Female-only sports exist for a reason: to give women like me the chance to podium, showcase our talents, and receive the recognition our hard work and talent deserve. But allowing a male to compete in the women's category shatters these opportunities.

20. Simply by observation, males are generally bigger, faster, and stronger than women. Eastwood's over six-foot-tall frame towered over the female competitors. June's cadence, stride length, broader shoulders, and lack of fatty tissue around the hips and chest all

spoke to June's male advantage. Personally, I would find it demeaning to stand on the podium beneath an athlete that had been on the podium with boys a couple years ago.

21. It is mentally draining to run against a male athlete. While in prior years I could just focus on my training, in 2020, I spent a lot of time in preseason stressing over competing against a male.

22. It only takes three males to displace females on the podium. And only eight males to displace females from All-Conference honors, and even worse from first-team All-American status which some women athletes could only dream of accomplishing.

23. I don't want to look back at the SUU school record books five or ten years down the line to find my name erased by males.

24. Because if men take over, I fear that women will lose the drive to compete in sports entirely.

25. Men are able to celebrate fairness in their sports, so it should only make sense that we can as well. It is discouraging for girls and women to think that they may have to compete against an individual that has a biological advantage over them. Taking away our opportunities will run us out of the sports world, which we already had to fight so hard to be a part of.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

Linnea Saltz

Dated: April 14, 2022

2019 NCAA Division II Outdoor Track & Field Championships (Excerpt)
May 23-25, 2019
Available at:
http://leonetiming.com/2019/Outdoor/NCAADII/Results.pdf
[permalink: https://perma.cc/BB84-YJPL]
(last visited: April 20, 2022)

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Armistead App. 0081

NCAA Division II
Outdoor Track & Field Championships
Hosted By Texas A&M Kingsville - 5/23/2019 to 5/25/2019
Results

Finals ... (Women 5000 Meter Run)

	Name	Yr	School	Finals
18	Dania Holmberg	SO	Seattle Pacific	17:54.06
19	Malena Grover	SR	Adams State	18:00.77
20	Chloe Flora	SO	Lee	18:02.64
21	Cynthia Togom	FR	Cen Missouri	18:03.95
22	Chloe Cook	SR	CO Mines	18:24.29
---	Allie Ludge	JR	Grand Valley St	DNF

Women 10000 Meter Run

Meet Record: 33:17.39 M 5/26/2011 Sarah Porter

	Name	Yr	School	Finals	
Finals					
1	Caroline Kurgat	SR	Alaska Anchorage	36:34.31	10
2	Leah Hanle	JR	Mount Olive	37:20.46	8
3	Gina Patterson	JR	Grand Valley St	37:33.19	6
4	Jessica Gockley	SO	Grand Valley St	37:40.52	5
5	Kaylee Bogina	JR	Adams State	37:43.89	4
6	Eileen Stressling	SR	Azusa Pacific	38:02.76	3
7	Alexa Shindruk	SR	Cen Washington	38:04.69	2
8	Allison Dorr	SR	Saginaw Valley	38:05.52	1
9	Kathryn Etelamaki	JR	Ferris State	38:16.78	
10	Ida Narbuvoll	JR	U-Mary	38:43.20	
11	Hope Jones	JR	So Indiana	38:46.90	
12	Malena Grover	SR	Adams State	38:51.72	
13	Billie Hatch	SO	Dixie State	39:01.07	
14	Emily Byrd	JR	Michigan Tech	39:27.23	
15	Leah Lewis	JR	Dallas Baptist	39:51.54	
16	Michaela Reynolds	SR	CO Mines	39:58.06	
17	Cassidy Ahrens	SR	West Colorado	40:16.52	
18	Jax Heckers	SO	CSU San Marcos	41:15.31	
---	Brianna Coy	JR	Walsh	DNF	
---	Alexandria Tucker	SO	Chico State	DNF	

Women 100 Meter Hurdles

Meet Record: 12.70 M 5/23/2013 Vashti Thomas

	Name	Yr	School	Prelims	
Preliminaries					
1	Courtney Nelson	SR	Pittsburg St	12.99Q	4.1
2	Erin Hodge	SR	Lindenwood	13.37Q	4.8
3	Danielle Kohlwey	SR	MN Duluth	13.52Q	3.4
4	Monisha Lewis	JR	San Francisco St	13.22Q	4.1
5	CeCe Telfer	SR	Franklin Pierce	13.49Q	4.8
6	Mariyah Vongsaveng	SR	Cen Washington	13.97Q	3.4
7	Briana Burt	SR	So. Conn. St	13.77q	4.1
8	Morgan Smith	SR	MO Southern	13.92q	4.1
9	Julia Hammerschmidt	SR	U-Mary	14.03	3.4
10	Tamia Prince	JR	Concordia-CA	14.03	4.8
11	Danielle Scantlebury	FR	St. Augustine's	14.12	3.4
12	SheQuilla McClain	SO	Shorter	14.13	4.8
13	Leah Molter	SR	OK Baptist	14.14	3.4
14	Nia Vance	JR	Cal Poly Pomoma	14.22	4.1
15	Oweneika Watson	JR	Adams State	14.34	3.4
16	Carolyn Hackel	JR	MN State	14.36	3.4
17	Jordan Nash	SR	Angelo State	14.40	4.8
18	Chelsea Walker	SO	Christian Bros	14.48	4.1
---	Jordan Hammond	JR	NW Missouri	DNF	4.8

Women 100 Meter Hurdles

Meet Record: 12.70 M 5/23/2013 Vashti Thomas

	Name	Yr	School	Finals	
Finals					
1	Courtney Nelson	SR	Pittsburg St	13.06	10
2	Monisha Lewis	JR	San Francisco St	13.29	8
3	Danielle Kohlwey	SR	MN Duluth	13.31	6
4	Erin Hodge	SR	Lindenwood	13.47	5
5	CeCe Telfer	SR	Franklin Pierce	13.56	4
6	Briana Burt	SR	So. Conn. St	13.83	3
7	Mariyah Vongsaveng	SR	Cen Washington	13.87	2
8	Morgan Smith	SR	MO Southern	13.98	1

Women 400 Meter Hurdles

Meet Record: 55.42 M 5/27/2017 Tia-Adana Belle

	Name	Yr	School	Prelims
Preliminaries				
1	CeCe Telfer	SR	Franklin Pierce	58.18Q
2	Shannon Kalawan	JR	St. Augustine's	59.18Q
3	Sidney Trinidad	SO	Cen Washington	59.78Q
4	Jordan Hammond	JR	NW Missouri	59.68Q
5	Kissi-Ann Brown	SR	Lincoln-MO	59.92Q
6	Jessica Eby	SO	Grand Valley St	1:00.34Q
7	Minna Sveard	SO	TAMU-Commerce	1:00.16q
8	Hanneke Oosterwegel	SR	Northern State	1:00.23q
9	Chelsea Walker	SO	Christian Bros	1:00.31
10	Erykah Weems	JR	Cen Washington	1:00.43
11	Claudia Cox	JR	UC San Diego	1:01.12
12	Faith Roberson	SO	Angelo State	1:01.24
13	Miyah Golden	SR	Shorter	1:01.35
14	Kelly Strand	SR	UC San Diego	1:01.79
15	Monisha Lewis	JR	San Francisco St	1:02.10
16	Janeth Moya	SR	Cal St. LA	1:02.13
17	Brittney Augustin	FR	Lees-McRae	1:02.69
18	Danielle Scantlebury	FR	St. Augustine's	1:02.71
19	Leah Molter	SR	OK Baptist	1:03.37

Women 400 Meter Hurdles

Meet Record: 55.42 M 5/27/2017 Tia-Adana Belle

	Name	Yr	School	Finals	
Finals					
1	CeCe Telfer	SR	Franklin Pierce	57.53	10
2	Minna Sveard	SO	TAMU-Commerce	59.21	8
3	Sidney Trinidad	SO	Cen Washington	59.49	6
4	Hanneke Oosterwegel	SR	Northern State	1:00.29	5
5	Jordan Hammond	JR	NW Missouri	1:01.24	4
6	Kissi-Ann Brown	SR	Lincoln-MO	1:01.35	3
7	Jessica Eby	SO	Grand Valley St	1:01.35	2

2020 Big Sky Indoor Track & Field Championship Results (Excerpt)
February 27-29, 2020
Available at:
https://bigskyconf.com/documents/2020/3/27//2020_bsc_itf_final_results_single_column.pdf?id=6627
[permalink: https://perma.cc/U4LX-23M6]
(last visited: April 20, 2022)

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2020 Big Sky Indoor Track & Field Championships - 2/27/2020 to 2/29/2020

Holt Arena

Results

Preliminaries ... (Women 800 Meter Run)

	Name	School	Seed	Prelims		H#
8	Morley, Bryn	Northern Arizona		2:14.26	q	1
9	Williams, Isabella	Weber State	2:15.25	2:14.75		1
10	Dilmore, Faith	Idaho	2:17.53	2:15.82		3
11	Kyro, Alexi	Montana State	2:13.69	2:15.97		1
12	Drennen, Maddie	Eastern Washington	2:19.88	2:17.75		2
13	Osipenko, Viktorija	Northern Colorado	2:17.74	2:18.25		3
14	Timmons, Presley	Idaho State	2:16.95	2:18.74		1
15	Henderson, Shayla	Idaho State	2:19.20	2:18.75		2
16	Good, Megan	Montana State	2:17.84	2:19.22		1
17	Marshall, Mary Kate	Idaho State	2:16.78	2:24.72		2

Women 800 Meter Run

BSC Champ:	**2:07.05**	**!**	**2001**	**Stephanie Hansen, Weber State**
BSC All-Time:	**2:03.07**	**#**	**2011**	**Lea Wallace, Sacramento State**
Arena:	**2:01.84**	**$**	**2000**	**Regina Jacobs, Golden Spike**

	Name	School	Prelims	Finals	Points
Finals					
1	Saltz, Linnea	Southern Utah	2:13.48	2:08.00	10
2	Loff, Melanie	Northern Arizona	2:12.49	2:09.63	8
3	Ramsay, McKenna	Montana State	2:13.62	2:11.33	6
4	Pecha, Anna	Idaho	2:13.72	2:12.56	5
5	Story, Krista	Idaho	2:13.41	2:14.31	4
6	Carlson, Patricia	Montana State	2:13.82	2:15.22	3
7	Morley, Bryn	Northern Arizona	2:14.26	2:15.83	2
8	Thacker, Malaina	Idaho	2:13.71	2:15.88	1

Women 1 Mile Run

BSC Champ:	**4:34.24**	**!**	**2006**	**Johanna Nilsson, Northern Arizona**
BSC All-Time:	**4:32.49**	**#**	**2003**	**Johanna Nilsson, Northern Arizona**
Arena:	**4:47.70**	**$**	**1976**	**Wendy Knudson, Colorado**

	Name	School	Seed	Finals	H#	Points
Finals						
1	Eastwood, June	Montana	4:45.83	4:50.28	2	10
2	Malaspina, Mikayla	Northern Arizona	4:48.95	4:54.78	2	8
3	Thacker, Malaina	Idaho	4:52.65	4:55.01	2	6
4	Olsen, Molly	Idaho State	4:52.65	4:57.03	2	5
5	Eitel, Pipi	Northern Arizona	4:48.61	5:00.41	2	4
6	Morley, Bryn	Northern Arizona	4:46.35	5:00.85	2	3
7	Bries, Jesselyn	Northern Arizona	4:52.75	5:01.52	2	2
8	Reiss, Annika	Northern Arizona	4:54.32	5:04.70	1	1
9	Taylor, Harley	Southern Utah	5:05.27	5:05.22	1	
10	Quinones, Amy	Sacramento St.	4:53.71	5:06.49	2	
11	Williams, Isabella	Weber State	4:53.91	5:06.58	2	
12	Carlson, Patricia	Montana State	4:55.02	5:07.53	1	
13	Leatham, Cheyenne	Weber State	4:56.25	5:08.81	1	
14	Pratt, Michelle	Weber State	4:57.33	5:08.98	1	
15	Duncan, Cagnei	Sacramento St.	4:53.18	5:12.03	2	
16	Tanne, Haley	Southern Utah	5:00.32	5:12.52	1	
17	DeBos, Madisan	Southern Utah	5:03.52	5:16.05	1	
18	Drennen, Maddie	Eastern Washington	5:10.86	5:17.24	1	

2020 Big Sky Indoor Track & Field Championships - 2/27/2020 to 2/29/2020

Holt Arena

Results

Finals ... (Women 1 Mile Run)

	Name	School	Seed	Finals	H#	Points
19	Klemic, Kaysie	Southern Utah	5:17.35	5:19.14	1	
20	Wilson, Emily	Northern Colorado	5:14.58	5:29.70	1	

Women 3000 Meter Run

BSC Champ:	**9:20.61**	**!**	**2004**	**Ida Nilsson, Northern Arizona**
BSC All-Time:	**9:06.61**	**#**	**2003**	**Johanna Milsson, Northern Arizona**
Arena:	**9:27.27**	**$**	**1983**	**Jill Molen, Utah**

	Name	School	Seed	Finals	H#	Points
Finals						
1	Malaspina, Mikayla	Northern Arizona	9:37.01	9:47.05	2	10
2	Olsen, Molly	Idaho State	9:34.02	9:48.12	2	8
3	Pittis, Emily	Montana	9:53.79	9:48.98	2	6
4	Mitchell, MarLee	Weber State	9:47.50	9:48.98	2	5
5	Swenson, Kelsey	Idaho	9:58.39	9:52.08	2	4
6	Bries, Jesselyn	Northern Arizona	9:48.13	9:59.69	2	3
7	Rasmussen, Delaney	Northern Arizona	9:52.73	10:00.37	2	2
8	Eitel, Pipi	Northern Arizona	9:46.56	10:00.96	2	1
9	Frissell, Beatrix	Montana	9:53.57	10:01.12	2	
10	Gibson, Kaila	Portland State	9:42.58	10:03.89	2	
11	Kyro, Alexi	Montana State		10:04.22	1	
12	Campos, Nathalia	Idaho	10:09.23	10:05.77	1	
13	Wall, Bailey	Weber State	10:05.57	10:07.26	1	
14	Maness, Gillian	Montana State	9:48.65	10:11.37	2	
15	Eastwood, June	Montana	9:59.82	10:14.04	2	
16	Riordan, Abby	Northern Arizona	10:08.03	10:15.72	1	
17	Victor, Rachel	Sacramento St.	10:15.30	10:19.62	1	
18	Reiss, Annika	Northern Arizona	10:03.49	10:21.72	2	
19	Engebretsen, Samantha	Montana	10:15.93	10:21.85	1	
20	Duncan, Cagnei	Sacramento St.	9:56.90	10:25.88	2	
21	DeBos, Madisan	Southern Utah	10:04.65	10:27.20	1	
22	Taylor, Harley	Southern Utah	9:52.63	10:27.78	2	
23	Harris, Shanee	Weber State	10:21.81	10:27.99	1	
24	Alicke, Laura	Idaho State	10:01.53	10:32.31	2	
25	Rosin, Adelyn	Weber State	10:24.33	10:32.33	1	
26	Tanne, Haley	Southern Utah	9:52.38	10:32.78	2	
27	Simard, Samantha	Southern Utah	10:24.01	10:33.58	1	
28	Nettesheim, Lily	Weber State	10:27.32	10:37.30	1	
29	Bushar, Josie	Southern Utah	10:27.50	10:44.60	1	
30	Quinones, Amy	Sacramento St.		10:46.99	1	
31	Ross, Miranda	Portland State	10:32.59	11:04.69	1	

Women 5000 Meter Run

BSC Champ:	**16:35.08**	**!**	**1992**	**Kari McKay, Eastern Washington**
BSC All-Time:	**15:45.76**	**#**	**2018**	**Paige Gilchrist, Northern Arizona**
Arena:	**16:33.60**	**$**	**1981**	**Aileen O'Connor, Virgina**

	Name	School	Seed	Finals	Points
Finals					
1	Malaspina, Mikayla	Northern Arizona	16:11.00	17:00.25	10
2	Swenson, Kelsey	Idaho		17:07.80	8
3	Mitchell, MarLee	Weber State	16:57.09	17:18.58	6

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2020 Big Sky Indoor Track & Field Championships - 2/27/2020 to 2/29/2020

Holt Arena

Results

Women 60 Meter Hurdles

BSC Champ:	**8.19**	**!**	**2014**	**Shaye Springall, Southern Utah**
BSC All-Time:	**8.19**	**#**	**2014**	**Shaye Springhall, Southern Utah**
Arena:	**8.00**	**$**	**2000**	**Sharon Jewell, Golden Spike**

	Name	School	Prelims	Finals	H#	Points
Finals						
1	Sorensen, Kate	Weber State	8.54	8.51	2	10
2	Evans, Morgan	Montana State	8.74	8.60	1	8
3	Okemgbo, Nyenuchi	Eastern Washington	8.61	8.61	2	6
4	Ellis, Olivia	Montana	8.85	8.65	1	5
5	Johnson, Semaye	Northern Colorado	8.79	8.72	2	4
6	Carter, Elena	Montana State	8.88	8.73	1	3
7	Coffey, Artearra	Sacramento St.	8.73	8.75	1	2
8	Tolliver, Destiny	Southern Utah	8.87	9.06	2	1

Women 4x400 Meter Relay

BSC Champ:	**3:40.23**	**!**	**2018**	**, Northern Arizona**
BSC All-Time:	**3:41.82**	**#**	**1989**	**, Northern Arizona**
Arena:	**3:37.28**	**$**	**1981**	**, Adelphi University**

	Team	Relay	Seed	Finals	H#	Points
Finals						
1	Sacramento St.	A	3:48.66	3:47.07	3	10
	1) Bedingfield, Shilah	2) Correa-Gonazalez, Jasmin	3) Coffey, Artearra	4) Revera, Mikayla		
2	Southern Utah	A	3:49.20	3:47.87	3	8
	1) Lott, Brooklyn	2) Saltz, Linnea	3) Green, Peyton	4) Reid, Gizelle		
3	Idaho State	A	3:52.82	3:48.61	2	6
	1) Holmes, Olivia	2) VanVleet, Brianna	3) Gallagher, Indi	4) Vanvleet Sturgis, Ashley		
4	Northern Arizona	A	3:51.50	3:48.88	3	5
	1) Wilson, Madeline	2) Jackson, Jada	3) Loff, Melanie	4) Onyemaobi, Miracle		
5	Northern Colorado	A	3:48.16	3:49.25	3	4
	1) Schuetz, Kelsi	2) Ellis, Gabrielle	3) Osipenko, Viktorija	4) Pettit, Mackenzie		
6	Weber State	A	3:53.60	3:49.26	2	3
	1) Barnes, Emily	2) Brown, Andee	3) Morgan-King, Emily	4) Sorensen, Kate		
7	Montana State	A	3:53.91	3:51.12	2	2
	1) Brockel, Maddie	2) Smith, Delaney	3) Ramsay, McKenna	4) Carlson, Patricia		
8	Idaho	A	3:59.09	3:54.54	1	1
	1) Kurucz, Aaryanna	2) Crouch, Camryn	3) Pecha, Anna	4) Paven, Lauren		
9	Montana	A	3:57.48	3:59.28	1	
	1) Ellis, Olivia	2) Bell, Cree	3) Harmon, Abby	4) Mane, Jaree		
10	Eastern Washington	A	4:01.73	4:01.98	1	
	1) Bowles, Sophie	2) Knight, Madelyn	3) Petsch, Katie	4) Okemgbo, Nyenuchi		

Women Distance Medley

BSC Champ:	**11:34.01**	**!**	**2018**	**, Northern Arizona**
BSC All-Time:	**11:13.18**	**#**	**2006**	**, Northern Arizona**
Arena:	**11:24.04**	**$**	**1981**	**, Iowa State**

	Team	Relay	Seed	Finals	Points
Finals					
1	Northern Arizona	A		11:48.97	10
	1) Bries, Jesselyn	2) Eitel, Pipi	3) Chloe, Barylski	4) Loff, Melanie	
2	Montana	A		11:51.69	8
	1) Engebretsen, Samantha	2) Mane, Jaree	3) Dahms, Carly	4) Eastwood, June	

2020 Big Sky Indoor Track & Field Championships - 2/27/2020 to 2/29/2020

Holt Arena

Results

Finals ... (Women Distance Medley)

	Team	Relay	Seed	Finals	Points
3	Weber State	A		11:53.38	6
	1) Pratt, Michelle	2) Barnes, Emily	3) Leatham, Cheyenne	4) Wall, Bailey	
4	Sacramento St.	A	11:56.27	11:54.74	5
	1) Duncan, Cagnei	2) Correa-Gonazalez, Jasmin	3) Quinones, Amy	4) Victor, Rachel	
5	Idaho State	A	12:39.79	12:05.88	4
	1) Kenyon, Madi	2) Martin, Kyndal	3) Henderson, Shayla	4) Olsen, Molly	
6	Montana State	A	12:07.35	12:05.98	3
	1) Carlson, Patricia	2) Good, Megan	3) Kyro, Alexi	4) Maness, Gillian	
7	Idaho	A	12:15.04	12:13.55	2
	1) Dilmore, Faith	2) Kurucz, Aaryanna	3) Pecha, Erica	4) Baker, Nell	
8	Southern Utah	A		12:15.58	1
	1) Simard, Samantha	2) Kehr, Laura	3) Klemic, Kaysie	4) DeBos, Madisan	

Women High Jump

BSC Champ:	**6-01.25**	**!**	**2006**	**Britney Rogers, Northern Arizona**
BSC All-Time:	**6-02**	**#**	**1988**	**Amber Welty, Idaho State**
Arena:	**6-03.25**	**$**	**1984**	**Lisa Bernhagen, Wood River High School**

	Name	School	Seed	Finals	Points
Finals					
1	Corbett, Lucy	Montana State	1.75m	1.72m	10
2	Booth, Jane	Montana	1.70m	J1.72m	8
3	Vanvleet Sturgis, Ashley	Idaho State	1.71m	J1.72m	6
4	Hayes, Julia	Idaho	1.68m	J1.72m	5
5	VanVleet, Brianna	Idaho State	1.63m	1.64m	3
5	Radtke, Morgan	Montana	1.65m	1.64m	3
5	Orton, Kapri	Idaho State	1.62m	1.64m	3
8	Christopherson, Courtney	Weber State	1.63m	J1.64m	.50
8	Dozier, Shelby	Sacramento St.	1.66m	J1.64m	.50
10	Phenix, NeNe	Northern Colorado	1.71m	J1.64m	
11	Wilson, Madeline	Northern Arizona	1.64m	1.59m	
11	Dunleavy, Ceil	Portland State	1.65m	1.59m	
13	Turner, Anya	Northern Colorado	1.60m	J1.59m	
13	Thareek, Rebecca	Eastern Washington	1.67m	J1.59m	
13	Nelson, Ginger	Idaho State	1.67m	J1.59m	
16	Bauer, McKayla	Northern Colorado	1.65m	J1.59m	
16	Johnson, Zoe	Montana State	1.65m	J1.59m	
---	Elliott, Taylor	Portland State	1.71m	NH	
---	Barnes, Emily	Weber State	1.63m	NH	
---	Oates, Alyssa	Eastern Washington	1.67m	NH	
---	Dodge, Abby	Montana	1.58m	NH	
---	Pettit, Mackenzie	Northern Colorado	1.69m	NH	
---	Wilson, Madison	Eastern Washington	1.67m	NH	

Women Pole Vault

BSC Champ:	**14-02**	**!**	**2012**	**Keisa Monterola, Eastern Washington**
BSC All-Time:	**14-04**	**#**	**2012**	**Keisa Monterola, Eastern Washington**
Arena:	**15-06**	**$**	**2003**	**Stacy Dragila, Nike**

	Name	School	Seed	Finals	Points
Finals					
1	Anger, Brooke	Idaho State	3.91m	3.98m	10
2	Schultz, Savannah	Eastern Washington	4.10m	3.93m	8

2022 Women's Ivy League Swimming & Diving Championship Results
February 16-19, 2022
Available at:
http://www.meetresults.com/2022/ivies/results.html
[permalink: https://perma.cc/RFA7-6YDX]
(last visited: April 20, 2022)

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Women's Ivy League Swimming & Diving Championships
February 16-19, 2022 - Harvard University
Results

Event 1 Women 200 Yard Medley Relay

Meet Record: M 1:37.30 2018 Yale
H.Vanderwel, C.O'Leary, M.Zimmerman, B.Hindley
Pool Record: P 1:37.30 2018 Yale
H.Vanderwel, C.O'Leary, M.Zimmerman, B.Hindley
NCAA A Std: A 1:36.40
NCAA B Std: B 1:37.05

	School	Seed	Finals	Points
1	Princeton University	1:38.96	1:38.66	64
	1) Pappas, Alexa FR	2) Wang, Vivian SR		
	3) Venema, Nikki JR	4) Bradley, Christina JR		
2	Yale University	1:37.48	1:38.91	56
	1) Wagner, Lindsey SO	2) Buckley, Marykate JR		
	3) Pilkinton, Ophelia SO	4) Henig, Iszac JR		
3	Harvard University	1:40.80	1:39.14	54
	1) Pasadyn, Felicia SR	2) Denisenko, Aleksandra FR		
	3) Carr, Abigail FR	4) Brenner, Mandy FR		
4	Brown University	1:41.71	1:40.22	52
	1) Reznicek, Jenna FR	2) Willhite, Kellie SO		
	3) Chidley, Nell JR	4) Scott, Samantha SO		
5	University of Pennsylvania	1:40.31	1:40.33	50
	1) Kannan, Hannah SR	2) Maizes, Rachel SR		
	3) Chong, Vanessa FR	4) Kaczorowski, Margot JR		
6	Columbia University	1:42.27	1:42.05	48
	1) Pruden, Mary SR	2) Walker, Allegra SO		
	3) Wang, Emily SR	4) Arevalo, Isabelle JR		
7	Cornell University	1:44.19	1:43.17	46
	1) Munoz, Aviva JR	2) Tsai, Sophia FR		
	3) Gruvberger, Anna SO	4) Wongso, Priscilla SO		
8	Dartmouth College	1:46.95	1:44.54	44
	1) Zhang, Connie JR	2) Zhang, Rachel FR		
	3) Howley, Mary FR	4) Wortzman, Zoe JR		

Event 2 Women 800 Yard Freestyle Relay

Meet Record: M 6:59.92 2020 Harvard
M. Dahlke, S. Shelton, K. Quist, F. Pasadyn
Pool Record: P 7:05.06 2018 Harvard
M. Dahlke, K. Quist, G. Enoch, M. Popp
NCAA A Std: A 7:00.86
NCAA B Std: B 7:05.88

	School	Seed	Finals	Points
1	Harvard University	7:15.97	7:06.66	64
	1) Pasadyn, Felicia SR	2) Shelton, Samantha JR		
	3) Bullock, Addie Rose SO	4) Hamlin, Molly FR		
2	Yale University	7:16.64	7:08.33	56
	1) Henig, Iszac JR	2) Massey, Alexandra FR		
	3) Jones, Raime JR	4) Moesch, Marlise SR		
3	University of Pennsylvania	7:14.50	7:09.91	54
	1) Thomas, Lia SR	2) Kaczorowski, Margot JR		
	3) Kalandadze, Anna Sofia JR	4) O'Leary, Bridget JR		
4	Princeton University	7:18.36	7:16.00	52
	1) Venema, Nikki JR	2) Marquardt, Ellie SO		
	3) Liu, Amelia JR	4) Valdman, Nathalie SO		
5	Columbia University	7:20.76	7:16.55	50

	1) Ganihanova, Aziza SO	2) Jubin, Olivia JR			
	3) Martin, Allison FR	4) Breiter, Callie SO			
6	Dartmouth College		7:36.02	7:20.86	48
	1) Post, Ashley JR	2) Leko, Mia JR			
	3) Wiener, Sophie FR	4) Wortzman, Zoe JR			
7	Brown University		7:29.88	7:21.75	46
	1) Podurgiel, Anna FR	2) Barrett, Sara FR			
	3) Bilgin, Zehra FR	4) Orange, Audrey JR			
8	Cornell University		7:33.06	7:27.74	44
	1) Parker, Melissa JR	2) Syrkin, Alex FR			
	3) Sih, Angelica SO	4) DuPont, Schuyler FR			

Event 3 Women 500 Yard Freestyle

Meet Record: M 4:36.37 2020 Ellie Marquardt (Princeton)
Pool Record: P 4:37.64 2007 Kate Ziegler (Fish)
NCAA A Std: A 4:35.76
NCAA B Std: B 4:47.20

	Name	Year	School	Prelims	Finals	Points
A - Final						
1	Thomas, Lia	SR	Penn	4:41.19	4:37.32P	32
2	Buroker, Catherine	SO	Penn	4:47.22	4:44.83B	28
3	Marquardt, Ellie	SO	Princeton	4:48.61	4:46.63B	27
4	Kalandadze, Anna Sofia	JR	Penn	4:46.62	4:47.54	26
5	Loomis, Ashley	SR	Yale	4:49.24	4:48.72	25
6	Ganihanova, Aziza	SO	Columbia	4:48.60	4:48.88	24
7	Cavanagh, Erin	FR	Harvard	4:47.38	4:49.04	23
8	Thompson, Mikki	SR	Harvard	4:49.99	4:52.59	22
B - Final						
9	O'Leary, Bridget	JR	Penn	4:50.20	4:47.77	20
10	Girotto, Amelia	FR	Penn	4:51.87	4:49.88	17
11	Kim, Junseo	FR	Yale	4:51.64	4:50.20	16
12	Rose, Carlie	FR	Harvard	4:52.20	4:50.26	15
13	Appleton, Emily	FR	Princeton	4:54.10	4:51.66	14
14	Valdman, Nathalie	SO	Princeton	4:52.80	4:51.72	13
15	Hazlett, Kate	SO	Harvard	4:54.05	4:53.53	12
16	Barrett, Sara	FR	Brown	4:52.14	4:54.11	11
C - Final						
17	Jubin, Olivia	JR	Columbia	4:54.85	4:52.20	9
18	Giddings, Grace	SR	Penn	4:56.83	4:55.91	7
19	Minnigh, Sarah	JR	Dartmouth	4:56.37	4:56.03	6
20	Antoniuk, Bella	FR	Brown	5:00.94	4:56.16	5
21	Iorini, Maria	SO	Brown	4:57.45	4:58.27	4
22	Mannion, Macey	SO	Princeton	5:01.16	4:58.65	3
23	Orange, Audrey	JR	Brown	4:54.30	4:58.68	2
24	Breiter, Callie	SO	Columbia	4:58.56	5:02.20	1

Event 3 Women 500 Yard Freestyle

Meet Record: M 4:36.37 2020 Ellie Marquardt (Princeton)
Pool Record: P 4:37.64 2007 Kate Ziegler (Fish)
NCAA A Std: A 4:35.76
NCAA B Std: B 4:47.20

	Name	Year	School	Seed	Prelims
Preliminaries					
1	Thomas, Lia	SR	Penn	4:34.06	4:41.19B
2	Kalandadze, Anna Sofia	JR	Penn	4:47.93	4:46.62B
3	Buroker, Catherine	SO	Penn	4:58.67	4:47.22
4	Cavanagh, Erin	FR	Harvard	4:47.98	4:47.38
5	Ganihanova, Aziza	SO	Columbia	4:50.71	4:48.60
6	Marquardt, Ellie	SO	Princeton	4:47.28	4:48.61
7	Loomis, Ashley	SR	Yale	4:52.23	4:49.24
8	Thompson, Mikki	SR	Harvard	5:02.27	4:49.99

9	O'Leary, Bridget	JR	Penn	5:03.20	4:50.20
10	Kim, Junseo	FR	Yale	4:53.98	4:51.64
11	Girotto, Amelia	FR	Penn	4:55.47	4:51.87
12	Barrett, Sara	FR	Brown	4:52.57	4:52.14
13	Rose, Carlie	FR	Harvard	4:54.43	4:52.20
14	Valdman, Nathalie	SO	Princeton	4:54.31	4:52.80
15	Hazlett, Kate	SO	Harvard	4:56.20	4:54.05
16	Appleton, Emily	FR	Princeton	4:53.07	4:54.10
17	Orange, Audrey	JR	Brown	4:57.48	4:54.30
18	Jubin, Olivia	JR	Columbia	4:57.20	4:54.85
19	Minnigh, Sarah	JR	Dartmouth	5:07.26	4:56.37
20	Giddings, Grace	SR	Penn	4:54.25	4:56.83
21	Iorini, Maria	SO	Brown	4:58.88	4:57.45
22	Breiter, Callie	SO	Columbia	4:54.27	4:58.56
23	Antoniuk, Bella	FR	Brown	4:53.03	5:00.94
24	Mannion, Macey	SO	Princeton	5:01.01	5:01.16
25	Caverly, Gillian	SR	Cornell	5:22.63	5:01.67
26	Cianciolo, Christina	SO	Dartmouth	5:13.70	5:01.91
27	Larsen, Clare	SR	Columbia	5:02.48	5:03.18
28	Jiang, Joy	FR	Penn	5:00.53	5:03.66
29	Danko, Allie	FR	Cornell	4:59.45	5:04.34
30	Peng, Jessica	JR	Columbia	5:03.15	5:04.39
31	Munoz, Aviva	JR	Cornell	5:05.35	5:05.77
32	Durak, Anna	SR	Princeton	5:10.71	5:05.81
33	Pujadas, Riley	FR	Columbia	5:08.07	5:06.31
34	Wiener, Sophie	FR	Dartmouth	5:12.46	5:06.97
35	Barry, Hayden	FR	Dartmouth	5:18.17	5:08.40
36	Maizes, Deedee	SR	Cornell	5:11.01	5:10.61

Event 4 Women 200 Yard IM

Meet Record: M 1:55.09 2013 Katie Meili (Columbia)
Pool Record: P 1:57.11 1981 Tracy Caulkins (Nashville)
NCAA A Std: A 1:53.66
NCAA B Std: B 1:59.94

	Name	Year	School	Prelims	Finals	Points
A - Final						
1	Shelton, Samantha	JR	Harvard	1:59.48	1:58.03B	32
2	Pasadyn, Felicia	SR	Harvard	1:58.86	1:58.25B	28
3	Whitmire, Liza	SO	Princeton	2:00.82	1:59.29B	27
4	Denisenko, Aleksandra	FR	Harvard	2:01.16	2:00.69	26
5	Jones, Raime	JR	Yale	2:02.28	2:01.24	25
6	Weng, Vivian	FR	Yale	2:01.64	2:01.90	24
7	Buckley, Maggie	FR	Harvard	2:02.15	2:01.94	23
--	Yeager, Jess	SO	Princeton	1:59.48	DQ 1:58.49	
	Head did not break the surface by 15 meters - fly					
B - Final						
9	McDonald, Margaux	SO	Princeton	2:02.35	2:01.31	20
10	Podurgiel, Anna	FR	Brown	2:02.41	2:01.65	17
11	Leko, Mia	JR	Dartmouth	2:02.85	2:02.48	16
12	Paoletti, Olivia	JR	Yale	2:02.68	2:02.90	15
13	Chong, Vanessa	FR	Penn	2:02.69	2:03.08	14
14	Pytel, Isabella	FR	Penn	2:02.41	2:03.31	13
15	Korbly, Isabella	FR	Princeton	2:03.12	2:03.42	12
16	Boeckman, Anna	FR	Penn	2:02.82	2:03.52	11
C - Final						
17	Martin, Allison	FR	Columbia	2:03.42	2:02.67	9
18	Lukawski, Audrey	SR	Brown	2:03.62	2:02.85	7
19	Maizes, Rachel	SR	Penn	2:03.66	2:03.06	6
20	Baldari, Alessandra	SR	Yale	2:03.70	2:03.27	5

21	Wang, Vivian	SR	Princeton	2:03.26	2:03.45	4
22	Sutter, Olivia	SO	Cornell	2:04.83	2:03.80	3
23	Williams, Marie	SO	Cornell	2:03.92	2:04.56	2
24	Chen, Jaime	FR	Princeton	2:05.02	2:06.16	1

Event 4 Women 200 Yard IM

Meet Record: M 1:55.09 2013 Katie Meili (Columbia)
Pool Record: P 1:57.11 1981 Tracy Caulkins (Nashville)
NCAA A Std: A 1:53.66
NCAA B Std: B 1:59.94

	Name	Year	School	Seed	Prelims
Preliminaries					
1	Pasadyn, Felicia	SR	Harvard	2:00.20	1:58.86B
2	Yeager, Jess	SO	Princeton	2:00.86	1:59.48B
2	Shelton, Samantha	JR	Harvard	2:02.16	1:59.48B
4	Whitmire, Liza	SO	Princeton	2:00.54	2:00.82
5	Denisenko, Aleksandra	FR	Harvard	2:01.45	2:01.16
6	Weng, Vivian	FR	Yale	2:06.74	2:01.64
7	Buckley, Maggie	FR	Harvard	2:02.84	2:02.15
8	Jones, Raime	JR	Yale	2:02.99	2:02.28
9	McDonald, Margaux	SO	Princeton	2:02.04	2:02.35
10	Podurgiel, Anna	FR	Brown	2:04.52	2:02.41
10	Pytel, Isabella	FR	Penn	2:02.70	2:02.41
12	Paoletti, Olivia	JR	Yale	2:04.63	2:02.68
13	Chong, Vanessa	FR	Penn	2:01.41	2:02.69
14	Boeckman, Anna	FR	Penn	2:03.23	2:02.82
15	Leko, Mia	JR	Dartmouth	2:05.81	2:02.85
16	Korbly, Isabella	FR	Princeton	2:05.65	2:03.12
17	Wang, Vivian	SR	Princeton	2:03.18	2:03.26
18	Martin, Allison	FR	Columbia	2:03.22	2:03.42
19	Lukawski, Audrey	SR	Brown	2:04.57	2:03.62
20	Maizes, Rachel	SR	Penn	2:12.74	2:03.66
21	Baldari, Alessandra	SR	Yale	2:06.24	2:03.70
22	Williams, Marie	SO	Cornell	2:05.60	2:03.92
23	Sutter, Olivia	SO	Cornell	2:05.53	2:04.83
24	Chen, Jaime	FR	Princeton	2:04.37	2:05.02
25	Walker, Allegra	SO	Columbia	2:03.26	2:05.08
26	Takabayashi, Miku	SR	Brown	2:02.67	2:05.56
27	Estabrook, Grace	SR	Penn	2:06.02	2:05.65
28	Unas, Julia	FR	Columbia	2:05.91	2:06.03
29	Laster, Susannah	JR	Dartmouth	2:13.66	2:07.73
30	Chang, Allison	SR	Cornell	2:06.88	2:07.96
31	Petersen, Amanda	FR	Cornell	2:09.44	2:09.13
32	Parker, Bridget	SO	Dartmouth	2:17.64	2:09.92
33	Hu, Ashley	FR	Columbia	2:08.24	2:11.17
34	Moon, Zoe	FR	Dartmouth	2:16.37	2:12.01
35	Wu, Amy	SO	Cornell	2:13.99	2:13.79
--	xHeilbrun, Maddie	SR	Harvard	2:07.59	X2:06.86

Event 5 Women 50 Yard Freestyle

Meet Record: M 21.83 2019 Bella Hindley (Yale)
Pool Record: P 22.34 2018 Bella Hindley (Yale)
NCAA A Std: A 21.66
NCAA B Std: B 22.76

	Name	Year	School	Prelims	Finals	Points
A - Final						
1	Henig, Iszac	JR	Yale	22.17	21.93P	32

2	Venema, Nikki	JR	Princeton	22.65	22.30P 28
3	Scott, Samantha	SO	Brown	22.80	22.81 27
4	Bradley, Christina	JR	Princeton	23.02	23.02 26
5	Wortzman, Zoe	JR	Dartmouth	23.05	23.03 25
6	Pilkinton, Ophelia	SO	Yale	23.06	23.05 24
7	Brenner, Mandy	FR	Harvard	22.90	23.08 23
8	Liu, Amelia	JR	Princeton	23.12	23.30 22

B - Final

9	Wagner, Lindsey	SO	Yale	23.14	23.12 20
10	Post, Ashley	JR	Dartmouth	23.25	23.22 17
11	Parker, Melissa	JR	Cornell	23.30	23.30 16
12	Arevalo, Isabelle	JR	Columbia	23.44	23.35 15
13	Macdonald, Emily	FR	Columbia	23.43	23.39 14
14	Secrest, Jennifer	JR	Princeton	23.26	23.42 13
15	Kaczorowski, Margot	JR	Penn	23.50	23.44 12
16	Carter, Camryn	JR	Penn	23.51	23.46 11

C - Final

17	Willhite, Kellie	SO	Brown	23.54	23.38 9
18	Healy, Marissa	SO	Yale	23.59	23.42 7
19	Wongso, Priscilla	SO	Cornell	23.60	23.57 6
20	Buckley, Marykate	JR	Yale	23.78	23.69 5
21	Young, Georgia	SO	Columbia	23.77	23.79 4
22	Myers, Andie	SR	Penn	23.68	23.85 3
23	Wang, Emily	SR	Columbia	23.74	23.88 2
24	Gruvberger, Anna	SO	Cornell	23.80	23.94 1

Event 5 Women 50 Yard Freestyle

Meet Record: M 21.83 2019 Bella Hindley (Yale)
Pool Record: P 22.34 2018 Bella Hindley (Yale)
NCAA A Std: A 21.66
NCAA B Std: B 22.76

	Name	Year	School	Seed	Prelims

Preliminaries

1	Henig, Iszac	JR	Yale	22.05	22.17P
2	Venema, Nikki	JR	Princeton	22.59	22.65B
3	Scott, Samantha	SO	Brown	23.13	22.80
4	Brenner, Mandy	FR	Harvard	22.91	22.90
5	Bradley, Christina	JR	Princeton	22.81	23.02
6	Wortzman, Zoe	JR	Dartmouth	23.82	23.05
7	Pilkinton, Ophelia	SO	Yale	23.06	23.06
8	Liu, Amelia	JR	Princeton	23.06	23.12
9	Wagner, Lindsey	SO	Yale	23.39	23.14
10	Post, Ashley	JR	Dartmouth	23.72	23.25
11	Secrest, Jennifer	JR	Princeton	23.61	23.26
12	Parker, Melissa	JR	Cornell	23.15	23.30
13	Macdonald, Emily	FR	Columbia	23.38	23.43
14	Arevalo, Isabelle	JR	Columbia	23.21	23.44
15	Kaczorowski, Margot	JR	Penn	23.44	23.50
16	Carter, Camryn	JR	Penn	23.84	23.51
17	Willhite, Kellie	SO	Brown	23.51	23.54
18	Healy, Marissa	SO	Yale	23.33	23.59
19	Wongso, Priscilla	SO	Cornell	23.39	23.60
20	Myers, Andie	SR	Penn	24.31	23.68
21	Wang, Emily	SR	Columbia	23.57	23.74
22	Young, Georgia	SO	Columbia	23.84	23.77
23	Buckley, Marykate	JR	Yale	25.14	23.78
24	Gruvberger, Anna	SO	Cornell	23.69	23.80
25	Bullock, Addie Rose	SO	Harvard	23.41	23.86
26	Matsushima, Sage	JR	Brown	24.27	23.87

27	Moesch, Marlise	SR	Yale	24.56	24.05
28	Zhang, Tori	FR	Cornell	24.19	24.09
29	Tsai, Sophia	FR	Cornell	23.93	24.18
30	Zhang, Connie	JR	Dartmouth	25.03	24.39
31	Syrkin, Alex	FR	Cornell	24.65	24.50
32	Wong, Anthea	FR	Columbia	24.00	24.53
33	Zwart, Eleanor	JR	Dartmouth	24.92	24.63
34	Zhang, Rachel	FR	Dartmouth	24.80	24.74
35	Van Steyn, Kenna	SR	Dartmouth	27.17	25.18
36	Kramer, Katherine	FR	Dartmouth	25.70	25.95
37	Hamlen, Izzy	FR	Dartmouth	25.89	26.00
--	xLe, Tina	JR	Columbia	23.77	X24.20
--	xOhr, Joelle	SO	Cornell	24.25	X24.37

Event 6 Women 1 mtr Diving

Meet Record: M 314.20 2016 Mikaela Thompson (Harvard)
Pool Record: P 324.15 1987 Jenny Greene (Harvard)
NCAA A Std: A 265.00

	Name	Year	School	Prelims	Finals	Points
A - Final						
1	Laverty, Katie	FR	Harvard	246.55	288.15A	32
2	Herculano, Morgane	SR	Harvard	272.95	282.95A	28
3	Lawrence, Esther	SR	Harvard	269.15	274.55A	27
4	Edvalson, Remi	FR	Harvard	257.45	268.45A	26
5	Francella, Olivia	JR	Penn	247.05	254.45	25
6	Geier, Evie	JR	Harvard	259.40	249.45	23.5
6	Diakova, Alice	SO	Columbia	245.95	249.45	23.5
8	Seltzer, Maddie	FR	Princeton	252.15	242.75	22
B - Final						
9	Henderson, Hayden	FR	Yale	243.80	266.85A	20
10	Lichen, Isabella	JR	Dartmouth	244.95	261.85	17
11	Jendritz, Elise	JR	Cornell	245.10	261.55	16
12	Wotovich, Amy	FR	Harvard	239.45	252.00	15
13	Mitchell, Liv	SR	Brown	239.40	249.95	14
14	Williams, Demetra	SR	Cornell	242.60	245.40	13
15	Milne, Georgi	SR	Harvard	240.55	242.95	12
16	Rosendalh, Brighida	SR	Columbia	240.40	239.70	11

Event 6 Women 1 mtr Diving

Meet Record: M 314.20 2016 Mikaela Thompson (Harvard)
Pool Record: P 324.15 1987 Jenny Greene (Harvard)
NCAA A Std: A 265.00

	Name	Year	School	Seed	Prelims
Preliminaries					
1	Herculano, Morgane	SR	Harvard	291.80	272.95A
2	Lawrence, Esther	SR	Harvard	284.48	269.15A
3	Geier, Evie	JR	Harvard	281.63	259.40
4	Edvalson, Remi	FR	Harvard	286.43	257.45
5	Seltzer, Maddie	FR	Princeton	279.80	252.15
6	Francella, Olivia	JR	Penn	264.60	247.05
7	Laverty, Katie	FR	Harvard	285.98	246.55
8	Diakova, Alice	SO	Columbia	294.68	245.95
9	Jendritz, Elise	JR	Cornell	289.35	245.10
10	Lichen, Isabella	JR	Dartmouth	292.10	244.95
11	Henderson, Hayden	FR	Yale	291.50	243.80
12	Williams, Demetra	SR	Cornell	286.58	242.60
13	Milne, Georgi	SR	Harvard	266.00	240.55
14	Rosendalh, Brighida	SR	Columbia	268.43	240.40
15	Wotovich, Amy	FR	Harvard	298.05	239.45
16	Mitchell, Liv	SR	Brown	285.08	239.40
17	Feord, Julia	JR	Brown	277.80	236.20

18	Lee, Michelle	SR	Columbia	274.73	234.80
19	Miclau, Elizabeth	SO	Harvard	273.98	229.55
20	Johnsson-Stjernstrom, Ha	SO	Princeton	251.35	224.80
21	Palacios, Alyssa	FR	Dartmouth	288.45	219.40
22	Thibodeau, Genevieve	FR	Yale	266.85	218.10
23	Chin, Audrey	SO	Harvard	240.00	216.95
24	Brinker, Alexa	FR	Brown	267.15	206.25
25	Singh, Ishani	SO	Yale	241.70	202.30
26	Shao, Stephanie	FR	Yale	306.75	198.95
27	Parker, Madeleine	FR	Penn	234.38	197.40
28	Ennis, Maya	FR	Yale	269.25	190.15
29	Stein, Samantha	SO	Penn	216.52	163.35
30	Jin, Laurel	FR	Yale	272.33	149.85

Event 7 Women 200 Yard Freestyle Relay

Meet Record: M 1:29.69 2017 Yale
B. Hindley, K. Rogers, M. Zimmerman, K. Zhou
Pool Record: P 1:30.50 2018 Harvard
M. Colby, I. Wall, J. Li, M. Dahlke
NCAA A Std: A 1:28.43
NCAA B Std: B 1:29.21

	School	Seed	Finals	Points
1	Yale University	1:30.14	1:29.66M	64
	1) Henig, Iszac JR	2) Wagner, Lindsey SO		
	3) Pilkinton, Ophelia SO	4) Healy, Marissa SO		
2	Princeton University	1:31.22	1:30.38P	56
	1) Bradley, Christina JR	2) Liu, Amelia JR		
	3) Venema, Nikki JR	4) Secrest, Jennifer JR		
3	Harvard University	1:32.48	1:31.90	54
	1) Brenner, Mandy FR	2) Shelton, Samantha JR		
	3) Bullock, Addie Rose SO	4) Hamlin, Molly FR		
4	University of Pennsylvania	1:33.67	1:32.45	52
	1) Kaczorowski, Margot JR	2) Thomas, Lia SR		
	3) Kannan, Hannah SR	4) Carter, Camryn JR		
5	Brown University	1:33.70	1:32.75	50
	1) Scott, Samantha SO	2) Reznicek, Jenna FR		
	3) Willhite, Kellie SO	4) Matsushima, Sage JR		
6	Columbia University	1:33.69	1:32.97	48
	1) Wang, Emily SR	2) Macdonald, Emily FR		
	3) Young, Georgia SO	4) Arevalo, Isabelle JR		
7	Dartmouth College	1:36.75	1:33.08	46
	1) Wortzman, Zoe JR	2) Post, Ashley JR		
	3) Wiener, Sophie FR	4) Leko, Mia JR		
8	Cornell University	1:33.64	1:33.86	44
	1) Wongso, Priscilla SO	2) Zhang, Tori FR		
	3) Gruvberger, Anna SO	4) Parker, Melissa JR		

Event 8 Women 1000 Yard Freestyle

Meet Record: M 9:33.43 2008 Alicia Aemisegger (Princeton)
Pool Record: P 9:28.49 2007 Kate Ziegler (Fish)

	Name	Year	School	Seed	Finals	Points
1	Buroker, Catherine	SO	Penn	9:56.25	9:43.54	32
2	Kalandadze, Anna Sofia	JR	Penn	9:48.15	9:50.05	28
3	Ganihanova, Aziza	SO	Columbia	10:04.73	9:53.92	27
4	Giddings, Grace	SR	Penn	9:58.45	9:57.15	26
5	Loomis, Ashley	SR	Yale	9:58.46	9:57.92	25
6	Barrett, Sara	FR	Brown	10:01.75	9:58.96	24
7	Rose, Carlie	FR	Harvard	10:14.20	9:59.40	23
8	Girotto, Amelia	FR	Penn	10:06.22	10:02.02	22
9	Ruppert-Gomez, Marcella	JR	Harvard	10:11.87	10:02.70	20
10	Valdman, Nathalie	SO	Princeton	10:04.03	10:07.62	17

11	Minnigh, Sarah	JR	Dartmouth	10:39.27	10:08.65	16
12	Yoon, Grace	FR	Harvard	10:23.13	10:10.22	15
13	Paoletti, Isabella	FR	Yale	10:12.35	10:12.51	14
14	Cianciolo, Christina	SO	Dartmouth	10:43.39	10:14.50	13
15	Danko, Allie	FR	Cornell	10:16.26	10:15.13	12
16	Antoniuk, Bella	FR	Brown	10:13.97	10:18.05	11
17	Mannion, Macey	SO	Princeton	10:22.26	10:19.39	9
18	Takabayashi, Miku	SR	Brown	10:36.64	10:19.97	7
19	Jiang, Joy	FR	Penn	NT	10:20.06	6
20	Maizes, Deedee	SR	Cornell	10:41.76	10:33.72	5
21	Barry, Hayden	FR	Dartmouth	10:56.19	10:41.50	4

Event 9 Women 400 Yard IM

Meet Record: M 4:06.15 2009 Alicia Aemisegger (Princeton)
Pool Record: P 4:04.63 1981 Tracy Caulkins (Nashville)
NCAA A Std: A 4:03.62
NCAA B Std: B 4:17.30

	Name	Year	School	Prelims	Finals	Points
A - Final						
1	Pasadyn, Felicia	SR	Harvard	4:13.45	4:10.45B	32
2	Thompson, Mikki	SR	Harvard	4:13.86	4:14.14B	28
3	Pruden, Mary	SR	Columbia	4:17.22	4:15.00B	27
4	Marquardt, Ellie	SO	Princeton	4:17.60	4:16.15B	26
5	Cavanagh, Erin	FR	Harvard	4:17.17	4:16.24B	25
6	Yeager, Jess	SO	Princeton	4:16.99	4:17.94	24
7	Paoletti, Olivia	JR	Yale	4:18.70	4:18.48	23
8	Paoletti, Isabella	FR	Yale	4:18.85	4:25.46	22
B - Final						
9	Hazlett, Kate	SO	Harvard	4:18.88	4:16.05B	20
10	Whitmire, Liza	SO	Princeton	4:21.91	4:18.19	17
11	Appleton, Emily	FR	Princeton	4:20.30	4:18.27	16
12	Kim, Junseo	FR	Yale	4:20.80	4:18.82	15
13	Yoon, Grace	FR	Harvard	4:19.01	4:18.91	14
14	Boeckman, Anna	FR	Penn	4:20.63	4:20.00	13
15	Buckley, Maggie	FR	Harvard	4:21.72	4:22.17	12
16	Boyer, Liz	JR	Harvard	4:22.72	4:23.78	11
C - Final						
17	Clements, Emily	SO	Brown	4:23.22	4:19.20	9
18	Brault, Ellie	FR	Brown	4:24.44	4:20.44	7
19	Whall, Emma	SR	Brown	4:27.84	4:22.53	6
20	Sutter, Olivia	SO	Cornell	4:23.28	4:22.75	5
21	Williams, Marie	SO	Cornell	4:31.17	4:26.58	4
22	Unas, Julia	FR	Columbia	4:34.02	4:30.43	3
23	Ruppert-Gomez, Marcella	JR	Harvard	4:28.71	4:34.33	2
24	Parker, Bridget	SO	Dartmouth	4:37.68	4:40.15	1

Event 9 Women 400 Yard IM

Meet Record: M 4:06.15 2009 Alicia Aemisegger (Princeton)
Pool Record: P 4:04.63 1981 Tracy Caulkins (Nashville)
NCAA A Std: A 4:03.62
NCAA B Std: B 4:17.30

	Name	Year	School	Seed	Prelims
Preliminaries					
1	Pasadyn, Felicia	SR	Harvard	4:13.82	4:13.45B
2	Thompson, Mikki	SR	Harvard	4:25.40	4:13.86B
3	Yeager, Jess	SO	Princeton	NT	4:16.99B
4	Cavanagh, Erin	FR	Harvard	4:13.69	4:17.17B
5	Pruden, Mary	SR	Columbia	4:18.92	4:17.22B
6	Marquardt, Ellie	SO	Princeton	4:13.99	4:17.60
7	Paoletti, Olivia	JR	Yale	4:18.97	4:18.70
8	Paoletti, Isabella	FR	Yale	4:25.22	4:18.85

9	Hazlett, Kate	SO	Harvard	4:17.49	4:18.88
10	Yoon, Grace	FR	Harvard	NT	4:19.01
11	Appleton, Emily	FR	Princeton	4:18.41	4:20.30
12	Boeckman, Anna	FR	Penn	4:25.02	4:20.63
13	Kim, Junseo	FR	Yale	4:25.08	4:20.80
14	Buckley, Maggie	FR	Harvard	4:22.18	4:21.72
15	Whitmire, Liza	SO	Princeton	4:19.77	4:21.91
16	Boyer, Liz	JR	Harvard	4:23.09	4:22.72
17	Clements, Emily	SO	Brown	4:27.06	4:23.22
18	Sutter, Olivia	SO	Cornell	4:26.60	4:23.28
19	Brault, Ellie	FR	Brown	4:25.15	4:24.44
20	Whall, Emma	SR	Brown	4:33.38	4:27.84
21	Ruppert-Gomez, Marcella	JR	Harvard	4:30.90	4:28.71
22	Williams, Marie	SO	Cornell	4:29.96	4:31.17
23	Unas, Julia	FR	Columbia	4:28.67	4:34.02
24	Parker, Bridget	SO	Dartmouth	4:53.56	4:37.68
25	Petersen, Amanda	FR	Cornell	4:34.69	4:37.93

Event 10 Women 100 Yard Butterfly

Meet Record: M 51.57 2013 Alex Forrester (Yale)
Pool Record: P 51.89 2018 Miki Dahlke (Harvard)
NCAA A Std: A 50.92
NCAA B Std: B 53.76

	Name	Year	School	Prelims	Finals	Points
A - Final						
1	Venema, Nikki	JR	Princeton	53.63	52.42B	32
2	Carr, Abigail	FR	Harvard	53.86	52.69B	28
3	Henig, Iszac	JR	Yale	53.53	52.82B	27
4	Massey, Alexandra	FR	Yale	53.73	53.59B	26
5	Chidley, Nell	JR	Brown	54.56	54.00	25
6	Reznicek, Jenna	FR	Brown	54.00	54.08	24
7	Bradley, Christina	JR	Princeton	54.39	54.16	23
8	Matsushima, Sage	JR	Brown	54.63	54.64	22
B - Final						
9	Pilkinton, Ophelia	SO	Yale	54.83	54.33	20
10	Myers, Andie	SR	Penn	54.84	54.56	17
11	Kannan, Hannah	SR	Penn	54.76	54.74	15.5
11	Chong, Vanessa	FR	Penn	54.79	54.74	15.5
13	Murphy, Quinn	FR	Yale	55.15	54.87	14
14	Secrest, Jennifer	JR	Princeton	55.06	54.94	13
15	Bilgin, Zehra	FR	Brown	54.83	54.97	12
16	Wang, Emily	SR	Columbia	55.01	55.26	11
C - Final						
17	Brenner, Mandy	FR	Harvard	55.42	54.48	9
18	Martin, Allison	FR	Columbia	55.25	55.05	7
19	Baldari, Alessandra	SR	Yale	55.19	55.24	6
20	Peng, Jessica	JR	Columbia	55.36	55.25	5
21	Howley, Mary	FR	Dartmouth	55.57	55.42	4
22	Chen, Jaime	FR	Princeton	55.57	55.43	3
23	Pappas, Alexa	FR	Princeton	55.44	56.02	2
24	Gruvberger, Anna	SO	Cornell	55.65	56.50	1

Event 10 Women 100 Yard Butterfly

Meet Record: M 51.57 2013 Alex Forrester (Yale)
Pool Record: P 51.89 2018 Miki Dahlke (Harvard)
NCAA A Std: A 50.92
NCAA B Std: B 53.76

	Name	Year	School	Seed	Prelims

Preliminaries

1	Henig, Iszac	JR	Yale	NT	53.53B
2	Venema, Nikki	JR	Princeton	52.64	53.63B
3	Massey, Alexandra	FR	Yale	54.41	53.73B
4	Carr, Abigail	FR	Harvard	53.00	53.86
5	Reznicek, Jenna	FR	Brown	54.05	54.00
6	Bradley, Christina	JR	Princeton	53.41	54.39
7	Chidley, Nell	JR	Brown	54.65	54.56
8	Matsushima, Sage	JR	Brown	55.13	54.63
9	Kannan, Hannah	SR	Penn	55.22	54.76
10	Chong, Vanessa	FR	Penn	54.67	54.79
11	Bilgin, Zehra	FR	Brown	55.38	54.83
11	Pilkinton, Ophelia	SO	Yale	NT	54.83
13	Myers, Andie	SR	Penn	55.62	54.84
14	Wang, Emily	SR	Columbia	54.62	55.01
15	Secrest, Jennifer	JR	Princeton	54.99	55.06
16	Murphy, Quinn	FR	Yale	56.16	55.15
17	Baldari, Alessandra	SR	Yale	55.06	55.19
18	Martin, Allison	FR	Columbia	55.70	55.25
19	Peng, Jessica	JR	Columbia	55.06	55.36
20	Brenner, Mandy	FR	Harvard	55.83	55.42
21	Pappas, Alexa	FR	Princeton	54.81	55.44
22	Chen, Jaime	FR	Princeton	55.20	55.57
22	Howley, Mary	FR	Dartmouth	57.37	55.57
24	Gruvberger, Anna	SO	Cornell	55.81	55.65
25	Healy, Marissa	SO	Yale	54.95	55.69
26	Wong, Anthea	FR	Columbia	55.62	55.77
27	Waterson, Rebecca	FR	Brown	56.46	56.23
28	Macdonald, Emily	FR	Columbia	56.44	56.50
29	Hailu, Hannah	FR	Columbia	56.50	56.64
30	Wortzman, Zoe	JR	Dartmouth	NT	57.46
31	Zhang, Tori	FR	Cornell	56.82	57.76
--	xRippon, Caylene	SR	Brown	56.73	X56.40
--	xNewnam, Anna	SR	Penn	56.69	X56.94

Event 11 Women 200 Yard Freestyle

Meet Record: M 1:43.78 2020 Miki Dahlke (Harvard)
Pool Record: P 1:45.00 2018 Miki Dahlke (Harvard)
NCAA A Std: A 1:42.98
NCAA B Std: B 1:47.12

	Name	Year	School	Prelims	Finals	Points
A - Final						
1	Thomas, Lia	SR	Penn	1:44.91	1:43.12M	32
2	Shelton, Samantha	JR	Harvard	1:47.42	1:45.82B	28
3	Hamlin, Molly	FR	Harvard	1:46.66	1:47.33	27
4	Post, Ashley	JR	Dartmouth	1:48.09	1:47.48	26
5	Moesch, Marlise	SR	Yale	1:48.25	1:48.09	25
6	O'Leary, Bridget	JR	Penn	1:48.79	1:48.29	24
7	Kaczorowski, Margot	JR	Penn	1:48.48	1:48.73	23
8	Leko, Mia	JR	Dartmouth	1:47.96	1:49.29	22
B - Final						
9	Jones, Raime	JR	Yale	1:48.89	1:48.17	20
10	Weng, Vivian	FR	Yale	1:49.56	1:48.48	17
11	Podurgiel, Anna	FR	Brown	1:48.94	1:49.17	16
12	Parker, Melissa	JR	Cornell	1:50.45	1:50.01	15
13	Breiter, Callie	SO	Columbia	1:50.56	1:50.18	14
14	Liu, Amelia	JR	Princeton	1:51.63	1:50.19	13
15	Carter, Camryn	JR	Penn	1:49.93	1:50.27	12
16	Jubin, Olivia	JR	Columbia	1:51.34	1:50.30	11

C - Final

17	Orange, Audrey	JR	Brown	1:51.64	1:51.80	9
18	Valdman, Nathalie	SO	Princeton	1:52.62	1:52.14	7
19	Wiener, Sophie	FR	Dartmouth	1:52.17	1:52.36	6
20	Syrkin, Alex	FR	Cornell	1:52.28	1:52.43	5
21	Iorini, Maria	SO	Brown	1:54.09	1:52.56	4
22	DuPont, Schuyler	FR	Cornell	1:52.94	1:52.60	3
23	Young, Georgia	SO	Columbia	1:53.54	1:53.03	2
24	Larsen, Clare	SR	Columbia	1:52.88	1:53.32	1

Event 11 Women 200 Yard Freestyle

Meet Record: M 1:43.78 2020 Miki Dahlke (Harvard)
Pool Record: P 1:45.00 2018 Miki Dahlke (Harvard)
NCAA A Std: A 1:42.98
NCAA B Std: B 1:47.12

	Name	Year	School	Seed	Prelims
Preliminaries					
1	Thomas, Lia	SR	Penn	1:41.93	1:44.91P
2	Hamlin, Molly	FR	Harvard	1:49.44	1:46.66B
3	Shelton, Samantha	JR	Harvard	1:50.63	1:47.42
4	Leko, Mia	JR	Dartmouth	1:50.64	1:47.96
5	Post, Ashley	JR	Dartmouth	1:52.39	1:48.09
6	Moesch, Marlise	SR	Yale	1:48.65	1:48.25
7	Kaczorowski, Margot	JR	Penn	1:55.27	1:48.48
8	O'Leary, Bridget	JR	Penn	1:49.56	1:48.79
9	Jones, Raime	JR	Yale	1:49.51	1:48.89
10	Podurgiel, Anna	FR	Brown	1:49.88	1:48.94
11	Weng, Vivian	FR	Yale	1:50.06	1:49.56
12	Carter, Camryn	JR	Penn	1:54.78	1:49.93
13	Parker, Melissa	JR	Cornell	1:49.61	1:50.45
14	Breiter, Callie	SO	Columbia	1:50.17	1:50.56
15	Jubin, Olivia	JR	Columbia	1:49.42	1:51.34
16	Liu, Amelia	JR	Princeton	1:50.03	1:51.63
17	Orange, Audrey	JR	Brown	1:51.69	1:51.64
18	Wiener, Sophie	FR	Dartmouth	1:54.59	1:52.17
19	Syrkin, Alex	FR	Cornell	1:51.40	1:52.28
20	Valdman, Nathalie	SO	Princeton	1:49.84	1:52.62
21	Larsen, Clare	SR	Columbia	1:52.12	1:52.88
22	DuPont, Schuyler	FR	Cornell	1:53.03	1:52.94
23	Young, Georgia	SO	Columbia	1:52.34	1:53.54
24	Iorini, Maria	SO	Brown	1:52.75	1:54.09
25	Durak, Anna	SR	Princeton	1:54.60	1:54.31
26	Arevalo, Isabelle	JR	Columbia	1:52.73	1:54.53
27	Scott, Samantha	SO	Brown	1:58.52	1:55.56
28	Sih, Angelica	SO	Cornell	1:53.67	1:55.99
29	Maizes, Deedee	SR	Cornell	1:54.84	1:57.23
--	xLe, Tina	JR	Columbia	1:53.14	X1:52.41

Event 12 Women 100 Yard Breaststroke

Meet Record: M 58.44 2013 Katie Meili (Columbia)
Pool Record: P 59.64 2012 Katie Meili (Columbia)
NCAA A Std: A 58.46
NCAA B Std: B 1:01.84

	Name	Year	School	Prelims	Finals	Points
A - Final						
1	Denisenko, Aleksandra	FR	Harvard	1:01.57	1:00.96B	32
2	Buckley, Marykate	JR	Yale	1:02.48	1:01.69B	28

	3	Franks, Ava	FR	Yale	1:02.32	1:01.96	27
	4	McDonald, Margaux	SO	Princeton	1:02.21	1:02.48	26
	5	Maizes, Rachel	SR	Penn	1:02.50	1:02.76	25
	6	Pytel, Isabella	FR	Penn	1:02.77	1:02.88	24
	7	Estabrook, Grace	SR	Penn	1:02.46	1:03.07	23
	8	Willhite, Kellie	SO	Brown	1:02.88	1:03.20	22
B - Final							
	9	Lukawski, Audrey	SR	Brown	1:03.27	1:02.76	20
	10	Brault, Ellie	FR	Brown	1:04.23	1:03.05	17
	11	Hu, Ashley	FR	Columbia	1:03.60	1:03.30	16
	12	Boyer, Liz	JR	Harvard	1:03.66	1:03.47	15
	13	Liu, Hannah	FR	Penn	1:03.45	1:03.57	14
	14	Walker, Allegra	SO	Columbia	1:03.42	1:04.15	13
	15	Wang, Vivian	SR	Princeton	1:03.53	1:04.23	12
	16	Wu, Amy	SO	Cornell	1:05.07	1:04.76	11
C - Final							
	17	Tsai, Sophia	FR	Cornell	1:05.20	1:04.44	9
	18	Chang, Allison	SR	Cornell	1:06.04	1:05.11	7
	19	Van Steyn, Kenna	SR	Dartmouth	1:05.17	1:05.65	6
	20	Zhang, Rachel	FR	Dartmouth	1:07.44	1:07.66	5

Event 12 Women 100 Yard Breaststroke

Meet Record: M 58.44 2013 Katie Meili (Columbia)
Pool Record: P 59.64 2012 Katie Meili (Columbia)
NCAA A Std: A 58.46
NCAA B Std: B 1:01.84

	Name	Year	School	Seed	Prelims
Preliminaries					
	1 Denisenko, Aleksandra	FR	Harvard	1:02.54	1:01.57B
	2 McDonald, Margaux	SO	Princeton	1:02.46	1:02.21
	3 Franks, Ava	FR	Yale	1:01.47	1:02.32
	4 Estabrook, Grace	SR	Penn	1:02.96	1:02.46
	5 Buckley, Marykate	JR	Yale	1:01.82	1:02.48
	6 Maizes, Rachel	SR	Penn	1:03.79	1:02.50
	7 Pytel, Isabella	FR	Penn	1:02.66	1:02.77
	8 Willhite, Kellie	SO	Brown	1:03.29	1:02.88
	9 Lukawski, Audrey	SR	Brown	1:03.58	1:03.27
	10 Walker, Allegra	SO	Columbia	1:02.76	1:03.42
	11 Liu, Hannah	FR	Penn	1:02.17	1:03.45
	12 Wang, Vivian	SR	Princeton	1:02.17	1:03.53
	13 Hu, Ashley	FR	Columbia	1:03.18	1:03.60
	14 Boyer, Liz	JR	Harvard	1:03.48	1:03.66
	15 Brault, Ellie	FR	Brown	1:03.39	1:04.23
	16 Wu, Amy	SO	Cornell	1:06.38	1:05.07
	17 Van Steyn, Kenna	SR	Dartmouth	1:07.61	1:05.17
	18 Tsai, Sophia	FR	Cornell	1:05.99	1:05.20
	19 Chang, Allison	SR	Cornell	1:05.13	1:06.04
	20 Zhang, Rachel	FR	Dartmouth	1:08.08	1:07.44
	-- xRippon, Caylene	SR	Brown	NT	X1:06.14
	-- xOhr, Joelle	SO	Cornell	1:09.19	X1:09.36

Event 13 Women 100 Yard Backstroke

Meet Record: M 52.34 2019 Bella Hindley (Yale)
Pool Record: P 52.45 2018 Heidi Vanderwel (Yale)
NCAA A Std: A 50.93
NCAA B Std: B 53.94

	Name	Year	School	Prelims	Finals	Points
A - Final						
	1 Reznicek, Jenna	FR	Brown	52.43	52.94B	32

2	Korbly, Isabella	FR	Princeton	53.85	53.88B 28
3	Wagner, Lindsey	SO	Yale	54.66	54.36 27
4	Hamlin, Molly	FR	Harvard	54.25	54.38 26
5	Kannan, Hannah	SR	Penn	53.76	54.42 25
6	Murphy, Quinn	FR	Yale	54.72	54.54 24
7	Pappas, Alexa	FR	Princeton	55.04	55.23 23
8	Bullock, Addie Rose	SO	Harvard	55.20	55.30 22

B - Final

9	Carr, Abigail	FR	Harvard	55.42	54.20 20
10	Matsushima, Sage	JR	Brown	55.66	55.60 17
11	Pruden, Mary	SR	Columbia	55.47	55.62 16
12	Howley, Mary	FR	Dartmouth	56.28	55.76 15
13	Clements, Emily	SO	Brown	56.40	56.01 13.5
13	Waterson, Rebecca	FR	Brown	56.22	56.01 13.5
15	Munoz, Aviva	JR	Cornell	56.02	56.45 12
16	Caverly, Gillian	SR	Cornell	56.58	56.92 11

C - Final

17	Laster, Susannah	JR	Dartmouth	57.42	56.31 9
18	Pujadas, Riley	FR	Columbia	56.68	56.47 7
19	Hamlen, Izzy	FR	Dartmouth	56.92	56.76 6
20	Hailu, Hannah	FR	Columbia	57.07	57.05 5
21	Zhang, Connie	JR	Dartmouth	57.60	57.50 4
22	Sih, Angelica	SO	Cornell	57.99	58.07 3
23	Zwart, Eleanor	JR	Dartmouth	57.77	58.15 2
24	Kramer, Katherine	FR	Dartmouth	59.36	58.67 1

Event 13 Women 100 Yard Backstroke

Meet Record: M 52.34 2019 Bella Hindley (Yale)
Pool Record: P 52.45 2018 Heidi Vanderwel (Yale)
NCAA A Std: A 50.93
NCAA B Std: B 53.94

	Name	Year	School	Seed	Prelims
Preliminaries					
1	Reznicek, Jenna	FR	Brown	52.94	52.43P
2	Kannan, Hannah	SR	Penn	54.71	53.76B
3	Korbly, Isabella	FR	Princeton	55.45	53.85B
4	Hamlin, Molly	FR	Harvard	54.43	54.25
5	Wagner, Lindsey	SO	Yale	53.58	54.66
6	Murphy, Quinn	FR	Yale	54.64	54.72
7	Pappas, Alexa	FR	Princeton	54.39	55.04
8	Bullock, Addie Rose	SO	Harvard	55.35	55.20
9	Carr, Abigail	FR	Harvard	54.65	55.42
10	Pruden, Mary	SR	Columbia	55.68	55.47
11	Matsushima, Sage	JR	Brown	56.67	55.66
12	Munoz, Aviva	JR	Cornell	56.73	56.02
13	Waterson, Rebecca	FR	Brown	56.34	56.22
14	Howley, Mary	FR	Dartmouth	57.52	56.28
15	Clements, Emily	SO	Brown	56.48	56.40
16	Caverly, Gillian	SR	Cornell	56.90	56.58
17	Pujadas, Riley	FR	Columbia	56.62	56.68
18	Hamlen, Izzy	FR	Dartmouth	59.52	56.92
19	Hailu, Hannah	FR	Columbia	57.30	57.07
20	Laster, Susannah	JR	Dartmouth	59.81	57.42
21	Zhang, Connie	JR	Dartmouth	59.25	57.60
22	Zwart, Eleanor	JR	Dartmouth	59.22	57.77
23	Sih, Angelica	SO	Cornell	57.09	57.99
24	Kramer, Katherine	FR	Dartmouth	1:00.41	59.36
25	Moon, Zoe	FR	Dartmouth	1:00.77	59.83
--	xMoore, Sophia	FR	Yale	56.13	X56.08
--	xNewnam, Anna	SR	Penn	NT	X59.62

Event 14 Women 400 Yard Medley Relay

Meet Record: M 3:32.72 2020 Harvard
F. Pasadyn, J. Yegher, M. Dahlke, K. Quist
Pool Record: P 3:34.22 2018 Yale
H. Vanderwel, C. O'Leary, M. Zimmerman, B. Hindley
NCAA A Std: A 3:31.66
NCAA B Std: B 3:33.78

	School	Seed	Finals	Points
1	Yale University	3:37.49	3:36.10	64
	1) Wagner, Lindsey SO	2) Buckley, Marykate JR		
	3) Massey, Alexandra FR	4) Henig, Iszac JR		
2	Princeton University	3:39.60	3:38.63	56
	1) Korbly, Isabella FR	2) McDonald, Margaux SO		
	3) Venema, Nikki JR	4) Bradley, Christina JR		
3	Brown University	3:43.62	3:41.72	54
	1) Reznicek, Jenna FR	2) Lukawski, Audrey SR		
	3) Chidley, Nell JR	4) Scott, Samantha SO		
4	University of Pennsylvania	3:40.97	3:41.87	52
	1) Kannan, Hannah SR	2) Estabrook, Grace SR		
	3) Chong, Vanessa FR	4) Thomas, Lia SR		
5	Columbia University	3:46.55	3:44.25	50
	1) Ganihanova, Aziza SO	2) Walker, Allegra SO		
	3) Wang, Emily SR	4) Macdonald, Emily FR		
6	Dartmouth College	3:51.77	3:45.35	48
	1) Howley, Mary FR	2) Van Steyn, Kenna SR		
	3) Leko, Mia JR	4) Post, Ashley JR		
7	Cornell University	3:50.79	3:48.25	46
	1) Munoz, Aviva JR	2) Wu, Amy SO		
	3) Gruvberger, Anna SO	4) Wongso, Priscilla SO		
--	Harvard University	3:40.88	DQ 3:35.82	
	Early take-off swimmer #3			
	1) Pasadyn, Felicia SR	2) Denisenko, Aleksandra FR		
	3) Carr, Abigail FR	4) Brenner, Mandy FR		

Event 15 Women 1650 Yard Freestyle

Meet Record: M 15:57.34 2009 Alicia Aemisegger (Princeton)
Pool Record: P 15:50.23 1981 Kim Linehan (Longhorn)
NCAA A Std: A 15:52.41
NCAA B Std: B 16:30.59

	Name	Year	School	Seed	Finals	Points
1	Buroker, Catherine	SO	Penn	16:23.72	16:21.17B	32
2	Marquardt, Ellie	SO	Princeton	16:34.66	16:28.22B	28
3	Kalandadze, Anna Sofia	JR	Penn	16:31.12	16:28.85B	27
4	Loomis, Ashley	SR	Yale	NT	16:36.57	26
5	Giddings, Grace	SR	Penn	16:44.50	16:37.79	25
6	Girotto, Amelia	FR	Penn	17:11.04	16:41.17	24
7	Barrett, Sara	FR	Brown	16:46.54	16:47.86	23
8	Minnigh, Sarah	JR	Dartmouth	17:40.40	16:48.35	22
9	Jubin, Olivia	JR	Columbia	NT	16:49.80	20
10	Appleton, Emily	FR	Princeton	16:45.59	16:53.62	17
11	O'Leary, Bridget	JR	Penn	NT	16:53.92	16
12	Rose, Carlie	FR	Harvard	17:02.13	16:56.05	15
13	Paoletti, Isabella	FR	Yale	NT	17:00.65	14
14	Whall, Emma	SR	Brown	NT	17:00.83	13
15	Orange, Audrey	JR	Brown	17:13.49	17:05.76	12
16	Ruppert-Gomez, Marcella	JR	Harvard	16:56.38	17:06.04	11
17	Cianciolo, Christina	SO	Dartmouth	NT	17:11.28	9
18	Antoniuk, Bella	FR	Brown	17:01.85	17:12.66	7
19	Danko, Allie	FR	Cornell	17:04.31	17:14.64	6
20	Mannion, Macey	SO	Princeton	NT	17:15.62	5

21	Takabayashi, Miku	SR	Brown	NT	17:18.05	4
22	Durak, Anna	SR	Princeton	NT	17:40.30	3
23	Barry, Hayden	FR	Dartmouth	18:15.71	17:54.27	2

Event 16 Women 200 Yard Backstroke

Meet Record: M 1:52.56 2020 Felicia Pasadyn (Harvard)
Pool Record: P 1:54.64 2018 Quinn Scannell (Pennsylvania)
NCAA A Std: A 1:50.50
NCAA B Std: B 1:57.11

	Name	Year	School	Prelims	Finals	Points
A - Final						
1	Pasadyn, Felicia	SR	Harvard	1:55.69	1:53.58P	32
2	Massey, Alexandra	FR	Yale	1:58.02	1:57.39	28
3	Murphy, Quinn	FR	Yale	1:58.09	1:57.42	27
4	Whitmire, Liza	SO	Princeton	1:57.08	1:57.44	26
5	Kannan, Hannah	SR	Penn	1:57.61	1:57.54	25
6	Korbly, Isabella	FR	Princeton	1:57.97	1:57.71	24
7	Pruden, Mary	SR	Columbia	1:58.65	1:59.13	23
8	Ganihanova, Aziza	SO	Columbia	1:58.16	1:59.27	22
B - Final						
9	Hazlett, Kate	SO	Harvard	1:58.96	1:57.26	20
10	Clements, Emily	SO	Brown	1:59.50	1:59.25	17
11	Jones, Raime	JR	Yale	2:00.59	1:59.61	16
12	Bullock, Addie Rose	SO	Harvard	1:59.47	1:59.87	15
13	Cavanagh, Erin	FR	Harvard	2:01.03	2:00.40	14
14	Munoz, Aviva	JR	Cornell	2:01.03	2:00.43	13
15	Chidley, Nell	JR	Brown	2:00.02	2:00.65	12
16	Laster, Susannah	JR	Dartmouth	2:01.41	2:00.71	11
C - Final						
17	Waterson, Rebecca	FR	Brown	2:02.62	2:01.60	9
18	Carter, Camryn	JR	Penn	2:01.48	2:01.70	7
19	Howley, Mary	FR	Dartmouth	2:02.17	2:01.77	6
20	Caverly, Gillian	SR	Cornell	2:01.79	2:01.79	5
21	Pujadas, Riley	FR	Columbia	2:01.89	2:01.86	4
22	Hailu, Hannah	FR	Columbia	2:02.88	2:02.49	3
23	Williams, Marie	SO	Cornell	2:01.74	2:02.70	2
24	Sutter, Olivia	SO	Cornell	2:03.55	2:03.19	1

Event 16 Women 200 Yard Backstroke

Meet Record: M 1:52.56 2020 Felicia Pasadyn (Harvard)
Pool Record: P 1:54.64 2018 Quinn Scannell (Pennsylvania)
NCAA A Std: A 1:50.50
NCAA B Std: B 1:57.11

	Name	Year	School	Seed	Prelims
Preliminaries					
1	Pasadyn, Felicia	SR	Harvard	1:54.97	1:55.69B
2	Whitmire, Liza	SO	Princeton	1:58.40	1:57.08B
3	Kannan, Hannah	SR	Penn	1:59.69	1:57.61
4	Korbly, Isabella	FR	Princeton	1:59.43	1:57.97
5	Massey, Alexandra	FR	Yale	1:57.32	1:58.02
6	Murphy, Quinn	FR	Yale	1:58.18	1:58.09
7	Ganihanova, Aziza	SO	Columbia	1:58.23	1:58.16
8	Pruden, Mary	SR	Columbia	1:59.28	1:58.65
9	Hazlett, Kate	SO	Harvard	1:57.75	1:58.96
10	Bullock, Addie Rose	SO	Harvard	2:03.08	1:59.47
11	Clements, Emily	SO	Brown	1:58.89	1:59.50
12	Chidley, Nell	JR	Brown	2:01.77	2:00.02
13	Jones, Raime	JR	Yale	2:00.71	2:00.59
14	Cavanagh, Erin	FR	Harvard	1:58.23	2:01.03
14	Munoz, Aviva	JR	Cornell	2:02.97	2:01.03

16	Laster, Susannah	JR	Dartmouth	2:07.95	2:01.41
17	Carter, Camryn	JR	Penn	2:02.91	2:01.48
18	Williams, Marie	SO	Cornell	2:01.13	2:01.74
19	Caverly, Gillian	SR	Cornell	2:02.86	2:01.79
20	Pujadas, Riley	FR	Columbia	2:02.66	2:01.89
21	Howley, Mary	FR	Dartmouth	2:05.64	2:02.17
22	Waterson, Rebecca	FR	Brown	2:03.77	2:02.62
23	Hailu, Hannah	FR	Columbia	2:02.60	2:02.88
24	Sutter, Olivia	SO	Cornell	2:04.31	2:03.55
25	Hamlen, Izzy	FR	Dartmouth	2:09.31	2:03.99
26	DuPont, Schuyler	FR	Cornell	2:04.95	2:05.82
27	Zhang, Connie	JR	Dartmouth	2:13.04	2:06.30
28	Moon, Zoe	FR	Dartmouth	2:09.79	2:06.32
29	Sih, Angelica	SO	Cornell	2:03.48	2:06.54
30	Kramer, Katherine	FR	Dartmouth	2:09.68	2:06.72
31	Zwart, Eleanor	JR	Dartmouth	2:10.17	2:08.09
--	xMoore, Sophia	FR	Yale	2:02.21	X2:03.48
--	xHeilbrun, Maddie	SR	Harvard	2:05.86	X2:05.15
--	Reznicek, Jenna	FR	Brown	1:58.63	DQ 2:04.77

False start

Event 17 Women 100 Yard Freestyle

Meet Record: M 47.85 2019 Bella Hindley (Yale)
Pool Record: P 48.64 2018 Miki Dahlke (Harvard)
NCAA A Std: A 47.18
NCAA B Std: B 49.51

	Name	Year	School	Prelims	Finals	Points
A - Final						
1	Thomas, Lia	SR	Penn	48.71	47.63M	32
2	Henig, Iszac	JR	Yale	47.80	47.82M	28
3	Venema, Nikki	JR	Princeton	49.66	48.81B	27
4	Hamlin, Molly	FR	Harvard	49.52	49.38B	26
5	Pilkinton, Ophelia	SO	Yale	49.94	49.67	25
6	Kaczorowski, Margot	JR	Penn	50.06	49.86	24
7	Wagner, Lindsey	SO	Yale	49.85	49.89	23
8	Post, Ashley	JR	Dartmouth	50.12	50.42	22
B - Final						
9	Shelton, Samantha	JR	Harvard	50.15	50.25	20
10	Bradley, Christina	JR	Princeton	50.59	50.26	17
11	Weng, Vivian	FR	Yale	50.66	50.28	16
12	Parker, Melissa	JR	Cornell	50.37	50.41	15
13	Macdonald, Emily	FR	Columbia	50.65	50.54	14
14	Liu, Amelia	JR	Princeton	50.41	50.61	13
15	Scott, Samantha	SO	Brown	50.52	50.85	12
16	Podurgiel, Anna	FR	Brown	50.82	50.97	11
C - Final						
17	Arevalo, Isabelle	JR	Columbia	50.86	50.56	9
18	Wongso, Priscilla	SO	Cornell	51.02	50.66	7
19	Brenner, Mandy	FR	Harvard	51.02	50.68	6
20	Moesch, Marlise	SR	Yale	51.14	50.81	5
21	Wortzman, Zoe	JR	Dartmouth	50.90	50.94	4
22	Secrest, Jennifer	JR	Princeton	51.17	51.23	3
23	Breiter, Callie	SO	Columbia	51.48	51.72	2
24	Healy, Marissa	SO	Yale	51.83	51.98	1

Event 17 Women 100 Yard Freestyle

Meet Record: M 47.85 2019 Bella Hindley (Yale)
Pool Record: P 48.64 2018 Miki Dahlke (Harvard)
NCAA A Std: A 47.18

NCAA B Std: B 49.51

	Name	Year	School	Seed	Prelims
Preliminaries					
1	Henig, Iszac	JR	Yale	48.03	47.80M
2	Thomas, Lia	SR	Penn	49.42	48.71B
3	Hamlin, Molly	FR	Harvard	50.97	49.52
4	Venema, Nikki	JR	Princeton	49.67	49.66
5	Wagner, Lindsey	SO	Yale	NT	49.85
6	Pilkinton, Ophelia	SO	Yale	49.88	49.94
7	Kaczorowski, Margot	JR	Penn	50.11	50.06
8	Post, Ashley	JR	Dartmouth	51.40	50.12
9	Shelton, Samantha	JR	Harvard	50.95	50.15
10	Parker, Melissa	JR	Cornell	50.82	50.37
11	Liu, Amelia	JR	Princeton	50.11	50.41
12	Scott, Samantha	SO	Brown	51.40	50.52
13	Bradley, Christina	JR	Princeton	49.91	50.59
14	Macdonald, Emily	FR	Columbia	50.60	50.65
15	Weng, Vivian	FR	Yale	51.03	50.66
16	Podurgiel, Anna	FR	Brown	51.43	50.82
17	Arevalo, Isabelle	JR	Columbia	51.04	50.86
18	Wortzman, Zoe	JR	Dartmouth	52.61	50.90
19	Brenner, Mandy	FR	Harvard	50.91	51.02
19	Wongso, Priscilla	SO	Cornell	50.80	51.02
21	Moesch, Marlise	SR	Yale	51.01	51.14
22	Secrest, Jennifer	JR	Princeton	51.92	51.17
23	Breiter, Callie	SO	Columbia	52.62	51.48
24	Healy, Marissa	SO	Yale	52.29	51.83
25	Gruvberger, Anna	SO	Cornell	51.65	51.88
26	Larsen, Clare	SR	Columbia	51.35	51.91
27	Young, Georgia	SO	Columbia	51.62	51.94
28	Bilgin, Zehra	FR	Brown	52.15	52.19
28	Wang, Emily	SR	Columbia	51.64	52.19
30	Baldari, Alessandra	SR	Yale	51.16	52.47
31	Tsai, Sophia	FR	Cornell	52.30	52.69
32	Zhang, Tori	FR	Cornell	52.22	52.98
33	Wiener, Sophie	FR	Dartmouth	53.92	53.00
--	xLe, Tina	JR	Columbia	51.48	X51.67
--	xOhr, Joelle	SO	Cornell	52.59	X52.54

Event 18 Women 200 Yard Breaststroke

Meet Record: M 2:08.47 2020 Jaycee Yegher (Harvard)
Pool Record: P 2:09.37 2010 Susan Kim (Yale)
NCAA A Std: A 2:06.58
NCAA B Std: B 2:13.97

	Name	Year	School	Prelims	Finals	Points
A - Final						
1	Denisenko, Aleksandra	FR	Harvard	2:13.78	2:11.93B	32
2	Franks, Ava	FR	Yale	2:15.73	2:12.79B	28
3	McDonald, Margaux	SO	Princeton	2:16.38	2:14.88	27
4	Pytel, Isabella	FR	Penn	2:16.70	2:15.11	26
5	Thompson, Mikki	SR	Harvard	2:14.56	2:15.46	25
6	Lukawski, Audrey	SR	Brown	2:16.15	2:15.82	24
7	Paoletti, Olivia	JR	Yale	2:16.47	2:15.87	23
8	Boeckman, Anna	FR	Penn	2:16.38	2:16.12	22
B - Final						
9	Estabrook, Grace	SR	Penn	2:17.24	2:16.02	20
10	Brault, Ellie	FR	Brown	2:17.37	2:16.50	17
11	Buckley, Maggie	FR	Harvard	2:17.33	2:17.33	16

12	Buckley, Marykate	JR	Yale	2:17.10	2:17.82	15
13	Liu, Hannah	FR	Penn	2:17.78	2:17.99	14
14	Maizes, Rachel	SR	Penn	2:18.33	2:18.20	13
15	Walker, Allegra	SO	Columbia	2:18.04	2:18.56	12
16	Wang, Vivian	SR	Princeton	2:19.92	2:20.22	11

C - Final

17	Chang, Allison	SR	Cornell	2:21.65	2:19.28	9
18	Hu, Ashley	FR	Columbia	2:20.23	2:20.06	7
19	Willhite, Kellie	SO	Brown	2:19.97	2:20.35	6
20	Unas, Julia	FR	Columbia	2:24.40	2:22.51	5
21	Wu, Amy	SO	Cornell	2:25.05	2:23.22	4
22	Van Steyn, Kenna	SR	Dartmouth	2:25.10	2:24.01	3
23	Petersen, Amanda	FR	Cornell	2:23.09	2:24.94	2
24	Parker, Bridget	SO	Dartmouth	2:26.36	2:25.27	1

Event 18 Women 200 Yard Breaststroke

Meet Record: M 2:08.47 2020 Jaycee Yegher (Harvard)
Pool Record: P 2:09.37 2010 Susan Kim (Yale)
NCAA A Std: A 2:06.58
NCAA B Std: B 2:13.97

	Name	Year	School	Seed	Prelims

Preliminaries

1	Denisenko, Aleksandra	FR	Harvard	2:14.31	2:13.78B
2	Thompson, Mikki	SR	Harvard	2:22.35	2:14.56
3	Franks, Ava	FR	Yale	2:12.56	2:15.73
4	Lukawski, Audrey	SR	Brown	2:17.36	2:16.15
5	Boeckman, Anna	FR	Penn	2:18.42	2:16.38
5	McDonald, Margaux	SO	Princeton	2:16.52	2:16.38
7	Paoletti, Olivia	JR	Yale	2:17.02	2:16.47
8	Pytel, Isabella	FR	Penn	2:16.75	2:16.70
9	Buckley, Marykate	JR	Yale	2:16.23	2:17.10
10	Estabrook, Grace	SR	Penn	2:18.16	2:17.24
11	Buckley, Maggie	FR	Harvard	2:18.43	2:17.33
12	Brault, Ellie	FR	Brown	2:18.85	2:17.37
13	Liu, Hannah	FR	Penn	2:17.47	2:17.78
14	Walker, Allegra	SO	Columbia	2:17.96	2:18.04
15	Maizes, Rachel	SR	Penn	2:25.73	2:18.33
16	Wang, Vivian	SR	Princeton	2:18.75	2:19.92
17	Willhite, Kellie	SO	Brown	2:18.04	2:19.97
18	Hu, Ashley	FR	Columbia	2:17.92	2:20.23
19	Chang, Allison	SR	Cornell	2:17.32	2:21.65
20	Petersen, Amanda	FR	Cornell	2:23.58	2:23.09
21	Unas, Julia	FR	Columbia	2:23.92	2:24.40
22	Wu, Amy	SO	Cornell	2:23.70	2:25.05
23	Van Steyn, Kenna	SR	Dartmouth	2:29.43	2:25.10
24	Parker, Bridget	SO	Dartmouth	2:35.39	2:26.36
25	Zhang, Rachel	FR	Dartmouth	2:27.46	2:26.97
--	xMoore, Sophia	FR	Yale	2:26.76	X2:21.87

Event 19 Women 200 Yard Butterfly

Meet Record: M 1:54.60 2013 Alex Forrester (Yale)
Pool Record: P 1:52.99 1981 Mary T. Meagher (Lakeside)
NCAA A Std: A 1:53.20
NCAA B Std: B 1:59.23

	Name	Year	School	Prelims	Finals	Points

A - Final

1	Carr, Abigail	FR	Harvard	1:58.08	1:57.26B	32
2	Chong, Vanessa	FR	Penn	2:00.03	1:58.17B	28

	3	Massey, Alexandra	FR	Yale	2:00.32	1:58.72B 27
	4	Yeager, Jess	SO	Princeton	1:59.19	1:58.75B 26
	5	Chidley, Nell	JR	Brown	1:59.97	1:59.63 25
	6	Leko, Mia	JR	Dartmouth	1:57.65	1:59.70 24
	7	Kim, Junseo	FR	Yale	2:00.45	1:59.92 23
	8	Yoon, Grace	FR	Harvard	2:00.54	2:01.13 22
B - Final						
	9	Martin, Allison	FR	Columbia	2:01.75	2:00.17 20
	10	Jiang, Joy	FR	Penn	2:01.08	2:00.99 17
	11	Bilgin, Zehra	FR	Brown	2:00.90	2:01.84 16
	12	Myers, Andie	SR	Penn	2:01.48	2:02.00 15
	13	Peng, Jessica	JR	Columbia	2:02.58	2:02.35 14
	14	Pappas, Alexa	FR	Princeton	2:03.96	2:02.53 13
	15	Boyer, Liz	JR	Harvard	2:02.62	2:03.05 12
	16	Whall, Emma	SR	Brown	2:03.56	2:06.71 11
C - Final						
	17	Wong, Anthea	FR	Columbia	2:04.81	2:03.47 9
	18	Iorini, Maria	SO	Brown	2:04.31	2:04.14 7
	19	Chen, Jaime	FR	Princeton	2:06.49	2:06.69 6
	20	DuPont, Schuyler	FR	Cornell	2:08.95	2:06.99 5
	21	Syrkin, Alex	FR	Cornell	2:10.29	2:08.24 4

Event 19 Women 200 Yard Butterfly

Meet Record: M 1:54.60 2013 Alex Forrester (Yale)
Pool Record: P 1:52.99 1981 Mary T. Meagher (Lakeside)
NCAA A Std: A 1:53.20
NCAA B Std: B 1:59.23

	Name	Year	School	Seed	Prelims
Preliminaries					
1	Leko, Mia	JR	Dartmouth	2:00.23	1:57.65B
2	Carr, Abigail	FR	Harvard	1:58.61	1:58.08B
3	Yeager, Jess	SO	Princeton	1:57.83	1:59.19B
4	Chidley, Nell	JR	Brown	1:59.35	1:59.97
5	Chong, Vanessa	FR	Penn	2:00.14	2:00.03
6	Massey, Alexandra	FR	Yale	1:57.51	2:00.32
7	Kim, Junseo	FR	Yale	2:01.27	2:00.45
8	Yoon, Grace	FR	Harvard	2:03.17	2:00.54
9	Bilgin, Zehra	FR	Brown	2:01.71	2:00.90
10	Jiang, Joy	FR	Penn	2:00.79	2:01.08
11	Myers, Andie	SR	Penn	2:04.21	2:01.48
12	Martin, Allison	FR	Columbia	2:01.42	2:01.75
13	Peng, Jessica	JR	Columbia	2:02.04	2:02.58
14	Boyer, Liz	JR	Harvard	2:02.01	2:02.62
15	Whall, Emma	SR	Brown	2:03.48	2:03.56
16	Pappas, Alexa	FR	Princeton	2:03.27	2:03.96
17	Iorini, Maria	SO	Brown	2:04.46	2:04.31
18	Wong, Anthea	FR	Columbia	2:03.66	2:04.81
19	Chen, Jaime	FR	Princeton	2:02.10	2:06.49
20	DuPont, Schuyler	FR	Cornell	2:06.37	2:08.95
21	Syrkin, Alex	FR	Cornell	2:07.54	2:10.29
--	xRippon, Caylene	SR	Brown	2:04.89	X2:05.32

Event 20 Women 3 mtr Diving

Meet Record: M 360.55 2015 Caitlin Chambers (Princeton)
Pool Record: P 360.55 2015 Caitlin Chambers (Princeton)
NCAA A Std: A 280.00

	Name	Year	School	Prelims	Finals	Points
A - Final						
1	Miclau, Elizabeth	SO	Harvard	261.45	315.20A	32

2	Milne, Georgi	SR	Harvard	310.35	311.20A 28
3	Lawrence, Esther	SR	Harvard	292.95	302.90A 27
4	Edvalson, Remi	FR	Harvard	277.75	292.05A 26
5	Williams, Demetra	SR	Cornell	271.35	281.30A 25
6	Jendritz, Elise	JR	Cornell	282.90	276.10 24
7	Laverty, Katie	FR	Harvard	264.05	274.30 23
8	Geier, Evie	JR	Harvard	300.10	274.15 22

B - Final

9	Herculano, Morgane	SR	Harvard	253.65	304.45A 20
10	Shao, Stephanie	FR	Yale	248.10	278.65 17
11	Henderson, Hayden	FR	Yale	254.45	276.15 16
12	Wotovich, Amy	FR	Harvard	257.40	274.80 15
13	Seltzer, Maddie	FR	Princeton	253.75	274.65 14
14	Francella, Olivia	JR	Penn	246.50	263.70 13
15	Rosendalh, Brighida	SR	Columbia	243.70	247.95 12
16	Brinker, Alexa	FR	Brown	228.90	209.40 11

Event 20 Women 3 mtr Diving

Meet Record: M 360.55 2015 Caitlin Chambers (Princeton)
Pool Record: P 360.55 2015 Caitlin Chambers (Princeton)
NCAA A Std: A 280.00

Preliminaries

	Name	Year	School	Seed	Prelims
1	Milne, Georgi	SR	Harvard	303.68	310.35A
2	Geier, Evie	JR	Harvard	291.90	300.10A
3	Lawrence, Esther	SR	Harvard	330.65	292.95A
4	Jendritz, Elise	JR	Cornell	321.08	282.90A
5	Edvalson, Remi	FR	Harvard	290.78	277.75
6	Williams, Demetra	SR	Cornell	312.00	271.35
7	Laverty, Katie	FR	Harvard	300.50	264.05
8	Miclau, Elizabeth	SO	Harvard	317.63	261.45
9	Wotovich, Amy	FR	Harvard	321.53	257.40
10	Henderson, Hayden	FR	Yale	323.55	254.45
11	Seltzer, Maddie	FR	Princeton	291.15	253.75
12	Herculano, Morgane	SR	Harvard	295.80	253.65
13	Shao, Stephanie	FR	Yale	268.80	248.10
14	Francella, Olivia	JR	Penn	275.10	246.50
15	Rosendalh, Brighida	SR	Columbia	293.55	243.70
16	Brinker, Alexa	FR	Brown	275.40	228.90
17	Thibodeau, Genevieve	FR	Yale	260.03	228.70
18	Jin, Laurel	FR	Yale	277.75	227.55
19	Johnsson-Stjernstrom, Ha	SO	Princeton	246.23	226.60
20	Singh, Ishani	SO	Yale	256.43	224.95
21	Ennis, Maya	FR	Yale	266.78	220.80
22	Mitchell, Liv	SR	Brown	304.00	220.25
23	Parker, Madeleine	FR	Penn	244.80	218.95
24	Feord, Julia	JR	Brown	306.45	217.35
25	Diakova, Alice	SO	Columbia	292.73	215.15
26	Lichen, Isabella	JR	Dartmouth	259.65	213.20
27	Lee, Michelle	SR	Columbia	257.33	210.35
28	Chin, Audrey	SO	Harvard	245.70	195.80
29	Stein, Samantha	SO	Penn	221.20	189.25
30	Palacios, Alyssa	FR	Dartmouth	298.15	185.90

Event 21 Women 400 Yard Freestyle Relay

Meet Record: M 3:14.48 2020 Harvard
F. Pasadyn, K. Quist, S. Shelton, M. Dahlke
Pool Record: P 3:18.25 2015 Princeton
C. McIlmail, N. Larson, E. McDonald, M. Veith
NCAA A Std: A 3:14.50
NCAA B Std: B 3:16.35

	School	Seed	Finals	Points

1	University of Pennsylvania	3:22.50	3:17.80P	64
	1) Thomas, Lia SR	2) Kaczorowski, Margot JR		
	3) Kannan, Hannah SR	4) Carter, Camryn JR		
2	Harvard University	3:19.40	3:19.17	56
	1) Pasadyn, Felicia SR	2) Shelton, Samantha JR		
	3) Denisenko, Aleksandra FR	4) Hamlin, Molly FR		
3	Yale University	3:17.61	3:19.71	54
	1) Pilkinton, Ophelia SO	2) Wagner, Lindsey SO		
	3) Weng, Vivian FR	4) Franks, Ava FR		
4	Princeton University	3:20.87	3:21.66	52
	1) Bradley, Christina JR	2) Liu, Amelia JR		
	3) Marquardt, Ellie SO	4) Secrest, Jennifer JR		
5	Columbia University	3:23.69	3:22.44	50
	1) Macdonald, Emily FR	2) Jubin, Olivia JR		
	3) Ganihanova, Aziza SO	4) Arevalo, Isabelle JR		
6	Dartmouth College	3:29.56	3:24.03	48
	1) Post, Ashley JR	2) Leko, Mia JR		
	3) Howley, Mary FR	4) Wortzman, Zoe JR		
7	Cornell University	3:24.49	3:24.40	46
	1) Wongso, Priscilla SO	2) Gruvberger, Anna SO		
	3) Tsai, Sophia FR	4) Parker, Melissa JR		
8	Brown University	3:26.68	3:25.40	44
	1) Podurgiel, Anna FR	2) Scott, Samantha SO		
	3) Reznicek, Jenna FR	4) Orange, Audrey JR		

Women - Team Rankings - Through Event 21

1. Harvard University	1503.5	2. Yale University	1258
3. University of Pennsylvania	1256	4. Princeton University	1074
5. Brown University	904	6. Columbia University	706.5
7. Dartmouth College	563	8. Cornell University	508

2022 NCAA Division I Women's Swimming & Diving Championship Results (500 Yard Freestyle)
March 16-19, 2022
Available at: https://swimmeetresults.tech/NCAA-Division-I-Women-2022/220316F003.htm
[permalink: https://perma.cc/JUD4-N2W6]
(last visited: April 20, 2022)

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NCAA Division I Championship Meet
2022 NCAA Division I Women's
Swimming & Diving Championships

Event 3 Women 500 Yard Freestyle

NCAA:	N	4:24.06	3/16/2017	Katie Ledecky, Stanford
Meet:	M	4:24.06	3/16/2017	Katie Ledecky, Stanford
American:	A	4:24.06	3/16/2017	Katie Ledecky, Stanford
US Open:	O	4:24.06	3/16/2017	Katie Ledecky, Stanford
Pool:	P	4:30.81	3/17/2016	Leah Smith, Virginia

	Name	Year	School	Prelims	Finals	Points
	=== Championship Final ===					
1	Thomas, Lia	5Y	Penn	4:33.82	4:33.24	20
	r:+0.76 25.25	52.80 (27.55)				
	1:20.59 (27.79)	1:48.43 (27.84)				
	2:16.24 (27.81)	2:44.12 (27.88)				
	3:11.80 (27.68)	3:39.29 (27.49)				
	4:06.74 (27.45)	4:33.24 (26.50)				
2	Weyant, Emma	FR	Virginia	4:37.25	4:34.99	17
	r:+0.73 25.59	53.04 (27.45)				
	1:20.91 (27.87)	1:48.66 (27.75)				
	2:16.33 (27.67)	2:44.17 (27.84)				
	3:11.98 (27.81)	3:39.90 (27.92)				
	4:07.73 (27.83)	4:34.99 (27.26)				
3	Sullivan, Erica	FR	Texas	4:36.79	4:35.92	16
	r:+0.66 25.34	52.62 (27.28)				
	1:20.30 (27.68)	1:48.25 (27.95)				
	2:16.22 (27.97)	2:44.41 (28.19)				
	3:12.74 (28.33)	3:40.98 (28.24)				
	4:08.96 (27.98)	4:35.92 (26.96)				
4	Forde, Brooke	5Y	Stanford	4:38.19	4:36.18	15
	r:+0.65 25.89	53.30 (27.41)				
	1:21.09 (27.79)	1:48.85 (27.76)				
	2:16.71 (27.86)	2:44.59 (27.88)				
	3:12.43 (27.84)	3:40.16 (27.73)				
	4:08.35 (28.19)	4:36.18 (27.83)				
5	Pfeifer, Evie	5Y	Texas	4:37.39	4:37.29	14
	r:+0.78 25.85	53.27 (27.42)				
	1:21.03 (27.76)	1:49.08 (28.05)				
	2:17.27 (28.19)	2:45.23 (27.96)				
	3:13.27 (28.04)	3:41.58 (28.31)				
	4:09.87 (28.29)	4:37.29 (27.42)				
6	McKenna, Paige	FR	Wisconsin	4:37.36	4:37.35	13
	r:+0.73 25.47	52.97 (27.50)				
	1:21.03 (28.06)	1:49.02 (27.99)				
	2:17.09 (28.07)	2:45.09 (28.00)				
	3:13.17 (28.08)	3:41.40 (28.23)				
	4:09.65 (28.25)	4:37.35 (27.70)				
7	McMahon, Kensey	SR	Alabama	4:38.76	4:40.06	12
	r:+0.73 25.96	53.81 (27.85)				
	1:21.43 (27.62)	1:49.54 (28.11)				
	2:17.97 (28.43)	2:46.43 (28.46)				
	3:15.11 (28.68)	3:43.92 (28.81)				
	4:12.58 (28.66)	4:40.06 (27.48)				
8	Tankersley, Morgan	SR	Stanford	4:38.65	4:40.08	11
	r:+0.70 26.03	53.96 (27.93)				
	1:22.08 (28.12)	1:50.49 (28.41)				

2:18.81 (28.32) 2:47.05 (28.24)
3:15.09 (28.04) 3:43.21 (28.12)
4:11.84 (28.63) 4:40.08 (28.24)

=== Consolation Final ===

9	Mrozinski, Julia	FR Tennessee	4:39.60	4:37.35	9
	r:+0.66 25.29	53.45 (28.16)			
	1:21.82 (28.37)	1:50.33 (28.51)			
	2:18.72 (28.39)	2:47.24 (28.52)			
	3:15.51 (28.27)	3:43.55 (28.04)			
	4:11.10 (27.55)	4:37.35 (26.25)			
10	Mull, Lola	SO Northwestern	4:40.70	4:38.37	7
	r:+0.69 26.09	54.01 (27.92)			
	1:22.23 (28.22)	1:50.73 (28.50)			
	2:19.25 (28.52)	2:47.94 (28.69)			
	3:16.04 (28.10)	3:44.23 (28.19)			
	4:11.78 (27.55)	4:38.37 (26.59)			
11	Mathieu, Tylor	JR Florida	4:39.07	4:38.62	6
	r:+0.75 26.15	54.25 (28.10)			
	1:22.72 (28.47)	1:51.21 (28.49)			
	2:19.74 (28.53)	2:47.99 (28.25)			
	3:16.05 (28.06)	3:44.24 (28.19)			
	4:11.97 (27.73)	4:38.62 (26.65)			
12	Coetzee, Dune	FR Georgia	4:40.24	4:38.78	5
	r:+0.73 25.67	53.62 (27.95)			
	1:21.89 (28.27)	1:50.22 (28.33)			
	2:18.69 (28.47)	2:46.91 (28.22)			
	3:15.44 (28.53)	3:43.85 (28.41)			
	4:11.72 (27.87)	4:38.78 (27.06)			
13	Laning, Erica	5Y ASU	4:40.70	4:38.90	4
	r:+0.73 25.84	53.34 (27.50)			
	1:21.33 (27.99)	1:49.54 (28.21)			
	2:17.98 (28.44)	2:46.43 (28.45)			
	3:15.17 (28.74)	3:43.78 (28.61)			
	4:11.97 (28.19)	4:38.90 (26.93)			
14	Nordin, Emma	5Y ASU	4:40.78	4:39.17	3
	r:+0.70 26.13	54.06 (27.93)			
	1:22.28 (28.22)	1:50.59 (28.31)			
	2:19.03 (28.44)	2:47.49 (28.46)			
	3:15.48 (27.99)	3:43.36 (27.88)			
	4:11.43 (28.07)	4:39.17 (27.74)			
15	Donohoe, Madelyn	JR Virginia	4:39.61	4:40.49	2
	r:+0.64 26.23	54.37 (28.14)			
	1:22.71 (28.34)	1:51.21 (28.50)			
	2:19.69 (28.48)	2:48.10 (28.41)			
	3:16.44 (28.34)	3:45.16 (28.72)			
	4:13.24 (28.08)	4:40.49 (27.25)			
16	McCulloh, Abigail	FR Georgia	4:40.58	4:41.17	1
	r:+0.67 26.20	54.57 (28.37)			
	1:22.97 (28.40)	1:51.44 (28.47)			
	2:20.06 (28.62)	2:48.68 (28.62)			
	3:17.22 (28.54)	3:45.78 (28.56)			
	4:14.02 (28.24)	4:41.17 (27.15)			

Women - Team Rankings - Through Event 3

1.	Virginia	93	2.	Texas	88
3.	Stanford	80	4.	California	56
5.	Alabama	50	6.	Louisville	46
7.	NC State	44	8.	Tennessee	43
9.	Georgia	40	10.	Ohio St	38
11.	Florida	32	12.	Wisconsin	27
13.	Michigan	26	14.	Penn	20
15.	Arizona St	19	16.	Southern California	18

16. Kentucky	18	18. Northwestern	15
19. UNC	10	20. Indiana	8
21. Virginia Tech	2	21. Arizona	2

2022 NCAA Division I Women's Swimming & Diving Championship Results (100 Yard Freestyle)

March 16-19, 2022

Available at: https://swimmeetresults.tech/NCAA-Division-I-Women-2022/220316F017.htm

[permalink: https://perma.cc/88Q9-4C5L]

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NCAA Division I Championship Meet
2022 NCAA Division I Women's
Swimming & Diving Championships

Event 17 Women 100 Yard Freestyle

```
         NCAA: N 45.56  3/18/2017 Simone Manuel, Stanford
         Meet: M 45.56  3/17/2017 Simone Manuel, Stanford
     American: A 45.56  3/18/2017 Simone Manuel, Stanford
      US Open: O 45.56  3/18/2017 Simone Manuel, Stanford
         Pool: P 46.05  3/19/2022 Gretchen Walsh, Virginia
```

	Name	Year	School	Prelims	Finals	Points
	=== Championship Final ===					
1	Walsh, Gretchen	FR	Virginia	46.78	46.05P	20
	r:+0.75 22.10		46.05 (23.95)			
2	Scott, Morgan	SR	Alabama	47.27	46.78	17
	r:+0.65 22.08		46.78 (24.70)			
3	Berkoff, Katharine	JR	NCSU	46.89	46.95	16
	r:+0.67 22.41		46.95 (24.54)			
4	Dupre, Cora	JR	Alabama	47.51	47.08	15
	r:+0.60 22.54		47.08 (24.54)			
5	Henig, Iszac	JR	Yale	47.55	47.32	13.5
	r:+0.60 22.65		47.32 (24.67)			
5	Albiero, Gabi	SO	Louisville	47.45	47.32	13.5
	r:+0.60 22.90		47.32 (24.42)			
7	Countie, Grace	SR	UNC	47.50	47.36	12
	r:+0.73 22.67		47.36 (24.69)			
8	Thomas, Lia	5Y	Penn	47.37	48.18	11
	r:+0.73 23.19		48.18 (24.99)			
	=== Consolation Final ===					
9	Huske, Torri	FR	Stanford	48.12	46.98	9
	r:+0.60 22.32		46.98 (24.66)			
10	MacNeil, Maggie	SR	Michigan	47.77	47.42	7
	r:+0.63 22.65		47.42 (24.77)			
11	Flynn, Lindsay	FR	Michigan	47.94	47.67	6
	r:+0.66 22.88		47.67 (24.79)			
12	Alons, Kylee	SR	NCSU	48.02	47.68	5
	r:+0.64 22.77		47.68 (24.91)			
13	Ivey, Isabel	SR	California	47.61	47.71	4
	r:+0.70 22.76		47.71 (24.95)			
14	Zenick, Katherine	SO	Ohio St	47.91	47.85	3
	r:+0.61 22.88		47.85 (24.97)			
15	Antoniou, Kalia	SR	Alabama	47.84	47.93	2
	r:+0.67 23.16		47.93 (24.77)			
16	Bates, Talia	JR	Florida	48.14	47.95	1
	r:+0.70 23.13		47.95 (24.82)			

Women - Team Rankings - Through Event 17

1.	Virginia	433.5	2.	Stanford	327
3.	Texas	292	4.	Alabama	243
5.	NC State	233	6.	California	155
7.	Louisville	153.5	8.	Ohio St	143
9.	Michigan	139	10.	Tennessee	118
11.	UNC	103	12.	Florida	91
13.	Southern California	89	14.	Wisconsin	86

15.	Georgia	85.5	16.	Kentucky	82.5
17.	Indiana	82	18.	Northwestern	68
19.	Penn	44.5	20.	Minnesota	43
21.	Miami (Florida)	41.5	22.	Arizona	35.5
23.	Virginia Tech	31	24.	Duke	27
25.	Missouri	25	26.	Arizona St	22
27.	Yale	14.5	28.	Arkansas	11
29.	South Carolina	9	30.	Rutgers	6
30.	Notre Dame	6	32.	UCLA	4
32.	Lsu	4	34.	Wyoming	2
34.	San Diego St	2	34.	Harvard	2
37.	Texas A&M	1			

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA
CHARLESTON DIVISION

B.P.J., by her next friend and mother, HEATHER JACKSON,

Plaintiff,

vs.

WEST VIRGINIA STATE BOARD OF EDUCATION; HARRISON COUNTY BOARD OF EDUCATION; WEST VIRGINIA SECONDARY SCHOOLS ACTIVITIES COMMISSION; W. CLAYTON BURCH, in his official capacity as State Superintendent, DORA STUTLER, in her official capacity as the Harrison County Superintendent, and the STATE OF WEST VIRGINIA,

Defendants,

and

LAINEY ARMISTEAD,

Defendant-Intervenor.

Case No. 2:21-cv-00316

Hon. Joseph R. Goodwin

DECLARATION OF GREGORY A. BROWN, PH.D., FACSM

I, Dr. Gregory A. Brown, pursuant to 28 U.S. Code § 1746, declare under penalty of perjury under the laws of the United States of America that the facts contained in my Expert Declaration of Gregory A. Brown, Ph.D., FACSM in the Case of B.P.J. v. West Virginia State Board of Education, attached hereto, are true and correct to the best of my knowledge and belief, and that the opinions expressed therein represent my own expert opinions.

Executed on February 23, 2022.

Gregory A. Brown

Expert Report of

Gregory A Brown, Ph.D. FACSM

In the case of B.P.J. vs. West Virginia State Board of Education.

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Personal Qualifications and Disclosure

I serve as Professor of Exercise Science in the Department of Kinesiology and Sport Sciences at the University of Nebraska Kearney, where I teach classes in Exercise Physiology among other topics. I am also the Director of the General Studies program. I have served as a tenured (and nontenured) professor at universities since 2002.

In August 2002, I received a Doctor of Philosophy degree from Iowa State University, where I majored in Health and Human Performance, with an emphasis in the Biological Bases of Physical Activity. In May 1999, I received a Master of Science degree from Iowa State University, where I majored in Exercise and Sport Science, with an emphasis in Exercise Physiology.

I have received many awards over the years, including the Mortar Board Faculty Excellence Honors Award, College of Education Outstanding Scholarship / Research Award, and the College of Education Award for Faculty Mentoring of Undergraduate Student Research. I have authored more than 40 refereed publications and more than 50 refereed presentations in the field of Exercise Science. I have authored chapters for multiple books in the field of Exercise Science. And I have served as a peer reviewer for over 25 professional journals, including *The American Journal of Physiology*, the *International Journal of Exercise Science*, the *Journal of Strength and Conditioning Research*, and *The Journal of Applied Physiology*.

My areas of research have included the endocrine response to testosterone prohormone supplements in men and women, the effects of testosterone prohormone supplements on health and the adaptations to strength training in men, the effects of energy drinks on the physiological response to exercise, and assessment of various athletic training modes in males and females. Articles that I have published that are closely related to topics that I discuss in this white paper include:

- Studies of the effect of ingestion of a testosterone precursor on circulating testosterone levels in young men. Douglas S. King, Rick L. Sharp, Matthew D. Vukovich, Gregory A. Brown, et al., *Effect of Oral Androstenedione on Serum Testosterone and Adaptations to Resistance Training in Young Men: A Randomized Controlled Trial*, JAMA 281: 2020-2028 (1999); G. A. Brown, M. A. Vukovich, et al., *Effects of Anabolic Precursors on Serum Testosterone Concentrations and Adaptations to Resistance Training in Young Men*, INT J SPORT NUTR EXERC METAB 10: 340-359 (2000).

- A study of the effect of ingestion of that same testosterone precursor on circulating testosterone levels in young women. G. A. Brown, J. C. Dewey, et

al., *Changes in Serum Testosterone and Estradiol Concentrations Following Acute Androstenedione Ingestion in Young Women*, HORM METAB RES 36: 62-66 (2004.)

- A study finding (among other things) that body height, body mass, vertical jump height, maximal oxygen consumption, and leg press maximal strength were higher in a group of physically active men than comparably active women, while the women had higher percent body fat. G. A. Brown, Michael W. Ray, et al., *Oxygen Consumption, Heart Rate, and Blood Lactate Responses to an Acute Bout of Plyometric Depth Jumps in College-Aged Men And Women*, J. STRENGTH COND RES 24: 2475-2482 (2010).

- A study finding (among other things) that height, body mass, and maximal oxygen consumption were higher in a group of male NCAA Division 2 distance runners, while women NCAA Division 2 distance runners had higher percent body fat. Furthermore, these male athletes had a faster mean competitive running speed (~3.44 min/km) than women (~3.88 min/km), even though the men ran 10 km while the women ran 6 km. Katherine Semin, Alvah C. Stahlnecker, Kate A. Heelan, G. A. Brown, et al, *Discrepancy Between Training, Competition and Laboratory Measures of Maximum Heart Rate in NCAA Division 2 Distance Runners*, JOURNAL OF SPORTS SCIENCE AND MEDICINE 7: 455-460 (2008).

- A presentation at the 2021 American Physiological Society New Trends in Sex and Gender Medicine Conference entitled "Transwomen Competing in Women's Sports: What We Know and What We Don't". I have also authored an August 2021 entry for the American Physiological Society Physiology Educators Community of Practice Blog (PECOP Blog) titled "The Olympics, Sex, and Gender in the Physiology Classroom."

A list of my published scholarly work for the past 10 years appears as an Appendix.

Purpose of this Declaration

I have been asked by counsel for Defendant State of West Virginia and Intervenor Defendant Lainey Armistead in the matter of *B.P.J. by her next friend and mother Heather Jackson, v. State of West Virginia State Board of Education, et al.* to offer my opinions about the following: (a) whether males have inherent advantages in athletic performance over females, and if so the scale and physiological basis of those advantages, to the extent currently understood by science and (b) whether the sex-based performance advantage enjoyed by males is eliminated if feminizing hormones are administered to male athletes who identify as transgender (and in the case of prepubertal children, whether puberty blockers eliminate the advantage). In this declaration, when I use the terms "boy" or "male," I am referring to biological males based on the individual's reproductive biology and genetics as determined at birth. Similarly, when I use the terms "girl" or "female," I am referring to biological females based on the individual's reproductive biology and genetics as determined at birth. When I use the term transgender, I am referring to persons who are males or females, but who identify as a member of the opposite sex.

I have previously provided expert information in cases similar to this one in the form of a written declaration and a deposition in the case of *Soule vs. CIAC* in the state of Connecticut, and in the form of a written declaration in the case of *Hecox vs. Little* in the state of Idaho. I have not previously testified as an expert in any trials.

The opinions I express in this declaration are my own, and do not necessarily reflect the opinions of my employer, the University of Nebraska.

I have been compensated for my time serving as an expert in this case at the rate of $150 per hour. My compensation does not depend on the outcome in the case.

Overview

In this declaration, I explore three important questions relevant to current discussions and policy decisions concerning inclusion of transgender individuals in women's athletic competitions. Based on my professional familiarity with exercise physiology and my review of the currently available science, including that contained in the many academic sources I cite in this report, I set out and explain three basic conclusions:

- At the level of (a) elite, (b) collegiate, (c) scholastic, and (d) recreational competition, men, adolescent boys, or male children, have an advantage over equally aged, gifted, and trained women, adolescent girls, or female children in almost all athletic events;

- Biological male physiology is the basis for the performance advantage that men, adolescent boys, or male children have over women, adolescent girls, or female children in almost all athletic events; and

- The administration of androgen inhibitors and cross-sex hormones to men or adolescent boys after the onset of male puberty does not eliminate the performance advantage that men and adolescent boys have over women and adolescent girls in almost all athletic events. Likewise, there is no published scientific evidence that the administration of puberty blockers to males before puberty eliminates the pre-existing athletic advantage that prepubertal males have over prepubertal females in almost all athletic events.

In short summary, men, adolescent boys, and prepubertal male children perform better in almost all sports than women, adolescent girls, and prepubertal female children because of their inherent physiological advantages. In general, men, adolescent boys, and prepubertal male children, can run faster, output more muscular power, jump higher, and possess greater muscular endurance than women, adolescent girls, and prepubertal female children. These advantages become greater during and after male puberty, but they exist before puberty.

Further, while after the onset of puberty males are on average taller and heavier than females, a male performance advantage over females has been measured in weightlifting competitions even between males and females matched for body mass.

Male advantages in measurements of body composition, tests of physical fitness, and athletic performance have also been shown in children before puberty. These advantages are magnified during puberty, triggered in large part by the higher testosterone concentrations in men, and adolescent boys, after the onset of

male puberty. Under the influence of these higher testosterone levels, adolescent boys and young men develop even more muscle mass, greater muscle strength, less body fat, higher bone mineral density, greater bone strength, higher hemoglobin concentrations, larger hearts and larger coronary blood vessels, and larger overall statures than women. In addition, maximal oxygen consumption (VO_2max), which correlates to ~30-40% of success in endurance sports, is higher in both elite and average men and boys than in comparable women and girls when measured in regard to absolute volume of oxygen consumed and when measured relative to body mass.

Although androgen deprivation (that is, testosterone suppression) may modestly decrease some physiological advantages that men and adolescent boys have over women and adolescent girls, it cannot fully or even largely eliminate those physiological advantages once an individual has passed through male puberty.

Evidence and Conclusions

I. The scientific reality of biological sex

1. The scientific starting point for the issues addressed in this report is the biological fact of dimorphic sex in the human species. It is now well recognized that dimorphic sex is so fundamental to human development that, as stated in a recent position paper issued by the Endocrine Society, it "must be considered in the design and analysis of human and animal research. . . . Sex is dichotomous, with sex determination in the fertilized zygote stemming from unequal expression of sex chromosomal genes." (Bhargava et al. 2021 at 220). As stated by Sax (2002 at 177), "More than 99.98% of humans are either male or female." All humans who do not suffer from some genetic or developmental disorder are unambiguously male or female.

2. Although sex and gender are used interchangeably in common conversation, government documents, and in the scientific literature, the American Psychological Association defines sex as "physical and biological traits" that "distinguish between males and females" whereas gender "implies the psychological, behavioral, social, and cultural aspects of being male or female (i.e., masculinity or femininity)" (https://dictionary.apa.org, accessed January 14, 2022). The concept that sex is an important biological factor determined at conception is a well-established scientific fact that is supported by statements from a number of respected organizations including, but not limited to, the Endocrine Society (Bhargava et al. 2021 at 220), the American Physiological Society (Shah 2014), the Institute of Medicine, and the National Institutes of Health (Miller 2014 at H781-82). Collectively, these and other organizations have stated that every cell has a sex

and every system in the body is influenced by sex. Indeed, "sex often influences gender, but gender cannot influence sex." (Bhargava 2021 at 228.)

3. To further explain: "The classical biological definition of the **2 sexes** is that females have ovaries and make larger female gametes (eggs), whereas males have testes and make smaller male gametes (sperm) … the definition can be extended to the ovaries and testes, and in this way the categories—female and male—can be applied also to individuals who have gonads but do not make gametes … sex is dichotomous because of the different roles of each sex in reproduction." (Bhargava 2021 at 221.) Furthermore, "sex determination begins with the inheritance of XX or XY chromosomes" (Bhargava 2021 at 221.) And, "Phenotypic sex differences develop in XX and XY embryos as soon as transcription begins. The categories of X and Y genes that are unequally represented or expressed in male and female mammalian zygotes … cause phenotypic sex differences" (Bhargava 2021 at 222.)

4. Although disorders of sexual development (DSDs) are sometimes confused with discussions of transgender individuals, the two are different phenomena. DSDs are disorders of physical development. Many DSDs are "associated with genetic mutations that are now well known to endocrinologists and geneticists." (Bhargava 2021 at 225) By contrast, a sense of transgender identity is usually not associated with any physical disorder, and "a clear biological causative underpinning of gender identity remains to be demonstrated." (Bhargava 2021 at 226.)

5. Further demonstrating the biological importance of sex, Gershoni and Pietrokovski (2017) detail the results of an evaluation of "18,670 out of 19,644 informative protein-coding genes in men versus women" and reported that "there are over 6500 protein-coding genes with significant S[ex]D[ifferential] E[xpression] in at least one tissue. Most of these genes have SDE in just one tissue, but about 650 have SDE in two or more tissues, 31 have SDE in more than five tissues, and 22 have SDE in nine or more tissues" (Gershoni 2017 at 2-3.) Some examples of tissues identified by these authors that have SDE genes include breast mammary tissue, skeletal muscle, skin, thyroid gland, pituitary gland, subcutaneous adipose, lung, and heart left ventricle. Based on these observations the authors state "As expected, Y-linked genes that are normally carried only by men show SDE in many tissues" (Gershoni 2017 at 3.) A stated by Heydari et al. (2022, at 1), "Y chromosome harbors male-specific genes, which either solely or in cooperation with their X-counterpart, and independent or in conjunction with sex hormones have a considerable impact on basic physiology and disease mechanisms in most or all tissues development."

6. In a review of 56 articles on the topic of sex-based differences in skeletal muscle, Haizlip et al., (2015) state that "More than 3,000 genes have been

identified as being differentially expressed between male and female skeletal muscle." (Haizlip 2015 at 30.) Furthermore, the authors state that "Overall, evidence to date suggests that skeletal muscle fiber-type composition is dependent on species, anatomical location/function, and sex" (Haizlip 2015 at 30.) The differences in genetic expression between males and females influence the skeletal muscle fiber composition (i.e. fast twitch and fast twitch sub-type and slow twitch), the skeletal muscle fiber size, the muscle contractile rate, and other aspects of muscle function that influence athletic performance. As the authors review the differences in skeletal muscle between males and females they conclude, "Additionally, all of the fibers measured in men have significantly larger cross-sectional areas (CSA) compared with women." (Haizlip 2015 at 31.) The authors also explore the effects of thyroid hormone, estrogen, and testosterone on gene expression and skeletal muscle function in males and females. One major conclusion by the authors is that "The complexity of skeletal muscle and the role of sex adding to that complexity cannot be overlooked." (Haizlip 2015 at 37.) The evaluation of SDE in protein coding genes helps illustrate that the differences between men and women are intrinsically part of the chromosomal and genetic makeup of humans which can influence many tissues that are inherent to the athletic competitive advantages of men compared to women.

II. Biological men, or adolescent boys, have large, well-documented performance advantages over women and adolescent girls in almost all athletic contests.

7. It should scarcely be necessary to invoke scientific experts to "prove" that men are on average larger, stronger, and faster than women. All of us, along with our siblings and our peers and perhaps our children, have passed through puberty, and we have watched that differentiation between the sexes occur. This is common human experience and knowledge.

8. Nevertheless, these differences have been extensively studied and measured. I cited many of these studies in the first paper on this topic that I prepared, which was submitted in litigation in January 2020. Since then, in light of current controversies, several authors have compiled valuable collections or reviews of data extensively documenting this objective fact about the human species, as manifest in almost all sports, each of which I have reviewed and found informative. These include Coleman (2020), Hilton & Lundberg (2021), World Rugby (2020), Harper (2021), Hamilton (2021), and a "Briefing Book" prepared by the Women's Sports Policy Working Group (2021). The important paper by Handelsman et al. (2018) also gathers scientific evidence of the systematic and large male athletic advantage.

9. These papers and many others document that men, adolescent boys, and prepubertal male children, substantially outperform comparably aged women,

adolescent girls and prepubertal female children, in competitions involving running speed, swimming speed, cycling speed, jumping height, jumping distance, and strength (to name a few, but not all, of the performance differences). As I discuss later, it is now clear that these performance advantages for men, adolescent boys, and prepubertal male children, are inherent to the biological differences between the sexes.

10. In fact, I am not aware of any scientific evidence today that disproves that after puberty men possess large advantages in athletic performance over women–so large that they are generally insurmountable for comparably gifted and trained athletes at every level (i.e. (a) elite, (b) collegiate, (c) scholastic, and (d) recreational competition). And I am not aware of any scientific evidence today that disproves that these measured performance advantages are at least largely the result of physiological differences between men and women which have been measured and are reasonably well understood.

11. My use of the term "advantage" in this paper must not be read to imply any normative judgment. The adult female physique is simply different from the adult male physique. Obviously, it is optimized in important respects for the difficult task of childbearing. On average, women require far fewer calories for healthy survival. Evolutionary biologists can and do theorize about the survival value or "advantages" provided by these and other distinctive characteristics of the female physique, but I will leave that to the evolutionary biologists. I use "advantage" to refer merely to performance advantages in athletic competitions.

12. I find in the literature a widespread consensus that the large performance and physiological advantages possessed by males–rather than social considerations or considerations of identity–are precisely the *reason* that most athletic competitions are separated by sex, with women treated as a "protected class." To cite only a few statements accepting this as the justification:

- Handelsman et al. (2018) wrote, "Virtually all elite sports are segregated into male and female competitions. The main justification is to allow women a chance to win, as women have major disadvantages against men who are, on average, taller, stronger, and faster and have greater endurance due to their larger, stronger, muscles and bones as well as a higher circulating hemoglobin level." (803)

- Millard-Stafford et al. (2018) wrote "Current evidence suggests that women will not swim or run as fast as men in Olympic events, which speaks against eliminating sex segregation in these individual sports" (530) "Given the historical context (2% narrowing in swimming over 44 y), a reasonable assumption might be that no more than 2% of the

current performance gap could still potentially be attributed to sociocultural influences.", (533) and "Performance gaps between US men and women stabilized within less than a decade after federal legislation provided equal opportunities for female participation, but only modestly closed the overall gap in Olympic swimming by 2% (5% in running)." (533) Dr. Millard-Stafford, a full professor at Georgia Tech, holds a Ph.D. in Exercise Physiology and is a past President of the American College of Sports Medicine.

- In 2021, Hilton et al. wrote, "most sports have a female category the purpose of which is the protection of both fairness and, in some sports, safety/welfare of athletes who do not benefit from the physiological changes induced by male levels of testosterone from puberty onwards." (204)

- In 2020 the Swiss High Court ("Tribunal Fédéral") observed that "in most sports . . . women and men compete in two separate categories, because the latter possess natural advantages in terms of physiology."[1]

- The members of the Women's Sports Policy Working Group wrote that "If sports were not sex-segregated, female athletes would rarely be seen in finals or on victory podiums," and that "We have separate sex sport and eligibility criteria based on biological sex because this is the only way we can assure that female athletes have the same opportunities as male athletes not only to participate but to win in competitive sport. . . . If we did not separate athletes on the basis of biological sex–if we used any other physical criteria–we would never see females in finals or on podiums." (WSPWG Briefing Book 2021 at 5, 20.)

- In 2020, the World Rugby organization stated that "the women's category exists to ensure protection, safety and equality for those who do not benefit from the biological advantage created by these biological performance attributes." (World Rugby Transgender Women Guidelines 2020.)

- In 2021 Harper et al. stated "…the small decrease in strength in transwomen after 12–36 months of GAHT [Gender Affirming Hormone Therapy] suggests that transwomen likely retain a strength advantage

[1] "dans la plupart des sports . . . les femmes et les hommes concourent dans deux catégories séparées, ces derniers étant naturellement avantagés du point de vue physique." Tribunal Fédéral decision of August 25, 2020, Case 4A_248/2019, 4A_398/2019, at §9.8.3.3.

over cisgender women." (7) and "…observations in trained transgender individuals are consistent with the findings of the current review in untrained transgender individuals, whereby 30 months of GAHT may be sufficient to attenuate some, but not all, influencing factors associated with muscular endurance and performance." (8)

- Hamilton et al. (2021), in a consensus statement for the International Federation of Sports Medicine (FIMS) concluded that "Transwomen have the right to compete in sports. However, cisgender women have the right to compete in a protected category." (1409)

13. While the sources I mention above gather more extensive scientific evidence of this uncontroversial truth, I provide here a brief summary of representative facts concerning the male advantage in athletic performance.

A. Men are stronger.

14. Males exhibit greater strength throughout the body. Both Handelsman et al. (2018) and Hilton & Lundberg (2021) have gathered multiple literature references that document this fact in various muscle groups.

15. Men have in the neighborhood of 60%-100% greater **arm strength** than women. (Handelsman 2018 at 812.)[2] One study of elbow flexion strength (basically, bringing the fist up towards the shoulder) in a large sample of men and women found that men exhibited 109% greater isometric strength, and 89% higher strength in a single repetition. (Hilton 2021 at 204, summarizing Hubal (2005) at Table 2.)

16. **Grip strength** is often used as a useful proxy for strength more generally. In one study, men showed on average 57% greater grip strength than women. (Bohannon 2019.) A wider meta-analysis of multiple grip-strength studies not limited to athletic populations found that 18- and 19-year-old males exhibited in

[2] Handelsman expresses this as women having 50% to 60% of the "upper limb" strength of men. Handelsman cites Sale, *Neuromuscular function*, for this figure and the "lower limb" strength figure. Knox et al., *Transwomen in elite sport* (2018) are probably confusing the correct way to state percentages when they state that "differences lead to decreased trunk and lower body strength by 64% and 72% respectively, in women" (397): interpreted literally, this would imply that men have **almost 4x as much** lower body strength as do women.

the neighborhood of 2/3 greater grip strength than females. (Handelsman 2017 Figure 3, summarizing Silverman 2011 Table 1.)[3]

17. In an evaluation of maximal isometric handgrip strength in 1,654 healthy men, 533 healthy women aged 20-25 years and 60 "highly trained elite female athletes from sports known to require high hand-grip forces (judo, handball)," Leyk et al. (2007) observed that, "The results of female national elite athletes even indicate that the strength level attainable by extremely high training will rarely surpass the 50th percentile of untrained or not specifically trained men." (Leyk 2007 at 415.)

18. Men have in the neighborhood of 25%-60% greater **leg strength** than women. (Handelsman 2018 at 812.) In another measure, men exhibit 54% greater knee extension torque and this male leg strength advantage is consistent across the lifespan. (Neder 1999 at 120-121.)

19. When male and female Olympic weightlifters of the same body weight are compared, the top males lift weights between 30% and 40% greater than the females of the same body weight. But when top male and female performances are compared in powerlifting, without imposing any artificial limitations on bodyweight, the male record is 65% higher than the female record. (Hilton 2021 at 203.)

20. In another measure that combines many muscle groups as well as weight and speed, moderately trained males generated 162% greater punching power than females even though men do not possess this large an advantage in any single bio-mechanical variable. (Morris 2020.) This objective reality was subjectively summed up by women's mixed-martial arts fighter Tamikka Brents, who suffered significant facial injuries when she fought against a biological male who identified as female and fought under the name of Fallon Fox. Describing the experience, Brents said:

> "I've fought a lot of women and have never felt the strength that I felt in a fight as I did that night. I can't answer whether it's because she was born a man or not because I'm not a doctor. I can only say, I've never felt so overpowered ever in my life, and I am an abnormally strong female in my own right."[4]

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[3] Citing Silverman, *The secular trend for grip strength in Canada and the United States*, J. Ports Sci. 29:599-606 (2011).

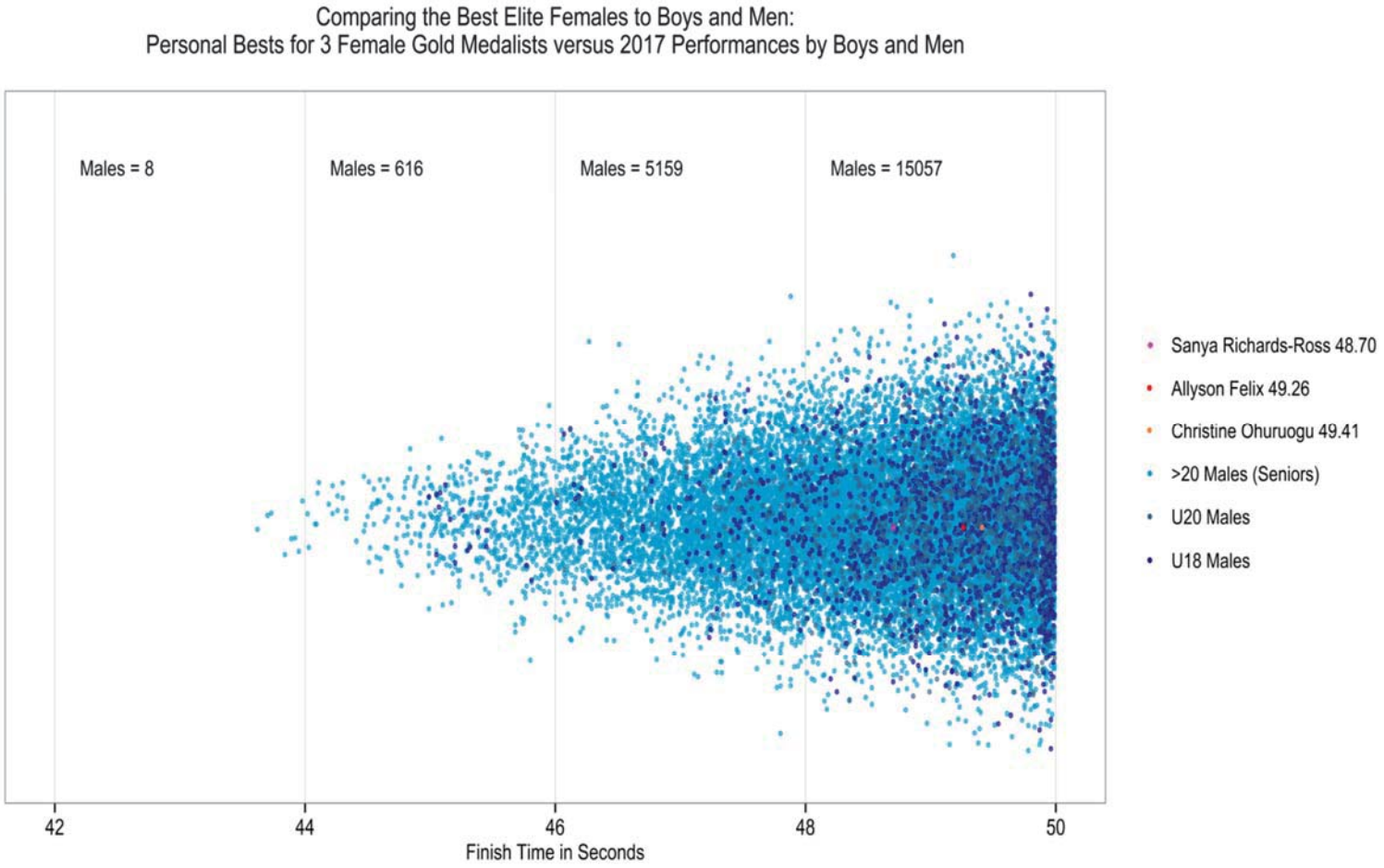
[4] http://whoatv.com/exclusive-fallon-foxs-latest-opponent-opens-up-to-whoatv/ (last accessed October 5, 2021).

B. Men run faster.

21. Many scholars have detailed the wide performance advantages enjoyed by men in running speed. One can come at this reality from a variety of angles.

22. Multiple authors report a male speed advantage in the neighborhood of 10%-13% in a variety of events, with a variety of study populations. Handelsman et al. 2018 at 813 and Handelsman 2017 at 70 both report a male advantage of about 10% by age 17. Thibault et al. 2010 at 217 similarly reported a stable 10% performance advantage across multiple events at the Olympic level. Tønnessen et al. (2015 at 1-2) surveyed the data and found a consistent male advantage of 10%-12% in running events after the completion of puberty. They document this for both short sprints and longer distances. One group of authors found that the male advantage increased dramatically in ultra-long-distance competition (Lepers & Knechtle 2013.)

23. A great deal of current interest has been focused on track events. It is worth noting that a recent analysis of publicly available sports federation and tournament records found that men enjoy the *least* advantage in running events, as compared to a range of other events and metrics, including jumping, pole vaulting, tennis serve speed, golf drives, baseball pitching speed, and weightlifting. (Hilton 2021 at 201-202.) Nevertheless, as any serious runner will recognize, the approximately 10% male advantage in running is an overwhelming difference. Dr. Hilton calculates that "approximately 10,000 males have personal best times that are faster than the current Olympic 100m female champion." (Hilton 2021 at 204.) Professors Doriane Coleman, Jeff Wald, Wickliffe Shreve, and Richard Clark dramatically illustrated this by compiling the data and creating the figure below (last accessed on February 10, 2022, at https://bit.ly/35yOyS4), which shows that the *lifetime best performances* of three female Olympic champions in the 400m event—including Team USA's Sanya Richards-Ross and Allyson Felix—would not match the performances of "literally thousands of boys and men, including thousands who would be considered second tier in the men's category" *just in 2017 alone*: (data were drawn from the International Association of Athletics Federations (IAAF) website which provides complete, worldwide results for individuals and events, including on an annual and an all-time basis).


Comparing the Best Elite Females to Boys and Men:
Personal Bests for 3 Female Gold Medalists versus 2017 Performances by Boys and Men
Males = 8
Males = 616
Males = 5159
Males = 15057
42
44
46
48
50
Finish Time in Seconds
Sanya Richards-Ross 48.70
Allyson Felix 49.26
Christine Ohuruogu 49.41
>20 Males (Seniors)
U20 Males
U18 Males

24. Professor Coleman and her colleague Wicklyffe Shreve also created the table below (last accessed on February 10, 2022, at https://bit.ly/37E1s2X), which "compares the number of men—males over 18—competing in events reported to the International Association of Athletics Federation whose results in each event in 2017 would have ranked them above the very best elite woman that year."

TABLE 2 – World's Best Woman v. Number of Men Outperforming			
Event	Best Women's Result	Best Men's Result	# of Men Outperforming
100 Meters	10.71	9.69	2,474
200 Meters	21.77	19.77	2,920
400 Meters	49.46	43.62	4,341
800 Meters	1:55.16*	1:43.10	3,992+
1500 Meters	3:56.14	3:28.80	3,216+
3000 Meters	8:23.14	7:28.73	1307+
5000 Meters	14:18.37	12:55.23	1,243
High Jump	2.06 meters	2.40 meters	777
Pole Vault	4.91 meters	6.00 meters	684
Long Jump	7.13 meters	8.65 meters	1,652
Triple Jump	14.96 meters	18.11 meters	969

25. The male advantage becomes insuperable well before the developmental changes of puberty are complete. Dr. Hilton documents that even "schoolboys"–defined as age 15 and under–have beaten the female world records in running, jumping, and throwing events. (Hilton 2021 at 204.)

26. Similarly, Coleman and Shreve created the table below (last accessed on February 10, 2022, at https://bit.ly/37E1s2X), which "compares the number of boys—males under the age of 18—whose results in each event in 2017 would rank them above the single very best elite [adult] woman that year:" data were drawn from the International Association of Athletics Federations (IAAF) website

TABLE 1 – World's Best Woman v. Under 18 Boys			
Event	Best Women's Result	Best Boys' Result	# of Boys Outperforming
100 Meters	10.71	10.15	124+
200 Meters	21.77	20.51	182
400 Meters	49.46	45.38	285
800 Meters	1:55.16*	1:46.3	201+
1500 Meters	3:56.14	3:37.43	101+
3000 Meters	8:23.14	7:38.90	30
5000 Meters	14:18.37	12:55.58	15
High Jump	2.06 meters	2.25 meters	28
Pole Vault	4.91 meters	5.31 meters	10
Long Jump	7.13 meters	7.88 meters	74
Triple Jump	14.96 meters	17.30 meters	47

27. In an analysis I have performed of running events (consisting of the 100 m, 200 m, 400 m, 800 m, 1500 m, 5000 m, and 10000 m) in the Division 1, Division 2, and Division 3 NCAA Outdoor track championships for the years of 2010-2019, the average performance across all events of the 1st place man was 14.1% faster than the 1st place woman, with the smallest difference being a 10.2% advantage for men in the Division 1 100 m race. The average 8th place man across all events (the last place to earn the title of All American) was 11.2% faster than 1st place woman, with the smallest difference being a 6.5% advantage for men in the Division 1 100 m race. (Brown et al. Unpublished observations, to be presented at the 2022 Annual Meeting of the American College of Sports Medicine.)

28. Athletic.net® is an internet-based resource providing "results, team, and event management tools to help coaches and athletes thrive." Among the resources available on Athletic.net are event records that can be searched by nationally or by state age group, school grade, and state. Higerd (2021) in an evaluation of high school track running performance records from five states(CA, FL, MN, NY, WA), over three years (2017 – 2019) observed that males were 14.38% faster than females in the 100M (at 99), 16.17% faster in the 200M (at 100), 17.62% faster in the 400M (at 102), 17.96% faster in the 800M (at 103), 17.81% faster in the 1600M (at 105), and 16.83% faster in the 3200M (at 106).

C. Men jump higher and farther.

29. Jumping involves both leg strength and speed as positive factors, with body weight of course a factor working against jump height. Despite their substantially greater body weight, males enjoy an even greater advantage in jumping than in running. Handelsman 2018 at 813, looking at youth and young adults, and Thibault 2010 at 217, looking at Olympic performances, both found male advantages in the range of 15%-20%. See also Tønnessen 2015 (approximately 19%); Handelsman 2017 (19%); Hilton 2021 at 201 (18%). Looking at the vertical jump called for in volleyball, research on elite volleyball players found that males jumped on average 50% higher during an "attack" at the net than did females. (Sattler 2015; see also Hilton 2021 at 203 (33% higher vertical jump).)

30. Higerd (2021) in an evaluation of high school high jump performance available through the track and field database athletic.net®, which included five states (CA, FL, MN, NY, WA), over three years (2017 – 2019) (at 82) observed that in 23,390 females and 26,843 males, females jumped an average of 1.35 m and males jumped an average of 1.62 m, for an 18.18% performance advantage for males (at 96). In an evaluation of long jump performance in 45,705 high school females and 54,506 high school males the females jumped an average of 4.08 m and males jumped an average of 5.20 m, for a 24.14% performance advantage for males (at 97).

31. The combined male advantage of body height and jump height means, for example, that a total of seven women in the WNBA have ever dunked a basketball in the regulation 10 foot hoop,[5] while the ability to dunk appears to be almost universal among NBA players: "Since the 1996–97 season (the earliest data is available from Basketball-Reference.com), 1,801 different [NBA] players have combined for 210,842 regular-season dunks, and 1,259 out of 1,367 players (or 92%) who have played at least 1,000 minutes have dunked at least once."[6]

D. Men throw, hit, and kick faster and farther.

32. Strength, arm-length, and speed combine to give men a large advantage over women in throwing. This has been measured in a number of studies.

33. One study of elite male and female baseball pitchers showed that men throw baseballs 35% faster than women—81 miles/hour for men vs. 60 miles/hour for women. (Chu 2009.) By age 12, "boys' throwing velocity is already between 3.5 and 4 standard deviation units higher than the girls'." (Thomas 1985 at 276.) By age seventeen, the *average* male can throw a ball farther than 99% of seventeen-year-old females. (Lombardo 2018; Chu 2009; Thomas 1985 at 268.) Looking at publicly available data, Hilton & Lundberg found that in both baseball pitching and the field hockey "drag flick," the *record* ball speeds achieved by males are more than 50% higher than those achieved by females. (Hilton 2021 at 202-203.)

34. Men achieve serve speeds in tennis more that 15% faster than women; and likewise in golf achieve ball speeds off the tee more than 15% faster than women. (Hilton 2021 at 202.)

35. Males are able to throw a javelin more than 30% farther than females. (Lombardo 2018 Table 2; Hilton 2021 at 203.)

36. Men serve and spike volleyballs with higher velocity than women, with a performance advantage in the range of 29-34%. (Hilton 2021 at 204 Fig. 1.)

37. Men are also able to kick balls harder and faster. A study comparing collegiate soccer players found that males kick the ball with an average 20% greater velocity than females. (Sakamoto 2014.)

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[5] https://www.espn.com/wnba/story/_/id/32258450/2021-wnba-playoffs-brittney-griner-owns-wnba-dunking-record-coming-more.

[6] https://www.si.com/nba/2021/02/22/nba-non-dunkers-patty-mills-tj-mcconnell-steve-novak-daily-cover

E. Males exhibit faster reaction times.

38. Interestingly, men enjoy an additional advantage over women in reaction time–an attribute not obviously related to strength or metabolism (e.g. $V0_2max$). "Reaction time in sports is crucial in both simple situations such as the gun shot in sprinting and complex situations when a choice is required. In many team sports this is the foundation for tactical advantages which may eventually determine the outcome of a game." (Dogan 2009 at 92.) "Reaction times can be an important determinant of success in the 100m sprint, where medals are often decided by hundredths or even thousandths of a second." (Tønnessen 2013 at 885.)

39. The existence of a sex-linked difference in reaction times is consistent over a wide range of ages and athletic abilities. (Dykiert 2012.) Even by the age of 4 or 5, in a ruler-drop test, males have been shown to exhibit 4% to 6% faster reaction times than females. (Latorre-Roman 2018.) In high school athletes taking a common baseline "ImPACT" test, males showed 3% faster reaction times than females. (Mormile 2018.) Researchers have found a 6% male advantage in reaction times of both first-year medical students (Jain 2015) and world-class sprinters (Tønnessen 2013).

40. Most studies of reaction times use computerized tests which ask participants to hit a button on a keyboard or to say something in response to a stimulus. One study on NCAA athletes measured "reaction time" by a criterion perhaps more closely related to athletic performance–that is, how fast athletes covered 3.3 meters after a starting signal. Males covered the 3.3 meters 10% faster than females in response to a visual stimulus, and 16% faster than females in response to an auditory stimulus. (Spierer 2010.)

41. Researchers have speculated that sex-linked differences in brain structure, as well as estrogen receptors in the brain, may be the source of the observed male advantage in reaction times, but at present this remains a matter of speculation and hypothesis. (Mormile at 19; Spierer at 962.)

III. Men have large measured physiological differences compared to women which demonstrably or likely explain their performance advantages.

42. No single physiological characteristic alone accounts for all or any one of the measured advantages that men enjoy in athletic performance. However, scientists have identified and measured a number of physiological factors that contribute to superior male performance.

A. Men are taller and heavier than women

43. In some sports, such as basketball and volleyball, height itself provides competitive advantage. While some women are taller than some men, based on data from 20 countries in North America, Europe, East Asia, and Australia, the 50th percentile for body height for women is 164.7 cm (5 ft 5 inches) and the 50th percentile for body height for men is 178.4 cm (5 ft 10 inches). Helping to illustrate the inherent height difference between men and women, from the same data analysis, the 95th percentile for body height for women is 178.9 cm (5 feet 10.43 inches), which is only 0.5 cm taller than the 50th percentile for men (178.4 cm; 5 feet 10.24 inches), while the 95th percentile for body height for men is 193.6 cm (6 feet 4.22 inches). (Roser 2013.)

44. To look at a specific athletic population, an evaluation of NCAA Division 1 basketball players compared 68 male guards and 59 male forwards to 105 female guards and 91 female forwards, and found that on average the male guards were 187.4 ± 7.0 cm tall and weighed 85.2 ± 7.4 kg while the female guards were 171.6 ± 5.0 cm tall and weighed 68.0 ± 7.4 kg. The male forwards were 201.7 ± 4.0 cm tall and weighed 105.3 ± 5.9 kg while the female forwards were 183.5 ± 4.4 cm tall and weighed 82.2 ± 12.5 kg. (Fields 2018 at 3.)

B. Males have larger and longer bones, stronger bones, and different bone configuration.

45. Obviously, males on average have longer bones. “Sex differences in height have been the most thoroughly investigated measure of bone size, as adult height is a stable, easily quantified measure in large population samples. Extensive twin studies show that adult height is highly heritable with predominantly additive genetic effects that diverge in a sex-specific manner from the age of puberty onwards.” (Handelsman 2018 at 818.) “Pubertal testosterone exposure leads to an ultimate average greater height in men of 12–15 centimeters, larger bones, greater muscle mass, increased strength and higher hemoglobin levels.” (Gooren 2011 at 653.)

46. “Men have distinctively greater bone size, strength, and density than do women of the same age. As with muscle, sex differences in bone are absent prior to puberty but then accrue progressively from the onset of male puberty due to the sex difference in exposure to adult male circulating testosterone concentrations.” (Handelsman 2018 at 818.)

47. “[O]n average men are 7% to 8% taller with longer, denser, and stronger bones, whereas women have shorter humerus and femur cross-sectional

areas being 65% to 75% and 85%, respectively, those of men." (Handelsman 2018 at 818.)

48. Greater height, leg, and arm length themselves provide obvious advantages in several sports. But male bone geometry also provides less obvious advantages. "The major effects of men's larger and stronger bones would be manifest via their taller stature as well as the larger fulcrum with greater leverage for muscular limb power exerted in jumping, throwing, or other explosive power activities." (Handelsman 2018 at 818.)

49. Male advantage in bone size is not limited to length, as larger bones provide the mechanical framework for larger muscle mass. "From puberty onwards, men have, on average, 10% more bone providing more surface area. The larger surface area of bone accommodates more skeletal muscle so, for example, men have broader shoulders allowing more muscle to build. This translates into 44% less upper body strength for women, providing men an advantage for sports like boxing, weightlifting and skiing. In similar fashion, muscle mass differences lead to decreased trunk and lower body strength by 64% and 72%, respectively in women. These differences in body strength can have a significant impact on athletic performance, and largely underwrite the significant differences in world record times and distances set by men and women." (Knox 2019 at 397.)

50. Meanwhile, distinctive aspects of the female pelvis geometry cut against athletic performance. "[T]he widening of the female pelvis during puberty, balancing the evolutionary demands of obstetrics and locomotion, retards the improvement in female physical performance." (Handelsman 2018 at 818.) "[T]he major female hormones, oestrogens, can have effects that disadvantage female athletic performance. For example, women have a wider pelvis changing the hip structure significantly between the sexes. Pelvis shape is established during puberty and is driven by oestrogen. The different angles resulting from the female pelvis leads to decreased joint rotation and muscle recruitment ultimately making them slower." (Knox 2019 at 397.)

51. There are even sex-based differences in foot size and shape. Wunderlich & Cavanaugh (2001) observed that a "foot length of 257 mm represents a value that is … approximately the 20th percentile men's foot lengths and the 80th percentile women's foot lengths." (607) and "For a man and a woman, both with statures of 170 cm (5 feet 7 inches), the man would have a foot that was approximately 5 mm longer and 2 mm wider than the woman." (608). Based on these, and other analyses, they conclude that "female feet and legs are not simply scaled-down versions of male feet but rather differ in a number of shape characteristics, particularly at the arch, the lateral side of the foot, the first toe, and the ball of the foot." (605) Further, Fessler et al. (2005) observed that "female foot length is consistently smaller than male foot length" (44) and concludes that

"proportionate foot length is smaller in women" (51) with an overall conclusion that "Our analyses of genetically disparate populations reveal a clear pattern of sexual dimorphism, with women consistently having smaller feet proportionate to stature than men." (53)

52. Beyond simple performance, the greater density and strength of male bones provide higher protection against stresses associated with extreme physical effort: "[S]tress fractures in athletes, mostly involving the legs, are more frequent in females, with the male protection attributable to their larger and thicker bones." (Handelsman 2018 at 818.)

C. Males have much larger muscle mass.

53. The fact that, on average, men have substantially larger muscles than women is as well known to common observation as men's greater height. But the male advantage in muscle size has also been extensively measured. The differential is large.

54. "On average, women have 50% to 60% of men's upper arm muscle cross-sectional area and 65% to 70% of men's thigh muscle cross-sectional area, and women have 50% to 60% of men's upper limb strength and 60% to 80% of men's leg strength. Young men have on average a skeletal muscle mass of >12 kg greater than age-matched women at any given body weight." (Handelsman 2018 at 812. See also Gooren 2011 at 653, Thibault 2010 at 214.)

55. "There is convincing evidence that the sex differences in muscle mass and strength are sufficient to account for the increased strength and aerobic performance of men compared with women and is in keeping with the differences in world records between the sexes." (Handelsman 2018 at 816.)

56. Once again, looking at specific and comparable populations of athletes, an evaluation of NCAA Division 1 basketball players consisting of 68 male guards and 59 male forwards, compared to 105 female guards and 91 female forwards, reported that on average the male guards had 77.7 ± 6.4 kg of fat free mass and 7.4 ± 3.1 kg fat mass while the female guards had 54.6 ± 4.4 kg fat free mass and 13.4 ± 5.4 kg fat mass. The male forwards had 89.5 ± 5.9 kg fat free mass and 15.9 ± 5.6 kg fat mass while the female forwards had 61.8 ± 5.9 kg fat free mass and 20.5 ± 7.7 kg fat mass. (Fields 2018 at 3.)

D. Females have a larger proportion of body fat.

57. While women have smaller muscles, they have proportionately more body fat, in general a negative for athletic performance. "Oestrogens also affect body

composition by influencing fat deposition. Women, on average, have higher percentage body fat, and this holds true even for highly trained healthy athletes (men 5%–10%, women 8%–15%). Fat is needed in women for normal reproduction and fertility, but it is not performance-enhancing. This means men with higher muscle mass and less body fat will normally be stronger kilogram for kilogram than women." (Knox 2019 at 397.)

58. "[E]lite females have more (<13 vs. <5 %) body fat than males. Indeed, much of the difference in [maximal oxygen uptake] between males and females disappears when it is expressed relative to lean body mass. . . . Males possess on average 7–9 % less percent body fat than females." (Lepers 2013 at 853.)

59. Knox et al. observe that both female pelvis shape and female body fat levels "disadvantage female athletes in sports in which speed, strength and recovery are important," (Knox 2019 at 397), while Tønnessen et al. describe the "ratio between muscular power and total body mass" as "critical" for athletic performance. (Tønnessen 2015 at 7.)

E. Males are able to metabolize and release energy to muscles at a higher rate due to larger heart and lung size, and higher hemoglobin concentrations.

60. While advantages in bone size, muscle size, and body fat are easily perceived and understood by laymen, scientists also measure and explain the male athletic advantage at a more abstract level through measurements of metabolism, or the ability to deliver energy to muscles throughout the body.

61. Energy release at the muscles depends centrally on the body's ability to deliver oxygen to the muscles, where it is essential to the complex chain of biochemical reactions that make energy available to power muscle fibers. Men have multiple distinctive physiological attributes that together give them a large advantage in oxygen delivery.

62. Oxygen is taken into the blood in the lungs. Men have greater capability to take in oxygen for multiple reasons. "**[L]ung capacity** [is] larger in men because of a lower diaphragm placement due to Y-chromosome genetic determinants." (Knox 2019 at 397.) Supporting larger lung capacity, men have "greater cross-sectional area of the trachea"; that is, they can simply move more air in and out of their lungs in a given time. (Hilton 2021 at 201.)

63. More, male lungs provide superior oxygen exchange even for a given volume: "The greater lung volume is complemented by testosterone-driven **enhanced alveolar multiplication** rate during the early years of life. Oxygen exchange takes place between the air we breathe and the bloodstream at the alveoli,

so more alveoli allows more oxygen to pass into the bloodstream. Therefore, the greater lung capacity allows more air to be inhaled with each breath. This is coupled with an improved uptake system allowing men to absorb more oxygen." (Knox 2019 at 397.)

64. "Once in the blood, oxygen is carried by haemoglobin. **Haemoglobin concentrations** are directly modulated by testosterone so men have higher levels and can carry more oxygen than women." (Knox 2019 at 397.) "It is well known that levels of circulating hemoglobin are androgen-dependent and consequently higher in men than in women by 12% on average…. Increasing the amount of hemoglobin in the blood has the biological effect of increasing oxygen transport from lungs to tissues, where the increased availability of oxygen enhances aerobic energy expenditure." (Handelsman 2018 at 816.) (See also Lepers 2013 at 853; Handelsman 2017 at 71.) "It may be estimated that as a result the average maximal oxygen transfer will be ~10% greater in men than in women, which has a direct impact on their respective athletic capacities." (Handelsman 2018 at 816.)

65. But the male metabolic advantage is further multiplied by the fact that men are also able to **circulate more blood per second** than are women. "Oxygenated blood is pumped to the active skeletal muscle by the heart. The left ventricle chamber of the heart is the reservoir from which blood is pumped to the body. The larger the left ventricle, the more blood it can hold, and therefore, the more blood can be pumped to the body with each heartbeat, a physiological parameter called 'stroke volume'.The female heart size is, on average, 85% that of a male resulting in the stroke volume of women being around 33% less." (Knox 2018 at 397.) Hilton cites different studies that make the same finding, reporting that men on average can pump 30% more blood through their circulatory system per minute ("cardiac output") than can women. (Hilton 2021 at 202.)

66. Finally, at the cell where the energy release is needed, men appear to have yet another advantage. "Additionally, there is experimental evidence that testosterone increases . . . **mitochondrial biogenesis**, myoglobin expression, and IGF-1 content, which may augment energetic and power generation of skeletal muscular activity." (Handelsman 2018 at 811.)

67. "Putting all of this together, men have a much more efficient cardiovascular and respiratory system." (Knox 2019 at 397.) A widely accepted measurement that reflects the combined effects of all these respiratory, cardiovascular, and metabolic advantages is referred to as "$V0_2max$," which refers to the maximum rate at which an individual can consume oxygen during aerobic

exercise.[7] Looking at 11 separate studies, including both trained and untrained individuals, Pate et al. concluded that men have a 50% higher $V0_2$max than women on average, and a 25% higher $V0_2$max in relation to body weight. (Pate 1984 at 92. See also Hilton 2021 at 202.)

IV. The role of testosterone in the development of male advantages in athletic performance.

68. The following tables of reference ranges for circulating testosterone in males and females are presented to help provide context for some of the subsequent information regarding athletic performance and physical fitness in children, youth, and adults, and regarding testosterone suppression in transwomen and athletic regulations. These data were obtained from the Mayo Clinic Laboratories (available at https://www.mayocliniclabs.com/test-catalog/overview/83686#Clinical-and-Interpretive, accessed January 14, 2022).

Reference ranges for serum testosterone concentrations in males and females.

Age	Males	Females
0 – 5 months	2.6 – 13.9 nmol/l	0.7 – 2.8 nmol/l
6 months – 9 years	0.2 – 0.7 nmol/l	0.2 – 0.7 nmol/l
10 – 11 years	0.2 – 4.5 nmol/l	0.2 – 1.5 nmol/l
12 -13 years	0.2 – 27.7 nmol/l	0.2 – 2.6 nmol/l
14 years	0.2 – 41.6 nmol/l	0.2 – 2.6 nmol/l
15 – 16 years	3.5 – 41.6 nmol/l	0.2 – 2.6 nmol/l
17 – 18 years	10.4 – 41.6 nmol/l	0.7 – 2.6 nmol/l
19 years and older	8.3 – 32.9 nmol/l	0.3 – 2.1 nmol/l

Please note that testosterone concentrations are sometimes expressed in units of ng/dl, and 1 nmol/l = 28.85 ng/dl.

69. Tanner Stages can be used to help evaluate the onset and progression of puberty and may be more helpful in evaluating normal testosterone concentrations than age in adolescents. "Puberty onset (transition from Tanner stage I to Tanner stage II) occurs for boys at a median age of 11.5 years and for girls

[7] $V0_2$max is "based on hemoglobin concentration, total blood volume, maximal stroke volume, cardiac size/mass/compliance, skeletal muscle blood flow, capillary density, and mitochondrial content." International Statement, *The Role of Testosterone in Athletic Performance* (January 2019), available at https://law.duke.edu/sites/default/files/centers/sportslaw/Experts_T_Statement_2019.pdf.

at a median age of 10.5 years. . . . Progression through Tanner stages is variable. Tanner stage V (young adult) should be reached by age 18." (https://www.mayocliniclabs.com/test-catalog/overview/83686#Clinical-and-Interpretive, accessed January 14, 2022).

Reference Ranges for serum testosterone concentrations by Tanner stage

Tanner Stage	Males	Females
I (prepubertal)	0.2 – 0.7 nmol/l	0.7 – 0.7 nmol/l
II	0.3 – 2.3 nmo/l	0.2 – 1.6 nmol/l
III	0.9 – 27.7 nmol/l	0.6 – 2.6 nmol/l
IV	2.9 – 41.6 nmol/l	0.7 – 2.6 nmol/l
V (young adult)	10.4 – 32.9 nmol/	0.4 – 2.1 nmol/l

70. Senefeld et al. (2020 at 99) state that "Data on testosterone levels in children and adolescents segregated by sex are scarce and based on convenience samples or assays with limited sensitivity and accuracy." They therefore "analyzed the timing of the onset and magnitude of the divergence in testosterone in youths aged 6 to 20 years by sex using a highly accurate assay" (isotope dilution liquid chromatography tandem mass spectrometry). Senefeld observed a significant difference beginning at age 11, which is to say about fifth grade.

Serum testosterone concentrations (nmol/L) in youths aged 6 to 20 years measured using isotope dilution liquid chromatography tandem mass spectrometry (Senefeld et al. ,2020, at 99)

	Boys			Girls		
Age (y)	5th	50th	95th	5th	50th	95th
6	0.0	0.1	0.2	0.0	0.1	0.2
7	0.0	0.1	0.2	0.0	0.1	0.3
8	0.0	0.1	0.3	0.0	0.1	0.3
9	0.0	0.1	0.3	0.1	0.2	0.6
10	0.1	0.2	2.6	0.1	0.3	0.9
11	0.1	0.5	11.3	0.2	0.5	1.3
12	0.3	3.6	17.2	0.2	0.7	1.4
13	0.6	9.2	21.5	0.3	0.8	1.5
14	2.2	11.9	24.2	0.3	0.8	1.6
15	4.9	13.2	25.8	0.4	0.8	1.8
16	5.2	14.9	24.1	0.4	0.9	2.0
17	7.6	15.4	27.0	0.5	1.0	2.0
18	9.2	16.3	25.5	0.4	0.9	2.1
19	8.1	17.2	27.9	0.4	0.9	2.3
20	6.5	17.9	29.9	0.4	1.0	3.4

A. Boys exhibit advantages in athletic performance even before puberty.

71. It is often said or assumed that boys enjoy no significant athletic advantage over girls before puberty. However, this is not true. Writing in their seminal work on the physiology of elite young female athletes, McManus and Armstrong (2011) reviewed the differences between boys and girls regarding bone density, body composition, cardiovascular function, metabolic function, and other physiologic factors that can influence athletic performance. They stated, "At birth, boys tend to have a greater lean mass than girls. This difference remains small but detectable throughout childhood with about a 10% greater lean mass in boys than girls prior to puberty." (28) "Sexual dimorphism underlies much of the physiologic response to exercise," and most importantly these authors concluded that, "Young girl athletes are not simply smaller, less muscular boys." (23)

72. Certainly, boys' physiological and performance advantages increase rapidly from the beginning of puberty until around age 17-19. But much data and multiple studies show that significant physiological differences, and significant male athletic performance advantages in certain areas, exist before significant developmental changes associated with male puberty have occurred.

73. Starting at birth, girls have more body fat and less fat-free mass than boys. Davis et al. (2019) in an evaluation of 602 infants reported that at birth and age 5 months, infant boys have larger total body mass, body length, and fat-free mass while having lower percent body fat than infant girls. In an evaluation of 20 boys and 20 girls ages 3-8 years old, matched for age, height, and body weight Taylor et al. (Taylor 1997) reported that the "boys had significantly less fat, a lower % body fat and a higher bone-free lean tissue mass than the girls" when "expressed as a percentage of the average fat mass of the boys", the girls' fat mass was 52% higher than the boys "…while the bone-free lean tissue mass was 9% lower" (at 1083.) In an evaluation of 376 prepubertal [Tanner Stage 1] boys and girls, Taylor et al. (2010) observed that the boys had 21.6% more lean mass, and 13% less body fat (when expressed as percent of total body mass) than did the girls. In a review of 22 peer reviewed publications on the topic, Staiano and Katzmarzyk (2012) conclude that "… girls have more T[otal]B[ody]F[at] than boys throughout childhood and adolescence. (at 4.)

74. In the seminal textbook, *Growth, Maturation, and Physical Activity*, Malina et al. (2004) present a summary of data from Gauthier et al. (1983) which present data from "a national sample of Canadian children and youth" demonstrating that from ages 7 to17, boys have a higher aerobic power output than do girls of the same ages when exercise intensity is measured using heart rate

(Malina at 242.) That is to say, that at a heart rate of 130 beats per minute, or 150, or 170, a 7 to 17 year old boy should be able to run, bike, or swim faster than a similarly aged girl.

75. Considerable data from school-based fitness testing exists showing that prepubertal boys outperform comparably aged girls in tests of muscular strength, muscular endurance, and running speed. These sex-based differences in physical fitness are relevant to the current issue of sex-based sports categories because, as stated by Lesinski et al. (2020), in an evaluation "of 703 male and female elite young athletes aged 8–18" (1) "fitness development precedes sports specialization" (2) and further observed that "males outperformed females in C[ounter]M[ovement]J[ump], D[rop]J[ump], C[hange]o[f]D[irection speed] performances and hand grip strength." (5).

76. Tambalis et al. (2016) states that "based on a large data set comprising 424,328 test performances" (736) using standing long jump to measure lower body explosive power, sit and reach to measure flexibility, timed 30 second sit ups to measure abdominal and hip flexor muscle endurance, 10 x 5 meter shuttle run to evaluate speed and agility, and multi-stage 20 meter shuttle run test to estimate aerobic performance (738). "For each of the fitness tests, performance was better in boys compared with girls ($p < 0.001$), except for the S[it and] R[each] test ($p < 0.001$)." (739) In order to illustrate that the findings of Tambalis (2016) are not unique to children in Greece, the authors state "Our findings are in accordance with recent studies from Latvia [ ] Portugal [ ] and Australia [Catley & Tomkinson (2013)]."(744).

77. The 20-m multistage fitness test is a commonly used maximal running aerobic fitness test used in the Eurofit Physical Fitness Test Battery and the FitnessGram Physical Fitness test. It is also known as the 20-meter shuttle run test, PACER test, or beep test (among other names; this is not the same test as the shuttle run in the Presidential Fitness Test). This test involves continuous running between two lines 20 meters apart in time to recorded beeps. The participants stand behind one of the lines facing the second line and begin running when instructed by the recording. The speed at the start is quite slow. The subject continues running between the two lines, turning when signaled by the recorded beeps. After about one minute, a sound indicates an increase in speed, and the beeps will be closer together. This continues each minute (level). If the line is reached before the beep sounds, the subject must wait until the beep sounds before continuing. If the line is not reached before the beep sounds, the subject is given a warning and must continue to run to the line, then turn and try to catch up with the pace within two more 'beeps'. The subject is given a warning the first time they fail to reach the line (within 2 meters) and eliminated after the second warning.

78. To illustrate the sex-based performance differences observed by Tambalis, I have prepared the following table showing the number of laps completed in the 20 m shuttle run for children ages 6-18 years for the low, middle, and top decile (Tambalis 2016 at 740 & 742), and have calculated the percent difference between the boys and girls using the same equation as Millard-Stafford (2018).

Performance difference between boys and girls ÷ Girls performance

Number of laps completed in the 20m shuttle run for children ages 6-18 years

	Male			Female			Male-Female % Difference		
Age	10th %ile	50th %ile	90th %ile	10th %ile	50th %ile	90th %ile	10th %ile	50th %ile	90th %ile
6	4	14	31	4.0	12.0	26.0	0.0%	16.7%	19.2%
7	8	18	38	8.0	15.0	29.0	0.0%	20.0%	31.0%
8	9	23	47	9.0	18.0	34.0	0.0%	27.8%	38.2%
9	11	28	53	10.0	20.0	40.0	10.0%	40.0%	32.5%
10	12	31	58	11.0	23.0	43.0	9.1%	34.8%	34.9%
11	15	36	64	12.0	26.0	48.0	25.0%	38.5%	33.3%
12	15	39	69	12.0	26.0	49.0	25.0%	50.0%	40.8%
13	16	44	76	12.0	26.0	50.0	33.3%	69.2%	52.0%
14	19	50	85	12.0	26.0	50.0	58.3%	92.3%	70.0%
15	20	53	90	12.0	25.0	47.0	66.7%	112.0%	91.5%
16	20	54	90	11.0	24.0	45.0	81.8%	125.0%	100.0%
17	18	50	86	10.0	23.0	50.0	80.0%	117.4%	72.0%
18	13	48	87	8.0	23.0	39.5	62.5%	108.7%	120.3%

79. The Presidential Fitness Test was widely used in schools in the United States from the late 1950s until 2013 (when it was phased out in favor of the Presidential Youth Fitness Program and FitnessGram, both of which focus on health-related physical fitness and do not present data in percentiles). Students participating in the Presidential Fitness Test could receive "The National Physical Fitness Award" for performance equal to the 50th percentile in five areas of the fitness test, "while performance equal to the 85th percentile could receive the Presidential Physical Fitness Award." Tables presenting the 50th and 85th percentiles for the Presidential Fitness Test for males and females ages 6 – 17, and differences in performance between males and females, for curl-ups, shuttle run, 1 mile run, push-ups, and pull-ups appear in the Appendix.

80. For both the 50th percentile (The National Physical Fitness Award) and the 85th percentile (Presidential Physical Fitness Award), with the exception of curl-ups in 6-year-old children, boys outperform girls. The difference in pull-ups for the 85th percentile for ages 7 through 17 are particularly informative with boys

outperforming girls by 100% – 1200%, highlighting the advantages in upper body strength in males.

81. A very recent literature review commissioned by the five United Kingdom governmental Sport Councils concluded that while "[i]t is often assumed that children have similar physical capacity regardless of their sex, . . . large-scale data reports on children from the age of six show that young males have significant advantage in cardiovascular endurance, muscular strength, muscular endurance, speed/agility and power tests," although they "score lower on flexibility tests." (UK Sports Councils' Literature Review 2021 at 3.)

82. Hilton et al., also writing in 2021, reached the same conclusion: "An extensive review of fitness data from over 85,000 Australian children aged 9–17 years old showed that, compared with 9-year-old females, 9-year-old males were faster over short sprints (9.8%) and 1 mile (16.6%), could jump 9.5% further from a standing start (a test of explosive power), could complete 33% more push-ups in 30 [seconds] and had 13.8% stronger grip." (Hilton 2021 at 201, summarizing the findings of Catley & Tomkinson 2013.)

83. The following data are taken from Catley & Tomkinson (2013 at 101) showing the low, middle, and top decile for 1.6 km run (1.0 mile) run time for 11,423 girls and boys ages 9-17.

1.6 km run (1.0 mile) run time for 11,423 girls and boys ages 9-17

	Male			Female			Male-Female % Difference		
Age	10th %ile	50th %ile	90th %ile	10th %ile	50th %ile	90th %ile	10th %ile	50th %ile	90th %ile
9	684	522	423	769.0	609.0	499.0	11.1%	14.3%	15.2%
10	666	511	420	759.0	600.0	494.0	12.3%	14.8%	15.0%
11	646	500	416	741.0	586.0	483.0	12.8%	14.7%	13.9%
12	621	485	408	726.0	575.0	474.0	14.5%	15.7%	13.9%
13	587	465	395	716.0	569.0	469.0	18.0%	18.3%	15.8%
14	556	446	382	711.0	567.0	468.0	21.8%	21.3%	18.4%
15	531	432	373	710.0	570.0	469.0	25.2%	24.2%	20.5%
16	514	423	366	710.0	573.0	471.0	27.6%	26.2%	22.3%
17	500	417	362	708.0	575.0	471.0	29.4%	27.5%	23.1%

84. Tomkinson et al. (2018) performed a similarly extensive analysis of literally millions of measurements of a variety of strength and agility metrics from the "Eurofit" test battery on children from 30 European countries. They provide detailed results for each metric, broken out by decile. Sampling the low, middle, and top decile, 9-year-old boys performed better than 9-year-old girls by between 6.5%

and 9.7% in the standing broad jump; from 11.4% to 16.1% better in handgrip; and from 45.5% to 49.7% better in the "bent-arm hang." (Tomkinson 2018.)

85. The Bent Arm Hang test is a measure of upper body muscular strength and endurance used in the Eurofit Physical Fitness Test Battery. To perform the Bent Arm Hang, the child is assisted into position with the body lifted to a height so that the chin is level with the horizontal bar (like a pull up bar). The bar is grasped with the palms facing away from body and the hands shoulder width apart. The timing starts when the child is released. The child then attempts to hold this position for as long as possible. Timing stops when the child's chin falls below the level of the bar, or the head is tilted backward to enable the chin to stay level with the bar.

86. Using data from Tomkinson (2018; table 7 at 1452), the following table sampling the low, middle, and top decile for bent arm hang for 9- to 17-year-old children can be constructed:

Bent Arm Hang time (in seconds) for children ages 9 - 17 years

	Male			Female			Male-Female % Difference		
	10th	50th	90th	10th	50th	90th	10th	50th	90th
Age	%ile	%ile	%ile	%ile	%ile	%ile	%ile	%ile	%ile
9	2.13	7.48	25.36	1.43	5.14	16.94	48.95%	45.53%	49.70%
10	2.25	7.92	26.62	1.42	5.15	17.06	58.45%	53.79%	56.04%
11	2.35	8.32	27.73	1.42	5.16	17.18	65.49%	61.24%	61.41%
12	2.48	8.79	28.99	1.41	5.17	17.22	75.89%	70.02%	68.35%
13	2.77	9.81	31.57	1.41	5.18	17.33	96.45%	89.38%	82.17%
14	3.67	12.70	38.39	1.40	5.23	17.83	162.14%	142.83%	115.31%
15	5.40	17.43	47.44	1.38	5.35	18.80	291.30%	225.79%	152.34%
16	7.39	21.75	53.13	1.38	5.63	20.57	435.51%	286.32%	158.29%
17	9.03	24.46	54.66	1.43	6.16	23.61	531.47%	297.08%	131.51%

87. Evaluating these data, a 9-year-old boy in the 50th percentile (that is to say a 9-year-old boy of average upper body muscular strength and endurance) will perform better in the bent arm hang test than 9 through 17-year-old girls in the 50th percentile. Similarly, a 9-year-old boy in the 90th percentile will perform better in the bent arm hang test than 9 through 17-year-old girls in the 90th percentile.

88. Using data from Tomkinson et al. (2017; table 1 at 1549), the following table sampling the low, middle, and top decile for running speed in the last stage of the 20 m shuttle run for 9- to 17-year-old children can be constructed.

20 m shuttle Running speed (km/h at the last completed stage)

	Male			Female			Male-Female % Difference		
Age	10th %ile	50th %ile	90th %ile	10th %ile	50th %ile	90th %ile	10th %ile	50th %ile	90th %ile
9	8.94	10.03	11.13	8.82	9.72	10.61	1.36%	3.19%	4.90%
10	8.95	10.13	11.31	8.76	9.75	10.74	2.17%	3.90%	5.31%
11	8.97	10.25	11.53	8.72	9.78	10.85	2.87%	4.81%	6.27%
12	9.05	10.47	11.89	8.69	9.83	10.95	4.14%	6.51%	8.58%
13	9.18	10.73	12.29	8.69	9.86	11.03	5.64%	8.82%	11.42%
14	9.32	10.96	12.61	8.70	9.89	11.07	7.13%	10.82%	13.91%
15	9.42	11.13	12.84	8.70	9.91	11.11	8.28%	12.31%	15.57%
16	9.51	11.27	13.03	8.71	9.93	11.14	9.18%	13.49%	16.97%
17	9.60	11.41	13.23	8.72	9.96	11.09	10.09%	14.56%	19.30%

89. Evaluating these data, a 9-year-old boy in the 50th percentile (that is to say a 9-year-old boy of average running speed) will run faster in the final stage of the 20 m shuttle run than 9 through 17-year-old girls in the 50th percentile. Similarly, a 9-year-old boy in the 90th percentile will run faster in the final stage of the 20-m shuttle run than 9 through 15, and 17-year-old girls in the 90th percentile and will be 0.01 km/h (0.01%) slower than 16-year-old girls in the 90th percentile.

90. Just using these two examples for bent arm hang and 20-m shuttle running speed (Tomkinson 2107, Tomkinson 2018) based on large sample sizes (thus having tremendous statistical power) it becomes apparent that a 9-year-old boy will be very likely to outperform similarly trained girls of his own age and older in athletic events involving upper body muscle strength and/or running speed.

91. Another report published in 2014 analyzed physical fitness measurements of 10,302 children aged 6 -10.9 years of age, from the European countries of Sweden, Germany, Hungary, Italy, Cyprus, Spain, Belgium, and Estonia. (De Miguel-Etayo et al. 2014.) The authors observed "… that boys performed better than girls in speed, lower- and upper-limb strength and cardiorespiratory fitness." (57) The data showed that for children of comparable fitness (i.e. 99th percentile boys vs. 99th percentile girls, 50th percentile boys vs. 50th percentile girls, etc.) the boys outperform the girls at every age in measurements of handgrip strength, standing long jump, 20-m shuttle run, and predicted VO_2max (pages 63 and 64, respectively). For clarification, VO_2max is the maximal oxygen consumption, which correlates to 30-40% of success in endurance sports.

92. The standing long jump, also called the Broad Jump, is a common and easy to administer test of explosive leg power used in the Eurofit Physical Fitness Test Battery and in the NFL Combine. In the standing long jump, the participant stands behind a line marked on the ground with feet slightly apart. A two-foot take-

off and landing is used, with swinging of the arms and bending of the knees to provide forward drive. The participant attempts to jump as far as possible, landing on both feet without falling backwards. The measurement is taken from takeoff line to the nearest point of contact on the landing (back of the heels) with the best of three attempts being scored.

93. Using data from De Miguel-Etayo et al. (2014, table 3 at 61), which analyzed physical fitness measurements of 10,302 children aged 6 -10.9 years of age, from the European countries of Sweden, Germany, Hungary, Italy, Cyprus, Spain, Belgium, and Estonia, the following table sampling the low, middle, and top decile for standing long jump for 6- to 9-year-old children can be constructed:

Standing Broad Jump (cm) for children ages 6-9 years

	Male			Female			Male-Female % Difference		
Age	10th %ile	50th %ile	90th %ile	10th %ile	50th %ile	90th %ile	10th %ile	50th %ile	90th %ile
6-<6.5	77.3	103.0	125.3	69.1	93.8	116.7	11.9%	9.8%	7.4%
6.5-<7	82.1	108.0	130.7	73.6	98.7	121.9	11.5%	9.4%	7.2%
7-<7.5	86.8	113.1	136.2	78.2	103.5	127.0	11.0%	9.3%	7.2%
7.5-<8	91.7	118.2	141.6	82.8	108.3	132.1	10.7%	9.1%	7.2%
8-<8.5	96.5	123.3	146.9	87.5	113.1	137.1	10.3%	9.0%	7.1%
8.5-<9	101.5	128.3	152.2	92.3	118.0	142.1	10.0%	8.7%	7.1%

94. Another study of Eurofit results for over 400,000 Greek children reported similar results. "[C]ompared with 6-year-old females, 6-year-old males completed 16.6% more shuttle runs in a given time and could jump 9.7% further from a standing position." (Hilton 2021 at 201, summarizing findings of Tambalis et al. 2016.)

95. Silverman (2011) gathered hand grip data, broken out by age and sex, from a number of studies. Looking only at the nine direct comparisons within individual studies tabulated by Silverman for children aged 7 or younger, in eight of these the boys had strength advantages of between 13 and 28 percent, with the remaining outlier recording only a 4% advantage for 7-year-old boys. (Silverman 2011 Table 1.)

96. To help illustrate the importance of one specific measure of physical fitness in athletic performance, Pocek (2021) stated that to be successful, volleyball "players should distinguish themselves, besides in skill level, in terms of above-average body height, upper and lower muscular power, speed, and agility. Vertical jump is a fundamental part of the spike, block, and serve." (8377) Pocek further stated that "relative vertical jumping ability is of great importance in volleyball regardless of the players' position, while absolute vertical jump values can differentiate players not only in terms of player position and performance level but in their career trajectories." (8382)

97. Using data from Ramírez-Vélez (2017; table 2 at 994) which analyzed vertical jump measurements of 7,614 healthy Colombian schoolchildren aged 9 -17.9 years of age the following table sampling the low, middle, and top decile for vertical jump can be constructed:

Vertical Jump Height (cm) for children ages 9 - 17 years

	Male			Female			Male-Female % Difference		
Age	10th %ile	50th %ile	90th %ile	10th %ile	50th %ile	90th %ile	10th %ile	50th %ile	90th %ile
9	18.0	24.0	29.5	16.0	22.3	29.0	12.5%	7.6%	1.7%
10	19.5	25.0	32.0	18.0	24.0	29.5	8.3%	4.2%	8.5%
11	21.0	27.0	32.5	19.5	25.0	31.0	7.7%	8.0%	4.8%
12	22.0	27.5	34.5	20.0	25.5	31.5	10.0%	7.8%	9.5%
13	23.0	30.5	39.0	19.0	25.5	32.0	21.1%	19.6%	21.9%
14	23.5	32.0	41.5	20.0	25.5	32.5	17.5%	25.5%	27.7%
15	26.0	35.5	43.0	20.2	26.0	32.5	28.7%	36.5%	32.3%
16	28.0	36.5	45.1	20.5	26.5	33.0	36.6%	37.7%	36.7%
17	28.0	38.0	47.0	21.5	27.0	35.0	30.2%	40.7%	34.3%

98. Similarly, using data from Taylor (2010; table 2, at 869) which analyzed vertical jump measurements of 1,845 children aged 10 -15 years in primary and secondary schools in the East of England, the following table sampling the low, middle, and top decile for vertical jump can be constructed:

Vertical Jump Height (cm) for children 10 -15 years

	Male			Female			Male-Female % Difference		
Age	10th %ile	50th %ile	90th %ile	10th %ile	50th %ile	90th %ile	10th %ile	50th %ile	90th %ile
10	16.00	21.00	29.00	15.00	22.00	27.00	6.7%	-4.5%	7.4%
11	20.00	27.00	34.00	19.00	25.00	32.00	5.3%	8.0%	6.3%
12	23.00	30.00	37.00	21.00	27.00	33.00	9.5%	11.1%	12.1%
13	23.00	32.00	40.00	21.00	26.00	34.00	9.5%	23.1%	17.6%
14	26.00	36.00	44.00	21.00	28.00	34.00	23.8%	28.6%	29.4%
15	29.00	37.00	44.00	21.00	28.00	39.00	38.1%	32.1%	12.8%

99. As can be seen from the data from Ramírez-Vélez (2017) and Taylor (2010), males consistently outperform females of the same age and percentile in vertical jump height. Both sets of data show that an 11-year-old boy in the 90th percentile for vertical jump height will outperform girls in the 90th percentile at ages 11 and 12, and will be equal to girls at ages 13, 14, and possibly 15. These data indicate that an 11-year-old would be likely to have an advantage over girls of the same age and older in sports such as volleyball where "absolute vertical jump

values can differentiate players not only in terms of player position and performance level but in their career trajectories." (Pocek 2021 at 8382.)

100. Boys also enjoy an advantage in throwing well before puberty. "Boys exceed girls in throwing velocity by 1.5 standard deviation units as early as 4 to 7 years of age. . . The boys exceed the girls [in throwing distance] by 1.5 standard deviation units as early as 2 to 4 years of age." (Thomas 1985 at 266.) This means that the average 4- to 7-year-old boy can out-throw approximately 87% of all girls of his age.

101. Record data from USA Track & Field indicate that boys outperform girls in track events even in the youngest age group for whom records are kept (age 8 and under).[8]

American Youth Outdoor Track & Field Record times in age groups 8 and under (time in seconds)

Event	Boys	Girls	Difference
100M	13.65	13.78	0.95%
200M	27.32	28.21	3.26%
400M	62.48	66.10	5.79%
800M	148.59	158.11	6.41%
1500M	308.52	314.72	2.01%
Mean			3.68%

102. Looking at the best times within a single year shows a similar pattern of consistent advantage for even young boys. I consider the 2018 USATF Region 8 Junior Olympic Championships for the youngest age group (8 and under).[9]

2018 USATF Region 8 Junior Olympic Championships for the 8 and under age group

Event	Boys	Girls	Difference
100M	15.11	15.64	3.51%
200M	30.79	33.58	9.06%
400M	71.12	77.32	8.72%
800M	174.28	180.48	3.56%
1500M	351.43	382.47	8.83%
Mean			6.74%

[8] http://legacy.usatf.org/statistics/records/view.asp?division=american&location=outdoor%20track%20%26%20field&age=youth&sport=TF

[9] https://www.athletic.net/TrackAndField/meet/384619/results/m/1/100m

[9] https://www.athletic.net/CrossCountry/Division/List.aspx?DivID=62211

103. Using Athletic.net[9], for 2021 Cross Country and Track & Field data for boys and girls in the 7-8, 9-10, and 11-12 year old age group club reports, and for 5th, 6th, and 7th grade for the whole United States I have compiled the tables for 3000 m events, and for the 100-m, 200-m, 400-m, 800-m, 1600-m, 3000-m, long jump, and high jump Track and Field data to illustrate the differences in individual athletic performance between boys and girls, all of which appear in the Appendix. The pattern of males outperforming females was consistent across events, with rare anomalies, only varying in the magnitude of difference between males and females.

104. Similarly, using Athletic.net, for 2021 Track & Field data for boys and girls in the 6th grade for the state of West Virginia, I have compiled tables, which appear in the appendix, comparing the performance of boys and girls for the 100-m, 200-m, 400-m, 800-m, 1600-m, and 3200-m running events in which the 1st place boy was consistently faster than the 1st place girl, and the average performance of the top 10 boys was consistently faster than the average performance for the top 10 girls. Based on the finishing times for the 1st place boy and girl in the 6th grade in West Virginia 1600-m race, and extrapolating the running time to a running pace, the 1st place boy would be expected to finish 273 m in front of the 1st place girl, which is 2/3 of a lap on a standard 400-m track, or almost the length of 3 football fields. In comparison, the 1st place boy would finish 66 m in front of the 2nd place boy, and the 1st place girl would finish 20 m in front of the 2nd place girl.

Top 10 West Virginia boys and girls 6th grade outdoor track for 2021 (time in seconds)

	100 m			200 m			400 m		
	Boys	Girls		Boys	Girls		Boys	Girls	
1	13.18	14.00	Difference	26.97	29.28	Difference	60.04	65.50	Difference
2	13.94	14.19	between #1	29.38	30.05	between #1	60.48	67.51	between #1
3	14.07	14.47	boy and # 1	30.09	30.34	boy and # 1	66.26	68.60	boy and # 1
4	14.44	14.86	girl	30.10	30.73	girl	67.12	70.43	girl
5	14.46	14.92	5.9%	30.24	31.00	7.9%	68.28	71.09	8.3%
6	14.53	15.04		30.38	31.04		68.36	71.38	
7	14.75	15.04	Average	30.54	31.10	Average	69.65	73.61	Average
8	14.78	15.20	difference	30.69	31.10	difference	69.70	73.87	difference
			boys vs			boys vs			boys vs
9	14.84	15.25	girls	30.74	31.35	girls	69.76	74.07	girls
10	14.94	15.28	2.9%	30.99	31.64	2.4%	70.63	74.21	5.6%

	800 m			1600 m			3200 m		
	Boys	Girls		Boys	Girls		Boys	Girls	
1	147.2	164.5	Difference	305.5	357.8	Difference	678.4	776.6	Difference
2	147.9	166.1	between #1	318.1	361.6	between #1	750.0	809.8	between #1
3	152.1	167.2	boy and # 1	322.0	379.8	boy and # 1	763.3	811.0	boy and # 1
4	153.2	170.2	girl	336.0	385.2	girl	766.3	843.0	girl
5	155.3	171.0	10.6%	342.2	390.2	14.6%	771.7	850.6	12.7%
6	159.5	171.5		348.0	392.0		782.8	852.1	
7	159.9	174.8	Average	356.6	393.3	Average	794.1	858.0	Average
8	167.8	174.9	difference	357.5	395.7	difference	803.0	862.8	difference
			boys vs			boys vs			boys vs
9	169.2	175.9	girls	362.4	398.1	girls	812.1	869.9	girls
10	172.6	177.6	7.5%	366.0	403.2	11.5%	814.3	883.3	8.1%

105. As serious runners will recognize, differences of 3%, 5%, or 8% are not easily overcome. During track competition the difference between first and second place, or second and third place, or third and fourth place (and so on) is often 0.5 - 0.7%, with some contests being determined by as little as 0.01%.

106. I performed an analysis of running events (consisting of the 100-m, 200-m, 400-m, 800-m, 1500-m, 5000-m, and 10,000-m) in the Division 1, Division 2, and Division 3 NCAA Outdoor championships for the years of 2010-2019: the mean difference between 1st and 2nd place was 0.48% for men and 0.86% for women. The mean difference between 2nd and 3rd place was 0.46% for men and 0.57% for women. The mean difference between 3rd place and 4th place was 0.31% for men and 0.44% for women. The mean difference between 1st place and 8th place (the last place to earn the title of All American) was 2.65% for men and 3.77% for women. (Brown et al. Unpublished observations, to be presented at the 2022 Annual Meeting of the American College of Sports Medicine.)

107. A common response to empirical data showing pre-pubertal performance advantages in boys is the argument that the performance of boys may

represent a social–cultural bias for boys to be more physically active, rather than representing inherent sex-based differences in pre-pubertal physical fitness. However, the younger the age at which such differences are observed, and the more egalitarian the culture within which they are observed, the less plausible this hypothesis becomes. Eiberg et al. (2005) measured body composition, VO_2max, and physical activity in 366 Danish boys and 332 Danish girls between the ages of 6 and 7 years old. Their observations indicated that VO_2max was 11% higher in boys than girls. When expressed relative to body mass the boys' VO_2max was still 8% higher than the girls. The authors stated that "…no differences in haemoglobin or sex hormones[10] have been reported in this age group," yet "… when children with the same VO_2max were compared, boys were still more active, and in boys and girls with the same P[hysical] A[ctivity] level, boys were fitter." (728). These data indicate that in pre-pubertal children, in a very egalitarian culture regarding gender roles and gender norms, boys still have a measurable advantage in regards to aerobic fitness when known physiological and physical activity differences are accounted for.

108. And, as I have mentioned above, even by the age of 4 or 5, in a ruler-drop test, boys exhibit 4% to 6% faster reaction times than girls. (Latorre-Roman 2018.)

109. When looking at the data on testosterone concentrations previously presented, along with the data on physical fitness and athletic performance presented, boys have advantages in athletic performance and physical fitness before there are marked differences in testosterone concentrations between boys and girls.

110. For the most part, the data I review above relate to pre-pubertal children. Today, we also face the question of inclusion in female athletics of males who have undergone "puberty suppression." The UK Sport Councils Literature Review notes that, "In the UK, so-called 'puberty blockers' are generally not used until Tanner maturation stage 2-3 (i.e. after puberty has progressed into early sexual maturation)." (9.) While it is outside my expertise, my understanding is that current practice with regard to administration of puberty blockers is similar in the Unites States. Tanner stages 2 and 3 generally encompass an age range from 10 to 14 years old, with significant differences between individuals. Like the authors of the UK Sports Council Literature Review, I am "not aware of research" directly addressing the implications for athletic capability of the use of puberty blockers. (UK Sport Councils Literature Review at 9.) As Handelsman documents, the male advantage begins to increase rapidly–along with testosterone levels–at about age 11, or "very closely aligned to the timing of the onset of male puberty." (Handelsman 2017.) It seems likely that males who have undergone puberty suppression will

[10] This term would include testosterone and estrogens.

have physiological and performance advantages over females somewhere between those possessed by pre-pubertal boys, and those who have gone through full male puberty, with the degree of advantage in individual cases depending on that individual's development and the timing of the start of puberty blockade.

111. Tack et al. (2018) observed that in 21 transgender-identifying biological males, administration of antiandrogens for 5-31 months (commencing at 16.3 ± 1.21 years of age), resulted in nearly, but not completely, halting of normal age-related *increases* in muscle strength. Importantly, muscle strength did not decrease after administration of antiandrogens. Rather, despite antiandrogens, these individuals retained higher muscle mass, lower percent body fat, higher body mass, higher body height, and higher grip strength than comparable girls of the same age. (Supplemental tables).

112. Klaver et al. (2018 at 256) demonstrated that the use of puberty blockers did not eliminate the differences in lean body mass between biological male and female teenagers. Subsequent use of puberty blockers combined with cross-sex hormone use (in the same subjects) still did not eliminate the differences in lean body mass between biological male and female teenagers. Furthermore, by 22 years of age, the use of puberty blockers, and then puberty blockers combined with cross sex hormones, and then cross hormone therapy alone for over 8 total years of treatment still had not eliminated the difference in lean body mass between biological males and females.

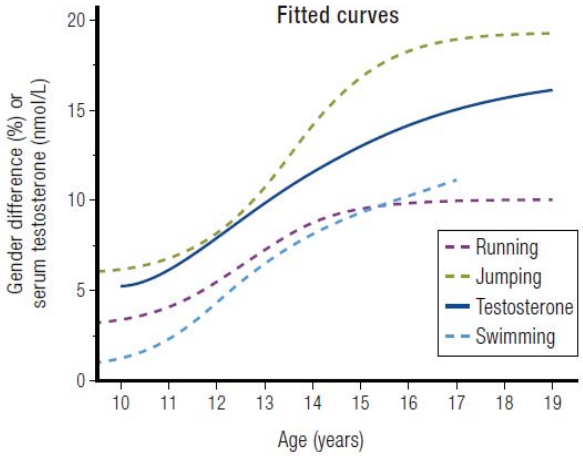
113. The effects of puberty blockers on growth and development, including muscle mass, fat mass, or other factors that influence athletic performance, have been minimally researched. Indeed, Klaver et al. (2018) is the only published research that I am aware of that has evaluated the use of puberty blockers on body composition. As stated by Roberts and Carswell (2021), "No published studies have fully characterized the impact of [puberty blockers on] final adult height or current height in an actively growing TGD youth." (1680). Likewise, "[n]o published literature provides guidance on how to best predict the final adult height for TGD youth receiving GnRHa and gender- affirming hormonal treatment." (1681). Thus, the effect of prescribing puberty blockers to a male child before the onset of puberty on the physical components of athletic performance is largely unknown. There is not any scientific evidence that such treatment eliminates the pre-existing performance advantages that prepubertal males have over prepubertal females.

B. The rapid increase in testosterone across male puberty drives characteristic male physiological changes and the increasing performance advantages.

114. While boys exhibit some performance advantage even before puberty, it is both true and well known to common experience that the male advantage

increases rapidly, and becomes much larger, as boys undergo puberty and become men. Empirically, this can be seen by contrasting the modest advantages reviewed immediately above against the large performance advantages enjoyed by men that I have detailed in Section II.

115. Multiple studies (along with common observation) document that the male performance advantage begins to increase during the early years of puberty, and then increases rapidly across the middle years of puberty (about ages 12-16). (Tønnessen 2015; Handelsman 2018 at 812-813.) Since it is well known that testosterone levels increase by more than an order of magnitude in boys across puberty, it is unsurprising that Handelsman finds that these increases in male performance advantage correlate to increasing testosterone levels, as presented in his chart reproduced below. (Handelsman 2018 at 812-13.)



116. Handelsman further finds that certain characteristic male changes including boys' increase in muscle mass do not begin at all until "circulating testosterone concentrations rise into the range of males at mid-puberty, which are higher than in women at any age." (Handelsman 2018 at 810.)

117. Knox et al. (2019) agree that "[i]t is well recognised that testosterone contributes to physiological factors including body composition, skeletal structure, and the cardiovascular and respiratory systems across the life span, with significant influence during the pubertal period. These physiological factors underpin strength, speed, and recovery with all three elements required to be competitive in almost all sports." (Knox 2019 at 397.) "High testosterone levels and prior male physiology provide an all-purpose benefit, and a substantial advantage. As the IAAF says, 'To the best of our knowledge, there is no other genetic or biological trait encountered in female athletics that confers such a huge performance advantage.'" (Knox 2019 at 399.)

118. However, the undisputed fact that high (that is, normal male) levels of testosterone drive the characteristically male physiological changes that occur across male puberty does not at all imply that artificially *depressing* testosterone levels after those changes occur will reverse all or most of those changes so as to eliminate the male athletic advantage. This is an empirical question. As it turns out, the answer is that while some normal male characteristics can be changed by means of testosterone suppression, others cannot be, and all the reliable evidence indicates that males retain large athletic advantages even after long-term testosterone suppression.

V. The available evidence shows that suppression of testosterone in a male after puberty has occurred does not substantially eliminate the male athletic advantage.

119. The 2011 "NCAA Policy on Transgender Student-Athlete Participation" requires only that males who identify as transgender be on unspecified and unquantified "testosterone suppression treatment" for "one calendar year" prior to competing in women's events. In supposed justification of this policy, the NCAA's Office of Inclusion asserts that, "It is also important to know that any strength and endurance advantages a transgender woman arguably may have as a result of her prior testosterone levels dissipate after about one year of estrogen or testosterone-suppression therapy." (NCAA 2011 at 8.)

120. Similarly, writing in 2018, Handelsman et al. could speculate that even though some male advantages established during puberty are "fixed and irreversible (bone size)," "[t]he limited available prospective evidence . . . suggests that the advantageous increases in muscle and hemoglobin due to male circulating testosterone concentrations are induced or reversed during the first 12 months." (Handelsman 2018 at 824.)

121. But these assertions or hypotheses of the NCAA and Handelsman are now strongly contradicted by the available science. In this section, I examine what is known about whether suppression of testosterone in males can eliminate the male physiological and performance advantages over females.

A. Empirical studies find that males retain a strong performance advantage even after lengthy testosterone suppression.

122. As my review in Section II indicates, a very large body of literature documents the large performance advantage enjoyed by males across a wide range of athletics. To date, only a limited number of studies have directly measured the effect of testosterone suppression and the administration of female hormones on the athletic performance of males. These studies report that testosterone suppression for a full year (and in some cases much longer) does not come close to eliminating

male advantage in strength (hand grip, leg strength, and arm strength) or running speed.

Hand Grip Strength

123. As I have noted, hand grip strength is a well-accepted proxy for general strength. Multiple separate studies, from separate groups, report that males retain a large advantage in hand strength even after testosterone suppression to female levels.

124. In a longitudinal study, Van Caenegem et al. reported that males who underwent standard testosterone suppression protocols lost only 7% hand strength after 12 months of treatment, and only a cumulative 9% after two years. (Van Caenegem 2015 at 42.) As I note above, on average men exhibit in the neighborhood of 60% greater hand grip strength than women, so these small decreases do not remotely eliminate that advantage. Van Caenegem et al. document that their sample of males who elected testosterone suppression began with less strength than a control male population. Nevertheless, after one year of suppression, their study population still had hand grip only 21% less than the control male population, and thus still far higher than a female population. (Van Caenegem 2015 at 42.)

125. Scharff et al. (2019) measured grip strength in a large cohort of male-to-female subjects from before the start of hormone therapy through one year of hormone therapy. The hormone therapy included suppression of testosterone to less than 2 nml/L "in the majority of the transwomen," (1024), as well as administration of estradiol (1021). These researchers observed a small decrease in grip strength in these subjects over that time (Fig. 2), but mean grip strength of this group remained far higher than mean grip strength of females—specifically, "After 12 months, the median grip strength of transwomen [male-to-female subjects] still falls in the 95th percentile for age-matched females." (1026).

126. Still a third longitudinal study, looking at teen males undergoing testosterone suppression, "noted no change in grip strength after hormonal treatment (average duration 11 months) of 21 transgender girls." (Hilton 2021 at 207, summarizing Tack 2018.)

127. In a fourth study, Lapauw et al. (2008) looked at the extreme case of testosterone suppression by studying a population of 23 biologically male individuals who had undergone at least two years of testosterone suppression, followed by sex reassignment surgery that included "orchidectomy" (that is, surgical castration), and then at least an additional three years before the study date. Comparing this group against a control of age- and height-matched healthy males, the researchers found that the individuals who had gone through testosterone suppression and then surgical castration had an average hand grip (41 kg) that was

24% weaker than the control group of healthy males. But this remains at least 25% *higher* than the average hand-grip strength of biological females as measured by Bohannon et al. (2019).

128. Summarizing these and a few other studies measuring strength loss (in most cases based on hand grip) following testosterone suppression, Harper et al. (2021) conclude that "strength loss with 12 months of [testosterone suppression] . . . ranged from non-significant to 7%. . . . [T]he small decrease in strength in transwomen after 12-36 months of [testosterone suppression] suggests that transwomen likely retain a strength advantage over cisgender women." (Hilton 2021 at 870.)

Arm Strength

129. Lapauw et al. (2008) found that 3 years after surgical castration, preceded by at least two years of testosterone suppression, biologically male subjects had 33% less bicep strength than healthy male controls. (Lapauw (2008) at 1018.) Given that healthy men exhibit between 89% and 109% greater arm strength than healthy women, this leaves a very large residual arm strength advantage over biological women.

130. Roberts et al. have recently published an interesting longitudinal study, one arm of which considered biological males who began testosterone suppression and cross-sex hormones while serving in the United States Air Force. (Roberts 2020.) One measured performance criterion was pushups per minute, which, while not exclusively, primarily tests arm strength under repetition. *Before* treatment, the biological male study subjects who underwent testosterone suppression could do 45% more pushups per minute than the average for all Air Force women under the age of 30 (47.3 vs. 32.5). *After* between one and two years of testosterone suppression, this group could still do 33% more pushups per minute. (Table 4.) Further, the body weight of the study group did not decline at all after one to two years of testosterone suppression (in fact rose slightly) (Table 3), and was approximately 24 pounds (11.0 kg) higher than the average for Air Force women under the age of 30. (Roberts 2020 at 3.) This means that the individuals who had undergone at least one year of testosterone suppression were not only doing 1/3 more pushups per minute, but were lifting significantly more weight with each pushup.

131. After two years of testosterone suppression, the study sample in Roberts et al. was only able to do 6% more pushups per minute than the Air Force female average. But their weight remained unchanged from their pre-treatment starting point, and thus about 24 pounds higher than the Air Force female average. As Roberts et al. explain, "as a group, transwomen weigh more than CW [cis-women]. Thus, transwomen will have a higher power output than CW when

performing an equivalent number of push-ups. Therefore, our study may underestimate the advantage in strength that transwomen have over CW." (Roberts 2020 at 4.)

Leg Strength

132. Wiik et al. (2020), in a longitudinal study that tracked 11 males from the start of testosterone suppression through 12 months after treatment initiation, found that isometric strength levels measured at the knee "were maintained over the [study period]."[11] (808) "At T12 [the conclusion of the one-year study], the absolute levels of strength and muscle volume were greater in [male-to-female subjects] than in . . . CW [women who had not undergone any hormonal therapy]." (Wiik 2020 at 808.) In fact, Wiik et al. reported that "muscle strength after 12 months of testosterone suppression was comparable to baseline strength. As a result, transgender women remained about 50% stronger than . . . a reference group of females." (Hilton 2021 at 207, summarizing Wiik 2020.)

133. Lapauw et al. (2008) found that 3 years after surgical castration, preceded by at least two years of testosterone suppression, subjects had peak knee torque only 25% lower than healthy male controls. (Lapauw 2008 at 1018.) Again, given that healthy males exhibit 54% greater maximum knee torque than healthy females, this leaves these individuals with a large average strength advantage over females even years after sex reassignment surgery.

Running speed

134. The most striking finding of the recent Roberts et al. study concerned running speed over a 1.5 mile distance–a distance that tests midrange endurance. Before suppression, the MtF study group ran 21% faster than the Air Force female average. After at least 2 year of testosterone suppression, these subjects still ran 12% faster than the Air Force female average. (Roberts 2020 Table 4.)

135. The specific experience of the well-known case of NCAA athlete Cece Telfer is consistent with the more statistically meaningful results of Roberts et al., further illustrating that male-to-female transgender treatment does not negate the inherent athletic performance advantages of a post-pubertal male. In 2016 and 2017 Cece Telfer competed as Craig Telfer on the Franklin Pierce University men's track team, being ranked 200th and 390th (respectively) against other NCAA Division 2 men. "Craig" Telfer did not qualify for the National Championships in any events. Telfer did not compete in the 2018 season while undergoing testosterone

[11] Isometric strength measures muscular force production for a given amount of time at a specific joint angle but with no joint movement.

suppression (per NCAA policy). In 2019 Cece Telfer competed on the Franklin Pierce University *women's* team, qualified for the NCAA Division 2 Track and Field National Championships, and placed 1st in the women's 400 meter hurdles and placed third in the women's 100 meter hurdles. (For examples of the media coverage of this please see https://www.washingtontimes.com/news/2019/jun/3/cece-telfer-franklin-pierce-transgenderhurdler-wi/ last accessed May 29, 2020. https://www.newshub.co.nz/home/sport/2019/06/athletics-transgender-woman-cece-telfer-whopreviously-competed-as-a-man-wins-ncaa-track-championship.html (last accessed May 29, 2020.)

136. The table below shows the best collegiate performance times from the combined 2015 and 2016 seasons for Cece Telfer when competing as a man in men's events, and the best collegiate performance times from the 2019 season when competing as a woman in women's events. Comparing the times for the running events (in which male and female athletes run the same distance) there is no statistical difference between Telfer's "before and after" times. Calculating the difference in time between the male and female times, Telfer performed an average of 0.22% *faster* as a female. (Comparing the performance for the hurdle events (marked with H) is of questionable validity due to differences between men's and women's events in hurdle heights and spacing, and distance for the 110m vs. 100 m.) While this is simply one example, and does not represent a controlled experimental analysis, this information provides some evidence that male-to-female transgender treatment does not negate the inherent athletic performance advantages of a postpubertal male. (These times were obtained from https://www.tfrrs.org/athletes/6994616/Franklin_Pierce/CeCe_Telfer.html and https://www.tfrrs.org/athletes/5108308.html, last accessed May 29, 2020).

As Craig Telfer (male athlete)		**As Cece Telfer (female athlete)**	
Event	Time (seconds)	Event	Time (seconds)
55	7.01	55	7.02
60	7.67	60	7.63
100	12.17	100	12.24
200	24.03	200	24.30
400	55.77	400	54.41
55 H †	7.98	55 H†	7.91
60 H †	8.52	60 H†	8.33
110 H†	15.17	100 H†	13.41*
400 H‡	57.34	400 H‡	57.53**

* women's 3rd place, NCAA Division 2 National Championships
** women's 1st place, NCAA Division 2 National Championships
† men's hurdle height is 42 inches with differences in hurdle spacing between men and women
‡ men's hurdle height is 36 inches, women's height is 30 inches with the same spacing between hurdles

137. Similarly, University of Pennsylvania swimmer Lia Thomas began competing in the women's division in the fall of 2021, after previously competing for U. Penn. in the men's division. Thomas has promptly set school, pool, and/or league women's records in 200 yard freestyle, 500 yard freestyle, and 1650 yard freestyle competitions, beating the nearest female in the 1650 yard by an unheard-of 38 seconds.

138. In a pre-peer review article, Senefeld, Coleman, Hunter, and Joyner (doi: https://doi.org/10.1101/2021.12.28.21268483, accessed January 12, 2022) "compared the gender-related differences in performance of a transgender swimmer who competed in both the male and female NCAA (collegiate) categories to the sex-related differences in performance of world and national class swimmers" and observed that this athlete [presumably Lia Thomas based on performance times and the timing of this article] was unranked in 2018-2019 in the 100-yard, ranked 551st in the 200-yard, 65th in the 500-yard 32nd in the 1650-yards men's freestyle. After following the NCAA protocol for testosterone suppression and competing as a woman in 2021-2022, this swimmer was ranked 94th in the 100-yard, 1st in the 200-yard, 1st in the 500-yard, and 6th in the 1650-yard women's freestyle. The performance times swimming as a female, when compared to swimming as a male, were 4.6% slower in the 100-yard, 2.6% slower in the 200-yard, 5.6% slower in the 500-yard, and 6.8% slower in the 1650-yard events than when swimming as a male. *It is important to note that these are mid-season race times and do not represent season best performance times or in a championship event where athletes often set their personal record times*. The authors concluded "…that for middle distance events (100, 200 and 400m or their imperial equivalents) lasting between about one and five minutes, the decrements in performance of the transgender woman swimmer are less than expected on the basis of a comparison of a large cohort of world and national class performances by female and male swimmers" and "it is possible that the relative improvements in this swimmer's rankings in the women's category relative to the men's category are due to legacy effects of testosterone on a number of physiological factors that can influence athletic performance."

139. Harper (2015) has often been cited as "proving" that testosterone suppression eliminates male advantage. And indeed, hedged with many disclaimers, the author in that article does more or less make that claim with respect to "distance races," while emphasizing that "the author makes no claims as to the equality of performances, pre and post gender transition, in any other sport." (Harper 2015 at 8.) However, Harper (2015) is in effect a collection of unverified anecdotes, not science. It is built around self-reported race times from just eight self-selected transgender runners, recruited "mostly" online. How and on what websites the subjects were recruited is not disclosed, nor is anything said about how those not recruited online were recruited. Thus, there is no information to tell us whether these eight runners could in any way be representative, and the

recruitment pools and methodology, which could bear on ideological bias in their self-reports, is not disclosed.

140. Further, the self-reported race times relied on by Harper (2015) *span 29 years*. It is well known that self-reported data, particularly concerning emotionally or ideologically fraught topics, is unreliable, and likewise that memory of distant events is unreliable. Whether the subjects were responding from memory or from written records, and if so what records, is not disclosed, and does not appear to be known to the author. For six of the subjects, the author claims to have been able to verify "approximately half" of the self-reported times. Which scores these are is not disclosed. The other two subjects responded only anonymously, so nothing about their claims could be or was verified. In short, neither the author nor the reader knows whether the supposed "facts" on which the paper's analysis is based are true.

141. Even if we could accept them at face value, the data are largely meaningless. Only two of the eight study subjects reported (undefined) "stable training patterns," and even with consistent training, athletic performance generally declines with age. As a result, when the few data points span 29 years, it is not possible to attribute declines in performance to asserted testosterone suppression. Further, distance running is usually not on a track, and race times vary significantly depending on the course and the weather. Only one reporting subject who claimed a "stable training pattern" reported "before and after" times on the same course within three years' time," which the author acknowledges would "represent the best comparison points."

142. Harper (2015) to some extent acknowledges its profound methodological flaws, but seeks to excuse them by the difficulty of breaking new ground. The author states that, "The first problem is how to formulate a study to create a meaningful measurement of athletic performance, both before and after testosterone suppression. No methodology has been previously devised to make meaningful measurements." (2) This statement was not accurate at the time of publication, as there are innumerable publications with validated methodology for comparing physical fitness and/or athletic performance between people of different ages, sexes, and before and after medical treatment, any of which could easily have been used with minimal or no adaptation for the purposes of this study. Indeed, well before the publication of Harper (2015), several authors that I have cited in this review had performed and published disciplined and methodologically reliable studies of physical performance and physiological attributes "before and after" testosterone suppression.

143. More recently, and to her credit, Harper has acknowledged the finding of Roberts (2020) regarding the durable male advantage in running speed in the 1.5 mile distance, even after two years of testosterone suppression. She joins with co-

authors in acknowledging that this study of individuals who (due to Air Force physical fitness requirements) "could at least be considered exercise trained," agrees that Roberts' data shows that "transwomen ran significantly faster during the 1.5 mile fitness test than ciswomen," and declares that this result is "consistent with the findings of the current review in untrained transgender individuals" that even 30 months of testosterone suppression does not eliminate all male advantages "associated with muscle endurance and performance." (Harper 2021 at 8.) The Harper (2021) authors conclude overall "that strength may be well preserved in transwomen during the first 3 years of hormone therapy," and that [w]hether transgender and cisgender women can engage in meaningful sport [in competition with each other], even after [testosterone suppression], is a highly debated question." (Harper 2021 at 1, 8.)

144. Higerd (2021) "[a]ssess[ed] the probability of a girls' champion being biologically male" by evaluating 920,11 American high school track and field performances available through the track and field database Athletic.net in five states (CA, FL, MN, NY, WA), over three years (2017 – 2019),in eight events; high jump, long jump, 100M, 200M, 400M, 800M, 1600M, and 3200M and estimated that "there is a simulated 81%-98% probability of transgender dominance occurring in the female track and field event" and further concluded that "in the majority of cases, the entire podium (top of the state) would be MTF [transgender athletes]" (at xii).

B. Testosterone suppression does not reverse important male physiological advantages.

145. We see that, once a male has gone through male puberty, later testosterone suppression (or even castration) leaves large strength and performance advantages over females in place. It is not surprising that this is so. What is now a fairly extensive body of literature has documented that many of the specific male physiological advantages that I reviewed in Section II are not reversed by testosterone suppression after puberty, or are reduced only modestly, leaving a large advantage over female norms still in place.

146. Handelsman has well documented that the large increases in physiological and performance advantages characteristic of men develop in tandem with, and are likely driven by, the rapid and large increases in circulating testosterone levels that males experience across puberty, or generally between the ages of about 12 through 18. (Handelsman 2018.) Some have misinterpreted Handelsman as suggesting that all of those advantages are and remain entirely dependent–on an ongoing basis–on *current* circulating testosterone levels. This is a misreading of Handelsman, who makes no such claim. As the studies reviewed above demonstrate, it is also empirically false with respect to multiple measures of

performance. Indeed, Handelsman himself, referring to the Roberts et al. (2020) study which I describe below, has recently written that "transwomen treated with estrogens after completing male puberty experienced only minimal declines in physical performance over 12 months, substantially surpassing average female performance for up to 8 years." (Handelsman 2020.)

147. As to individual physiological advantages, the more accurate and more complicated reality is reflected in a statement titled "The Role of Testosterone in Athletic Performance," published in 2019 by several dozen sports medicine experts and physicians from many top medical schools and hospitals in the U.S. and around the world. (Levine et al. 2019.) This expert group concurs with Handelsman regarding the importance of testosterone to the male advantage, but recognizes that those advantages depend not only on *current* circulating testosterone levels in the individual, but on the "exposure in biological males to much higher levels of testosterone during growth, development, and throughout the athletic career." (*Emphasis added*.) In other words, both past and current circulating testosterone levels affect physiology and athletic capability.

148. Available research enables us to sort out, in some detail, which specific physiological advantages are immutable once they occur, which can be reversed only in part, and which appear to be highly responsive to later hormonal manipulation. The bottom line is that very few of the male physiological advantages I have reviewed in Section II above are largely reversible by testosterone suppression once an individual has passed through male puberty.

Skeletal Configuration

149. It is obvious that some of the physiological changes that occur during "growth and development" across puberty cannot be reversed. Some of these irreversible physiological changes are quite evident in photographs that have recently appeared in the news of transgender competitors in female events. These include skeletal configuration advantages including:

- Longer and larger bones that give height, weight, and leverage advantages to men;
- More advantageous hip shape and configuration as compared to women.

Cardiovascular Advantages

150. Developmental changes for which there is no apparent means of reversal, and no literature suggesting reversibility, also include multiple

contributors to the male cardiovascular advantage, including diaphragm placement, lung and trachea size, and heart size and therefore pumping capacity.[12]

151. On the other hand, the evidence is mixed as to hemoglobin concentration, which as discussed above is a contributing factor to $V0_2$ max. Harper (2021) surveyed the literature and found that "Nine studies reported the levels of Hgb [hemoglobin] or HCT [red blood cell count] in transwomen before and after [testosterone suppression], from a minimum of three to a maximum of 36 months post hormone therapy. Eight of these studies. . . found that hormone therapy led to a significant (4.6%–14.0%) decrease in Hgb/HCT ($p<0.01$), while one study found no significant difference after 6 months," but only one of those eight studies returned results at the generally accepted 95% confidence level. (Harper 2021 at 5-6 and Table 5.)

152. I have not found any study of the effect of testosterone suppression on the male advantage in mitochondrial biogenesis.

Muscle mass

153. Multiple studies have found that muscle mass decreases modestly or not at all in response to testosterone suppression. Knox et al. report that "healthy young men did not lose significant muscle mass (or power) when their circulating testosterone levels were reduced to 8.8 nmol/L (lower than the 2015 IOC guideline of 10 nmol/L) for 20 weeks." (Knox 2019 at 398.) Gooren found that "[i]n spite of muscle surface area reduction induced by androgen deprivation, after 1 year the mean muscle surface area in male-to- female transsexuals remained significantly greater than in untreated female-to-male transsexuals." (Gooren 2011 at 653.) An earlier study by Gooren found that after one year of testosterone suppression, muscle mass at the thigh was reduced by only about 10%, exhibited "no further reduction after 3 years of hormones," and "remained significantly greater" than in his sample of untreated women. (Gooren 2004 at 426-427.) Van Caenegem et al. found that muscle cross section in the calf and forearm decreased only trivially (4% and 1% respectively) after two years of testosterone suppression. (Van Caenegem 2015 Table 4.)

154. Taking measurements one month after start of testosterone suppression in male-to-female (non-athlete) subjects, and again 3 and 11 months after start of feminizing hormone replacement therapy in these subjects, Wiik et al.

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[12] "[H]ormone therapy will not alter … lung volume or heart size of the transwoman athlete, especially if [that athlete] transitions postpuberty, so natural advantages including joint articulation, stroke volume and maximal oxygen uptake will be maintained." (Knox 2019 at 398.)

found that total lean tissue (i.e. primarily muscle) did not decrease significantly across the entire period. Indeed, "some of the [subjects] did not lose any muscle mass at all." (Wiik 2020 at 812.) And even though they observed a small decrease in thigh muscle mass, they found that isometric strength levels measured at the knee "were maintained over the [study period]." (808) "At T12 [the conclusion of the one-year study], the absolute levels of strength and muscle volume were greater in [male-to-female subjects] than in [female-to-male subjects] and CW [women who had not undergone any hormonal therapy]." (808)

155. Hilton & Lundberg summarize an extensive survey of the literature as follows:

> "12 longitudinal studies have examined the effects of testosterone suppression on lean body mass or muscle size in transgender women. The collective evidence from these studies suggests that 12 months, which is the most commonly examined intervention period, of testosterone suppression to female typical reference levels results in a modest (approximately− 5%) loss of lean body mass or muscle size. . . .
>
> "Thus, given the large baseline differences in muscle mass between males and females (Table 1; approximately 40%), the reduction achieved by 12 months of testosterone suppression can reasonably be assessed as small relative to the initial superior mass. We, therefore, conclude that the muscle mass advantage males possess over females, and the performance implications thereof, are not removed by the currently studied durations (4 months, 1, 2 and 3 years) of testosterone suppression in transgender women. (Hilton 2021 at 205-207.)

156. When we recall that "women have 50% to 60% of men's upper arm muscle cross-sectional area and 65% to 70% of men's thigh muscle cross-sectional area" (Handelsman 2018 at 812), it is clear that Hilton's conclusion is correct. In other words, biologically male subjects possess substantially larger muscles than biologically female subjects after undergoing a year or even three years of testosterone suppression.

157. I note that outside the context of transgender athletes, the testosterone-driven increase in muscle mass and strength enjoyed by these male-to-female subjects would constitute a disqualifying doping violation under all league anti-doping rules with which I am familiar.

C. Responsible voices internationally are increasingly recognizing that suppression of testosterone in a male after puberty has occurred does not substantially reverse the male athletic advantage.

158. The previous very permissive NCAA policy governing transgender participation in women's collegiate athletics was adopted in 2011, and the previous IOC guidelines were adopted in 2015. At those dates, much of the scientific analysis of the actual impact of testosterone suppression had not yet been performed, much less any wider synthesis of that science. In fact, a series of important peer-reviewed studies and literature reviews have been published only very recently, since I prepared my first paper on this topic, in early 2020.

159. These new scientific publications reflect a remarkably consistent consensus: once an individual has gone through male puberty, testosterone suppression does not substantially eliminate the physiological and performance advantages that that individual enjoys over female competitors.

160. Importantly, I have found no peer-reviewed scientific paper, nor any respected scientific voice, that is now asserting the contrary–that is, that testosterone suppression can eliminate or even largely eliminate the male biological advantage once puberty has occurred.

161. I excerpt the key conclusions from important recent peer-reviewed papers below.

162. Roberts 2020: "In this study, we confirmed that . . . the pretreatment differences between transgender and cis gender women persist beyond the 12-month time requirement currently being proposed for athletic competition by the World Athletics and the IOC." (6)

163. Wiik 2020: The muscular and strength changes in males undergoing testosterone suppression "were modest. The question of when it is fair to permit a transgender woman to compete in sport in line with her experienced gender identity is challenging." (812)

164. Harper 2021: "[V]alues for strength, LBM [lean body mass], and muscle area in transwomen remain above those of cisgender women, even after 36 months of hormone therapy." (1)

165. Hilton & Lundberg 2021: "evidence for loss of the male performance advantage, established by testosterone at puberty and translating in elite athletes to a 10–50% performance advantage, is lacking. . . . These data significantly

undermine the delivery of fairness and safety presumed by the criteria set out in transgender inclusion policies . . .” (211)

166. Hamilton et al. 2020, “Response to the United Nations Human Rights Council’s Report on Race and Gender Discrimination in Sport: An Expression of Concern and a Call to Prioritize Research”: “There is growing support for the idea that development influenced by high testosterone levels may result in retained anatomical and physiological advantages . . . . If a biologically male athlete self-identifies as a female, legitimately with a diagnosis of gender dysphoria or illegitimately to win medals, the athlete already possesses a physiological advantage that undermines fairness and safety. This is not equitable, nor consistent with the fundamental principles of the Olympic Charter.”

167. Hamilton et al. 2021, “Consensus Statement of the Fédération Internationale de Médecine du Sport” (International Federation of Sports Medicine, or FIMS), signed by more than 60 sports medicine experts from prestigious institutions around the world: The available studies “make it difficult to suggest that the athletic capabilities of transwomen individuals undergoing HRT or GAS are comparable to those of cisgender women.” The findings of Roberts et al. “question the required testosterone suppression time of 12 months for transwomen to be eligible to compete in women’s sport, as most advantages over ciswomen were not negated after 12 months of HRT.”

168. Outside the forum of peer-reviewed journals, respected voices in sport are reaching the same conclusion.

169. The **Women’s Sports Policy Working Group** identifies among its members and “supporters” many women Olympic medalists, former women’s tennis champion and LGBTQ activist Martina Navratilova, Professor Doriane Coleman, a former All-American women’s track competitor, transgender athletes Joanna Harper and Dr. Renee Richards, and many other leaders in women’s sports and civil rights. I have referenced other published work of Joanna Harper and Professor Coleman. In early 2021 the Women’s Sports Policy Working Group published a “Briefing Book” on the issue of transgender participation in women’s sports,[13] in which they reviewed largely the same body of literature I have reviewed above, and analyzed the implications of that science for fairness and safety in women’s sports.

170. Among other things, the Women’s Sports Policy Working Group concluded:

[13] https://womenssportspolicy.org/wp-content/uploads/2021/02/Congressional-Briefing-WSPWG-Transgender-Women-Sports-2.27.21.pdf

- "[T]he evidence is increasingly clear that hormones do not eliminate the legacy advantages associated with male physical development" (8) due to "the considerable size and strength advantages that remain even after hormone treatments or surgical procedures." (17)

- "[T]here is convincing evidence that, depending on the task, skill, sport, or event, trans women maintain male sex-linked (legacy) advantages even after a year on standard gender-affirming hormone treatment." (26, citing Roberts 2020.)

- "[S]everal peer-reviewed studies, including one based on data from the U.S. military, have confirmed that trans women retain their male sex-linked advantages even after a year on gender affirming hormones. . . . Because of these retained advantages, USA Powerlifting and World Rugby have recently concluded that it isn't possible fairly and safely to include trans women in women's competition." (32)

171. As has been widely reported, in 2020, after an extensive scientific consultation process, the **World Rugby** organization issued its Transgender Guidelines, finding that it would not be consistent with fairness or safety to permit biological males to compete in World Rugby women's matches, no matter what hormonal or surgical procedures they might have undergone. Based on their review of the science, World Rugby concluded:

- "Current policies regulating the inclusion of transgender women in sport are based on the premise that reducing testosterone to levels found in biological females is sufficient to remove many of the biologically-based performance advantages described above. However, peer-reviewed evidence suggests that this is not the case."

- "Longitudinal research studies on the effect of reducing testosterone to female levels for periods of 12 months or more do not support the contention that variables such as mass, lean mass and strength are altered meaningfully in comparison to the original male-female differences in these variables. The lowering of testosterone removes only a small proportion of the documented biological differences, with large, retained advantages in these physiological attributes, with the safety and performance implications described previously."

- ". . . given the size of the biological differences prior to testosterone suppression, this comparatively small effect of testosterone reduction allows substantial and meaningful differences to remain. This has significant implications for the risk of injury . . . ."

- " . . . bone mass is typically maintained in transgender women over the course of at least 24 months of testosterone suppression, ... Height and other skeletal measurements such as bone length and hip width have also not been shown to change with testosterone suppression, and nor is there any plausible biological mechanism by which this might occur, and so sporting advantages due to skeletal differences between males and females appear unlikely to change with testosterone reduction.

172. In September 2021 the government-commissioned Sports Councils of the United Kingdom and its subsidiary parts (the five Sports Councils responsible for supporting and investing in sport across England, Wales, Scotland and Northern Ireland) issued a formal "Guidance for Transgender Inclusion in Domestic Sport" (UK Sport Councils 2021), following an extensive consultation process, and a commissioned "International Research Literature Review" prepared by the Carbmill Consulting group (UK Sport Literature Review 2021). The UK Sport Literature Review identified largely the same relevant literature that I review in this paper, characterizes that literature consistently with my own reading and description, and based on that science reaches conclusions similar to mine.

173. The UK Sport Literature Review 2021 concluded:

- "Sexual dimorphism in relation to sport is significant and the most important determinant of sporting capacity. The challenge to sporting bodies is most evident in the inclusion of transgender people in female sport." "[The] evidence suggests that parity in physical performance in relation to gender-affected sport cannot be achieved for transgender people in female sport through testosterone suppression. Theoretical estimation in contact and collision sport indicate injury risk is likely to be increased for female competitors." (10)

- "From the synthesis of current research, the understanding is that testosterone suppression for the mandated one year before competition will result in little or no change to the anatomical differences between the sexes, and a more complete reversal of some acute phase metabolic pathways such as haemoglobin levels although the impact on running performance appears limited, and a modest change in muscle mass and strength: The average of around 5% loss of muscle mass and strength will not reverse the average 40-50% difference in strength that typically exists between the two sexes." (7)

- "These findings are at odds with the accepted intention of current policy in sport, in which twelve months of testosterone suppression is

expected to create equivalence between transgender women and females." (7)

174. Taking into account the science detailed in the UK Sport Literature Review 2021, the UK Sports Councils have concluded:

- "[T]he latest research, evidence and studies made clear that there are retained differences in strength, stamina and physique between the average woman compared with the average transgender woman or non-binary person registered male at birth, with or without testosterone suppression." (3)

- "Competitive fairness cannot be reconciled with self-identification into the female category in gender-affected sport." (7)

- "As a result of what the review found, the Guidance concludes that the inclusion of transgender people into female sport cannot be balanced regarding transgender inclusion, fairness and safety in gender-affected sport where there is meaningful competition. This is due to retained differences in strength, stamina and physique between the average woman compared with the average transgender woman or non-binary person assigned male at birth, with or without testosterone suppression." (6)

- "Based upon current evidence, testosterone suppression is unlikely to guarantee fairness between transgender women and natal females in gender-affected sports. . . . Transgender women are on average likely to retain physical advantage in terms of physique, stamina, and strength. Such physical differences will also impact safety parameters in sports which are combat, collision or contact in nature." (7)

175. On January 15, 2022 the American Swimming Coaches Association (ASCA) issued a statement stating, "The American Swimming Coaches Association urges the NCAA and all governing bodies to work quickly to update their policies and rules to maintain fair competition in the women's category of swimming. ASCA supports following all available science and evidenced-based research in setting the new policies, and we strongly advocate for more research to be conducted" and further stated "The current NCAA policy regarding when transgender females can compete in the women's category can be unfair to cisgender females and needs to be reviewed and changed in a transparent manner." (https://swimswam.com/asca-issues-statement-calling-for-ncaa-to-review-transgender-rules/; Accessed January 16, 2022.)

176. On January 19, 2022, the NCAA Board of Governors approved a change to the policy on transgender inclusion in sport and stated that "…the updated NCAA policy calls for transgender participation for each sport to be determined by the policy for the national governing body of that sport, subject to ongoing review and recommendation by the NCAA Committee on Competitive Safeguards and Medical Aspects of Sports to the Board of Governors. If there is no N[ational]G[overning]B[ody] policy for a sport, that sport's international federation policy would be followed. If there is no international federation policy, previously established IOC policy criteria would be followed" (https://www.ncaa.org/news/2022/1/19/media-center-board-of-governors-updates-transgender-participation-policy.aspx; Accessed January 20, 2022.)

177. On February 1, 2022, because "…a competitive difference in the male and female categories and the disadvantages this presents in elite head-to-head competition … supported by statistical data that shows that the top-ranked female in 2021, on average, would be ranked 536th across all short course yards (25 yards) male events in the country and 326th across all long course meters (50 meters) male events in the country, among USA Swimming members," USA Swimming released its Athlete Inclusion, Competitive Equity and Eligibility Policy. The policy is intended to "provide a level-playing field for elite cisgender women, and to mitigate the advantages associated with male puberty and physiology." (USA Swimming Releases Athlete Inclusion, Competitive Equity and Eligibility Policy, available at https://www.usaswimming.org/news/2022/02/01/usa-swimming-releases-athlete-inclusion-competitive-equity-and-eligibility-policy.) The policy states:

- For biologically male athletes seeking to compete in the female category in certain "elite" level events, the athlete has the burden of demonstrating to a panel of independent medical experts that:
    - "From a medical perspective, the prior physical development of the athlete as Male, as mitigated by any medical intervention, does not give the athlete a competitive advantage over the athlete's cisgender Female competitors" and
    - There is a presumption that the athlete is not eligible unless the athlete "demonstrates that the concentration of testosterone in the athlete's serum has been less than 5 nmol/L . . . continuously for a period of at least thirty-six (36) months before the date of the Application." This presumption may be rebutted "if the Panel finds, in the unique circumstances of the case, that [the athlete's prior physical development does not give the athlete a competitive advantage] notwithstanding the athlete's serum testosterone results (e.g., the athlete has a medical condition

which limits bioavailability of the athlete's free testosterone)." (USA Swimming Athlete Inclusion Procedures at 43.)

Conclusions

The research and actual observed data show the following:

- At the level of (a) elite, (b) collegiate, (c) scholastic, and (d) recreational competition, men, adolescent boys, or male children, have an advantage over equally gifted, aged and trained women, adolescent girls, or female children in almost all athletic events;

- Biological male physiology is the basis for the performance advantage that men, adolescent boys, or male children have over women, adolescent girls, or female children in almost all athletic events; and

- The administration of androgen inhibitors and cross-sex hormones to men or adolescent boys after the onset of male puberty does not eliminate the performance advantage that men and adolescent boys have over women and adolescent girls in almost all athletic events. Likewise, there is no published scientific evidence that the administration of puberty blockers to males before puberty eliminates the pre-existing athletic advantage that prepubertal males have over prepubertal females in almost all athletic events.

For over a decade sports governing bodies (such as the IOC and NCAA) have wrestled with the question of transgender inclusion in female sports. The previous polices implemented by these sporting bodies had an underlying "premise that reducing testosterone to levels found in biological females is sufficient to remove many of the biologically-based performance advantages." (World Rugby 2020 at 13.) Disagreements centered around what the appropriate threshold for testosterone levels must be–whether the 10nmol/liter value adopted by the IOC in 2015, or the 5nmol/liter value adopted by the IAAF.

But the science that has become available within just the last few years contradicts that premise. Instead, as the UK Sports Councils, World Rugby, the FIMS Consensus Statement, and the Women's Sports Policy Working Group have all recognized the science is now sharply "at odds with the accepted intention of current policy in sport, in which twelve months of testosterone suppression is expected to create equivalence between transgender women and females" (UK Sports Literature Review 2021 at 7), and it is now "difficult to suggest that the athletic capabilities of transwomen individuals undergoing HRT or GAS are comparable to those of cisgender women." (Hamilton, FIMS Consensus Statement 2021.) It is important to note that while the 2021 "IOC Framework on Fairness,

Inclusion, and Non-Discrimination on the Basis of Gender Identity and Sex Variations" calls for an "evidence-based approach," that Framework does not actually reference *any* of the now extensive scientific evidence relating to the physiological differences between the sexes, and the inefficacy of hormonal intervention to eliminate male advantages relevant to most sports. Instead, the IOC calls on other sporting bodies to define criteria for transgender inclusion, while demanding that such criteria simultaneously ensure fairness, safety, and inclusion for all. The recently updated NCAA policy on transgender participation also relies on other sporting bodies to establish criteria for transgender inclusion while calling for fair competition and safety.

But what we currently know tells us that these policy goals—fairness, safety, and full transgender inclusion—are irreconcilable for many or most sports. Long human experience is now joined by large numbers of research papers that document that males outperform females in muscle strength, muscular endurance, aerobic and anaerobic power output, VO_2max, running speed, swimming speed, vertical jump height, reaction time, and most other measures of physical fitness and physical performance that are essential for athletic success. The male advantages have been observed in fitness testing in children as young as 3 years old, with the male advantages increasing immensely during puberty. To ignore what we know to be true about males' athletic advantages over females, based on mere hope or speculation that cross sex hormone therapy (puberty blockers, androgen inhibitors, or cross-sex hormones) might neutralize that advantage, when the currently available evidence says it does not, is not science and is not "evidence-based" policy-making.

Because of the recent research and analysis in the general field of transgender athletics, many sports organizations have revised their policies or are in the process of doing so. As a result, there is not any universally recognized policy among sports organizations, and transgender inclusion policies are in a state of flux, likely because of the increasing awareness that the goals of fairness, safety, and full transgender inclusion are irreconcilable.

Sports have been separated by sex for the purposes of safety and fairness for a considerable number of years. The values of safety and fairness are endorsed by numerous sports bodies, including the NCAA and IOC. The existing evidence of durable physiological and performance differences based on biological sex provides a strong evidence-based rationale for keeping rules and policies for such sex-based separation in place (or implementing them as the case may be).

As set forth in detail in this report, there are physiological differences between males and females that result in males having a significant performance advantage over similarly gifted, aged, and trained females in nearly all athletic events before, during, and after puberty. There is not scientific evidence that any

amount or duration of cross sex hormone therapy (puberty blockers, androgen inhibitors, or cross-sex hormones) eliminates all physiological advantages that result in males performing better than females in nearly all athletic events. Males who have received such therapy retain sufficient male physiological traits that enhance athletic performance vis-à-vis similarly aged females and are thus, from a physiological perspective, more accurately categorized as male and not female.

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Bibliography

Bhargava, A. et al. *Considering Sex as a Biological Variable in Basic and Clinical Studies: An Endocrine Society Scientific Statement.* Endocr Rev. 42:219-258 (2021).

Bohannon, R.W. et al., *Handgrip strength: a comparison of values obtained from the NHANES and NIH toolbox studies*. Am. J. Occ. Therapy 73(2) (March/April 2019).

Catley, M. and G.Tomkinson, *Normative health-related fitness values for children: analysis of 85,437 test results on 9-17-year-old Australians since 1985.* Br. J. Sports Med. published online October 21, 2011. Bjsm.bmj.com. Additional versions of this article were published by BJSM in 2012 and 2013, including Br. J. Sports Med. 47:98-108 (2013).

Chu, Y. et al., *Biomechanical comparison between elite female and male baseball pitchers.* J. App. Biomechanics 25:22-31 (2009).

Coleman, D.L. and W. Shreve, *Comparing athletic performances: the best elite women to boys and men.* web.law.duke.edu/sites/default/files/centers/sportslaw/comparingathleticperformances.pdf. (Accessed 06/20/21)

Coleman, D. L. et al., *Re-affirming the value of the sports exception to Title IX's general non-discrimination rule.* Duke J. of Gender and Law Policy 27(69):69-134 (2020).

Davis SM, Kaar JL, Ringham BM, Hockett CW, Glueck DH, and Dabelea D. *Sex differences in infant body composition emerge in the first 5 months of life.* J Pediatr Endocrinol Metab 32: 1235-1239 (2019).

De Miguel-Etayo, P. et al., *Physical fitness reference standards in European children: the IDEFICS study*. Int. J. Obes (Lond) 38(2):557-566 (2014).

Dogan, B., *Multiple-choice reaction and visual perception in female and male elite athletes.* J. Sports Med. and Physical Fitness 49:91-96 (2009).

Dykiert, D. and G. Der, *Sex differences in reaction time mean and intraindividual variability across the life span*. Developmental Psychology 48(5): 1262-76 (2012).

Eiberg, S. et al, *Maximum oxygen uptake and objectively measured physical activity in Danish children 6-7 years of age: the Copenhagen school child intervention study*. Br J Sports Med 39:725-30 (2005).

Fessler, D.M. et al. *Sexual dimorphism in foot length proportionate to stature*. Ann Hum Biol. 32:44-59 (2005).

Fields J. et al., *Seasonal and Longitudinal Changes in Body Composition by Sport-Position in NCAA Division I Basketball Athletes*. Sports (Basel). 22:6 (2018).

Gauthier. R. et al. The physical work capacity of Canadian children, aged 7 to 17 in 1983. A comparison with 1968. CAHPER Journal/Revue de l'ACSEPR 50:4–9 (1983).

Gershoni, M. & Pietrokovski, S. *The landscape of sex-differential transcriptome and its consequent selection in human adults*. BMC BIOL 15: 7 (2017).

Gooren, L., *The significance of testosterone for fair participation of the female sex in competitive sports*, 13 Asian J. of Andrology 653 (2011).

Gooren, L., et al., *Transsexuals and competitive sports*. Eur. J. Endocrinol. 151:425-9 (2004).

Haizlip, K.M. et al., *Sex-based differences in skeletal muscle kinetics and fiber-type composition*. PHYSIOLOGY (BETHESDA) 30: 30–39 (2015).

Hamilton, B. et al, *Integrating transwomen and female athletes with differences of sex development (DSD) into elite competition: the FIMS 2021 consensus statement*. Sports Med 2021. doi: 10.1007/s40279-021-01451-8.

Hamilton, B. et al., *Response to the United Nations Human Rights Council's report on race and gender discrimination in sport: an expression of concern and a call to prioritise research*. Sports Med 2020. doi: 10.1007/s40279-020-01380-4.

Handelsman, D.J. et al., *Circulating testosterone as the hormonal basis of sex differences in athletic performance*. Endocrine Reviews 39(5):803-829 (Oct 2018).

Handelsman, D.J., *Sex differences in athletic performance emerge coinciding with the onset of male puberty*, 87 Clinical Endocrinology 68 (2017).

Handelsman, D.J., *"Perspective,"* at https://www.healio.com/news/endocrinology/20201216/transgender-women-outpace-cisgender-women-in-athletic-tests-after-1-year-on-hormones (last accessed September 29, 2021).

Harper, J. et al., *How does hormone transition in transgender women change body composition, muscle strength and haemoglobin? Systematic review with a focus on the implications for sport participation*. Br J Sports Med 55(15):865-872 (2021).

Harper, J., *Race time for transgender athletes.* J. Sporting Cultures & Identities 6:1 (2015).

Heydari R, et al. *Y chromosome is moving out of sex determination shadow*. Cell Biosci. 12:4. (2022).

Higerd, G.A. *Assessing the Potential Transgender Impact on Girl Champions in American High School Track and Field.* Doctoral Dissertation United States Sports Academy. (2020). https://www.proquest.com/openview/65d34c1e949899aa823beecad873afae/1?pq-origsite=gscholar&cbl=18750&diss=y

Hilton, E. N. and T.R. Lundberg, *Transgender women in the female category of sport: perspectives on testosterone suppression and performance advantage.* Sports Medicine 51:199-214 (2021).

Hubal, M., H. Gordish-Dressman, P. Thompson, et al., *Variability in muscle size and strength gain after unilateral resistance training*, Med & Sci in Sports & Exercise 964 (2005).

Jain, A. et al., *A comparative study of visual and auditory reaction times on the basis of gender and physical activity levels of medical first year students.* Int J App & Basic Med Res 5:2(124-27) (May-Aug 2015).

Klaver M, et al.. *Early Hormonal Treatment Affects Body Composition and Body Shape in Young Transgender Adolescents*. J Sex Med 15: 251-260 (2018).

Knechtle, B., P. T. Nikolaidis et al., *World single age records in running from 5 km to marathon*, Frontiers in Psych 9(1) (2013).

Knox, T., L.C. Anderson, et al., *Transwomen in elite sport: scientific & ethical considerations*, 45 J. Med Ethics 395 (2019).

Lapauw, B. et al., *Body composition, volumetric and areal bone parameters in male-to-female transsexual persons.* Bone 43:1016-21 (2008).

Latorre-Roman, P. et al., *Reaction times of preschool children on the ruler drop test: a cross-sectional study with reference values.* Perceptual & Motor Skills 125(5):866-78 (2018).

Lepers, R., B. Knechtle et al., *Trends in triathlon performance: effects of sex & age*, 43 Sports Med 851 (2013).

Lesinski, M., A. Schmelcher, et al., *Maturation-, age-, and sex-specific anthropometric and physical fitness percentiles of German elite young athletes.* PLoS One. 15(8):e0237423 (2020).

Levine, B., M. Joyner et al., *The role of testosterone in athletic performance.* Available at https://web.law.duke.edu/sites/default/files/centers/sportslaw/Experts_T_Statement_2019.pdf (January 2019).

Leyk, D, W. Gorges et al., *Hand-grip strength of young men, women and highly trained female athletes*, Eur J Appl Physiol. 2007 Mar; 99(4):415-21 (2007).

Lombardo, M. and R. Deaner, *On the evolution of the sex differences in throwing: throwing as a male adaptation in humans*, Quarterly Rev of Biology 93(2):91-119 (2018).

Malina R.M., Bouchards, C., Bar-Or, O. Growth, Maturation, and Physical Activity (2nd edition). Published by Human Kinetics. 2004.

McManus, A. and N. Armstrong, *Physiology of elite young female athletes*. J Med & Sport Sci 56:23-46 (2011).

Millard-Stafford, M. et al., *Nature versus nurture: have performance gaps between men and women reached an asymptote?* Int'l J. Sports Physiol. & Performance 13:530-35 (2018).

Miller, V.M. *Why are sex and gender important to basic physiology and translational and individualized medicine?* Am J Physiol Heart Circ Physiol 306(6): H781-788, (2014).

Mormile, M. et al., *The role of gender in neuropsychological assessment in healthy adolescents*. J Sports Rehab 27:16-21 (2018).

Morris, J. et al., *Sexual dimorphism in human arm power and force: implications for sexual selection on fighting ability*. J Exp Bio 223 (2020).

National Collegiate Athletic Association, *Inclusion of transgender student-athletes*. https://ncaaorg.s3.amazonaws.com/inclusion/lgbtq/INC_TransgenderHandbook.pdf (August 2011).

Neder, J.A. et al., *Reference values for concentric knee isokinetic strength and power in nonathletic men and women from 20 to 80 years old*. J. Orth. & Sports Phys. Therapy 29(2):116-126 (1999).

Pate, R. and A. Kriska, *Physiological basis of the sex difference in cardiorespiratory endurance*. Sports Med 1:87-98 (1984).

Pocek, S. et al., *Anthropometric Characteristics and Vertical Jump Abilities by Player Position and Performance Level of Junior Female Volleyball Players*. Int J Environ Res Public Health. 18: 8377-8386 (2021).

Ramírez-Vélez, R. et al., *Vertical Jump and Leg Power Normative Data for Colombian Schoolchildren Aged 9-17.9 Years: The FUPRECOL Study*. J Strength Cond Res. 31: 990-998 (2017).

Roberts, S.A., J.M. Carswell. *Growth, growth potential, and influences on adult height in the transgender and gender-diverse population*. Andrology. 9:1679-1688 (2021).

Roberts, T.A. et al., *Effect of gender affirming hormones on athletic performance in transwomen and transmen: implications for sporting organisations and legislators*. Br J Sports Med published online at 10.1136/bjsports-2020-102329 (Dec. 7, 2020).

Roser, M., Cameron Appel and Hannah Ritchie (2013) "Human Height". Published online at OurWorldInData.org. Retrieved from: https://ourworldindata.org/human-height [Online Resource]

Ross, J.G. and G.G. Gilbert. *National Children and Youth Fitness Study*. J Physical Educ Rec Dance (JOPERD) 56: 45 – 50 (1985).

Sakamoto, K. et al., *Comparison of kicking speed between female and male soccer players*. Procedia Eng 72:50-55 (2014).

Santos, R. et al. *Physical fitness percentiles for Portuguese children and adolescents aged 10-18 years*. J Sports Sci. 32:1510-8. (2014).

Sattler, T. et al., *Vertical jump performance of professional male and female volleyball players: effects of playing position and competition level*. J Strength & Cond Res 29(6):1486-93 (2015).

Sax L. *How common is intersex? a response to Anne Fausto-Sterling*. J Sex Res. 39(3):174-8 (2002).

Scharff, M. et al., *Change in grip strength in trans people and its association with lean body mass and bone density*. Endocrine Connections 8:1020-28 (2019).

Senefeld, J.W., et al. *Divergence in timing and magnitude of testosterone levels between male and female youths*, JAMA 324(1):99-101 (2020).

Shah, K. et al. *Do you know the sex of your cells?* Am J Physiol Cell Physiol. 306(1):C3-18 (2014).

Silverman, I., *The secular trend for grip strength in Canada and the United States*, J Sports Sci 29(6):599-606 (2011).

Spierer, D. et al., *Gender influence on response time to sensory stimuli*. J Strength & Cond Res 24:4(957-63) (2010).

Staiano AE, Katzmarzyk PT. *Ethnic and sex differences in body fat and visceral and subcutaneous adiposity in children and adolescents*. Int J Obes (Lond). 36:1261-9. (2012).

Tack, L.J.W. et al., *Proandrogenic and antiandrogenic progestins in transgender youth: differential effects on body composition and bone metabolism*. J. Clin. Endocrinol. Metab, 103(6):2147-56 (2018).

Tambalis, K. et al., *Physical fitness normative values for 6-18-year-old Greek boys and girls, using the empirical distribution and the lambda, mu, and sigma statistical method*. Eur J Sports Sci 16:6(736-46) (2016).

Taylor, M.J. et al., *Vertical jumping and leg power normative data for English school children aged 10-15 years*. J Sports Sci. 28:867-72. (2010).

Taylor RW, Gold E, Manning P, and Goulding A. *Gender differences in body fat content are present well before puberty*. Int J Obes Relat Metab Disord 21: 1082-1084, 1997.

Taylor RW, Grant AM, Williams SM, and Goulding A. *Sex differences in regional body fat distribution from pre- to postpuberty*. Obesity (Silver Spring) 18: 1410-1416, 2010.

Thibault, V., M. Guillaume et al., *Women and men in sport performance: the gender gap has not evolved since 1983*. J Sports Science & Med 9:214-223 (2010).

Thomas, J.R. and K. E. French, *Gender differences across age in motor performance: a meta-analysis*. Psych. Bull. 98(2):260-282 (1985).

Tomkinson, G. et al., *European normative values for physical fitness in children and adolescents aged 9-17 years: results from 2,779,165 Eurofit performances representing 30 countries*. Br J Sports Med 52:1445-56 (2018).

Tomkinson, G. et al., *International normative 20 m shuttle run values from 1,142,026 children and youth representing 50 countries*. Br J Sports Med. 51:1545-1554 (2017).

Tønnessen, E., I. S. Svendsen et al., *Performance development in adolescent track & field athletes according to age, sex, and sport discipline*. PLoS ONE 10(6): e0129014 (2015).

Tønnessen, E. et al., *Reaction time aspects of elite sprinters in athletic world championships*. J Strength & Cond Res 27(4):885-92 (2013).

United Kingdom Sports Councils, *Guidance for transgender inclusion in domestic sport*. Available at https://equalityinsport.org/docs/300921/Guidance for Transgender Inclusion in Domestic Sport 2021 - Summary of Background Documents.pdf. September 2021.

United Kingdom Sports Councils, *International Research Literature Review*. Available at https://equalityinsport.org/docs/300921/Transgender%20International%20Research%20Literature%20Review%202021.pdf. September 2021.

USA Swimming Athlete Inclusion Procedures, last revision February 1, 2022, available at https://www.usaswimming.org/docs/default-source/governance/governance-lsc-website/rules_policies/usa-swimming-policy-19.pdf.

VanCaenegem, E. et al, *Preservation of volumetric bone density and geometry in trans women during cross-sex hormonal therapy: a prospective observational study*. Osteoporos Int 26:35-47 (2015).

Wiik, A., T. R Lundberg et al., *Muscle strength, size, and composition following 12 months of gender-affirming treatment in transgender individuals*. J. Clinical Endocrin. & Metab. 105(3):e805-813 (2020).

Women's Sports Policy Working Group, *Briefing book: a request to Congress and the administration to preserve girls' and women's sport and accommodate transgender athletes*. Available at womenssportspolicy.org. (2021).

World Rugby Transgender Guidelines. https://www.world.rugby/the-game/player-welfare/guidelines/transgender (2020).

World Rugby Transgender Women's Guidelines. https://www.world.rugby/the-game/player-welfare/guidelines/transgender/women (2020).

Wunderlich RE, Cavanagh PR. *Gender differences in adult foot shape: implications for shoe design*. Med Sci Sports Exerc. 33:605-1 (2001).

Appendix 1 – Data Tables

Presidential Physical Fitness Results[14]

Curl-Ups (# in 1 minute)

	Male		Female			Male-Female % Difference	
Age	50th %ile	85th %ile	50th %ile	85th %ile	Age	50th %ile	85th %ile
6	22	33	23	32	6	-4.3%	3.1%
7	28	36	25	34	7	12.0%	5.9%
8	31	40	29	38	8	6.9%	5.3%
9	32	41	30	39	9	6.7%	5.1%
10	35	45	30	40	10	16.7%	12.5%
11	37	47	32	42	11	15.6%	11.9%
12	40	50	35	45	12	14.3%	11.1%
13	42	53	37	46	13	13.5%	15.2%
14	45	56	37	47	14	21.6%	19.1%
15	45	57	36	48	15	25.0%	18.8%
16	45	56	35	45	16	28.6%	24.4%
17	44	55	34	44	17	29.4%	25.0%

[14] This data is available from a variety of sources. including: https://gilmore.gvsd.us/documents/Info/Forms/Teacher%20Forms/Presidentialchallengetest.pdf

Shuttle Run (seconds)

	Male		Female			Male-Female % Difference	
Age	50th %ile	85th %ile	50th %ile	85th %ile	Age	50th %ile	85th %ile
6	13.3	12.1	13.8	12.4	6	3.6%	2.4%
7	12.8	11.5	13.2	12.1	7	3.0%	5.0%
8	12.2	11.1	12.9	11.8	8	5.4%	5.9%
9	11.9	10.9	12.5	11.1	9	4.8%	1.8%
10	11.5	10.3	12.1	10.8	10	5.0%	4.6%
11	11.1	10	11.5	10.5	11	3.5%	4.8%
12	10.6	9.8	11.3	10.4	12	6.2%	5.8%
13	10.2	9.5	11.1	10.2	13	8.1%	6.9%
14	9.9	9.1	11.2	10.1	14	11.6%	9.9%
15	9.7	9.0	11.0	10.0	15	11.8%	10.0%
16	9.4	8.7	10.9	10.1	16	13.8%	13.9%
17	9.4	8.7	11.0	10.0	17	14.5%	13.0%

1 mile run (seconds)

	Male		Female			Male-Female % Difference	
Age	50th %ile	85th %ile	50th %ile	85th %ile	Age	50th %ile	85th %ile
6	756	615	792	680	6	4.5%	9.6%
7	700	562	776	636	7	9.8%	11.6%
8	665	528	750	602	8	11.3%	12.3%
9	630	511	712	570	9	11.5%	10.4%
10	588	477	682	559	10	13.8%	14.7%
11	560	452	677	542	11	17.3%	16.6%
12	520	431	665	503	12	21.8%	14.3%
13	486	410	623	493	13	22.0%	16.8%
14	464	386	606	479	14	23.4%	19.4%
15	450	380	598	488	15	24.7%	22.1%
16	430	368	631	503	16	31.9%	26.8%
17	424	366	622	495	17	31.8%	26.1%

Pull Ups (# completed)

	Male		Female			Male-Female % Difference	
Age	50th %ile	85th %ile	50th %ile	85th %ile	Age	50th %ile	85th %ile
6	1	2	1	2	6	0.0%	0.0%
7	1	4	1	2	7	0.0%	100.0%
8	1	5	1	2	8	0.0%	150.0%
9	2	5	1	2	9	100.0%	150.0%
10	2	6	1	3	10	100.0%	100.0%
11	2	6	1	3	11	100.0%	100.0%
12	2	7	1	2	12	100.0%	250.0%
13	3	7	1	2	13	200.0%	250.0%
14	5	10	1	2	14	400.0%	400.0%
15	6	11	1	2	15	500.0%	450.0%
16	7	11	1	1	16	600.0%	1000.0%
17	8	13	1	1	17	700.0%	1200.0%

Data Compiled from Athletic.Net

2021 National 3000 m cross country race time in seconds

	7-8 years old			9-10 years old			11-12 year old		
Rank	Boys	Girls		Boys	Girls		Boys	Girls	
1	691.8	728.4	Difference	607.7	659.8	Difference	608.1	632.6	Difference
2	722.5	739.0	#1 boy vs #	619.6	674.0	#1 boy vs #	608.7	639.8	#1 boy vs #
3	740.5	783.0	1 girl	620.1	674.7	1 girl	611.3	664.1	1 girl
4	759.3	783.5	5.0%	643.2	683.7	7.9%	618.6	664.4	3.9%
5	759.6	792.8		646.8	685.0		619.7	671.6	
6	760.0	824.1		648.0	686.4		631.2	672.1	
7	772.0	825.7	Average	648.8	687.0	Average	631.7	672.3	Average
8	773.0	832.3	difference	658.0	691.0	difference	634.9	678.4	difference
9	780.7	834.3	boys vs girls	659.5	692.2	boys vs girls	635.0	679.3	boys vs girls
10	735.1	844.4	6.2%	663.9	663.3	5.6%	635.1	679.4	6.3%

2021 National 3000 m cross country race time in seconds

	5th grade			6th grade			7th grade		
Rank	Boys	Girls		Boys	Girls		Boys	Girls	
1	625.5	667.0	Difference	545.3	582.0	Difference	534.0	560.7	Difference
2	648.8	685.0	#1 boy vs #	553.2	584.3	#1 boy vs #	541.0	567.0	#1 boy vs #
3	653.5	712.9	1 girl	562.3	585.1	1 girl	542.6	581.8	1 girl
4	658.4	719.2	6.2%	562.9	599.8	6.3%	544.6	583.0	4.8%
5	675.3	725.2		571.5	612.9		546.0	595.0	
6	677.4	727.7		588.0	622.0		556.0	599.0	
7	677.6	734.0	Average	591.3	624.9	Average	556.0	604.3	Average
8	679.1	739.4	difference	593.0	626.0	difference	556.0	606.0	difference
9	686.4	739.4	boys vs girls	593.8	628.0	boys vs girls	558.6	606.8	boys vs girls
10	686.4	746.4	7.3%	594.1	645.6	5.8%	563.2	617.0	7.1%

2021 National 100 m Track race time in seconds

	7-8 years old			9-10 years old			11-12 year old		
Rank	Boys	Girls		Boys	Girls		Boys	Girls	
1	13.06	14.24	Difference #1	10.87	12.10	Difference #1	11.37	12.08	Difference #1
2	13.54	14.41	boy vs # 1	10.91	12.24	boy vs # 1	11.61	12.43	boy vs # 1
3	13.73	14.44	girl	11.09	12.63	girl	11.73	12.51	girl
4	14.10	14.48	8.3%	11.25	12.70	10.2%	11.84	12.55	5.9%
5	14.19	14.49		11.27	12.75		11.89	12.57	
6	14.31	14.58		11.33	12.80		11.91	12.62	
7	14.34	14.69	Average	11.42	12.83	Average	11.94	12.65	Average
8	14.35	14.72	difference	11.43	12.84	difference	11.97	12.71	difference
9	14.41	14.77	boys vs girls	11.44	12.88	boys vs girls	12.08	12.71	boys vs girls
10	14.43	14.86	3.6%	11.51	12.91	11.1%	12.12	12.75	5.7%

2021 National 200 m Track race time in seconds

	7-8 years old			9-10 years old			11-12 year old		
Rank	Boys	Girls		Boys	Girls		Boys	Girls	
1	24.02	28.72	Difference #1	21.77	25.36	Difference #1	20.66	25.03	Difference #1
2	24.03	28.87	boy vs # 1	22.25	25.50	boy vs # 1	22.91	25.18	boy vs # 1
3	28.07	29.92	girl	22.48	25.55	girl	23.14	25.22	girl
4	28.44	29.95	16.4%	22.57	25.70	14.2%	23.69	25.49	17.5%
5	28.97	30.04		22.65	26.08		23.84	25.78	
6	29.26	30.09		22.77	26.22		24.23	25.89	
7	29.34	30.27	Average	23.11	26.79	Average	24.35	26.03	Average
8	29.38	30.34	difference	23.16	26.84	difference	24.58	26.07	difference
9	29.65	30.41	boys vs girls	23.28	26.91	boys vs girls	24.59	26.10	boys vs girls
10	29.78	30.54	6.1%	23.47	26.85	13.1%	24.61	26.13	7.9%

2021 National 400 m Track race time in seconds

	7-8 years old			9-10 years old			11-12 year old		
Rank	Boys	Girls		Boys	Girls		Boys	Girls	
1	66.30	67.12	Difference #1	49.29	56.80	Difference #1	51.96	55.70	Difference #1
2	66.88	67.67	boy vs # 1	50.47	58.57	boy vs # 1	55.52	57.08	boy vs # 1
3	67.59	67.74	girl	52.28	60.65	girl	55.58	57.60	girl
4	68.16	68.26	1.2%	52.44	61.45	13.2%	55.59	57.79	6.7%
5	68.51	68.37		53.31	61.81		55.72	58.02	
6	69.13	71.02		53.65	62.03		55.84	58.25	
7	69.75	72.73	Average	53.78	62.32	Average	55.92	59.25	Average
8	69.80	73.25	difference	54.51	62.33	difference	57.12	59.27	difference
9	69.81	73.31	boys vs girls	55.84	62.34	boys vs girls	57.18	59.40	boys vs girls
10	70.32	73.48	2.4%	55.90	62.40	13.0%	57.22	59.49	4.2%

2021 National 800 m Track race time in seconds

	7-8 years old			9-10 years old			11-12 year old		
Rank	Boys	Girls		Boys	Girls		Boys	Girls	
1	152.2	157.9	Difference #1	120.8	141.4	Difference #1	127.8	138.5	Difference #1
2	155.2	164.6	boy vs # 1	124.0	142.2	boy vs # 1	129.7	143.1	boy vs # 1
3	161.0	164.9	girl	125.1	148.8	girl	130.5	144.2	girl
4	161.1	165.9	3.6%	125.6	151.3	14.5%	133.2	144.2	7.7%
5	161.2	168.5		126.5	151.6		136.2	144.9	
6	161.6	169.9		136.5	152.5		136.5	145.0	
7	161.8	171.5	Average	137.1	153.1	Average	136.7	145.2	Average
8	162.2	173.1	difference	138.5	153.7	difference	136.7	145.6	difference
9	165.3	173.4	boys vs girls	139.5	153.8	boys vs girls	137.0	145.6	boys vs girls
10	166.9	174.7	4.5%	140.2	154.2	12.6%	137.9	145.8	6.9%

2021 National 1600 m Track race time in seconds

	7-8 years old			9-10 years old			11-12 year old		
Rank	Boys	Girls		Boys	Girls		Boys	Girls	
1	372.4	397.6	Difference #1	307.4	319.3	Difference #1	297.3	313.8	Difference #1
2	378.3	400.9	boy vs # 1	313.7	322.2	boy vs # 1	298.4	317.1	boy vs # 1
3	378.4	405.6	girl	315.0	322.6	girl	307.0	319.9	girl
4	402.0	435.2	6.3%	318.2	337.5	3.7%	313.9	323.3	5.2%
5	406.4	445.0		318.4	345.2		319.2	325.3	
6	413.4	457.0		320.5	345.7		320.4	326.2	
7	457.4	466.0	Average	327.0	345.9	Average	321.1	327.0	Average
8	473.3	466.8	difference	330.3	347.1	difference	321.9	330.0	difference
9	498.3	492.3	boys vs girls	333.4	347.5	boys vs girls	325.5	331.1	boys vs girls
10	505.0	495.0	4.0%	347.0	355.6	4.7%	327.1	332.5	2.9%

2021 National 3000 m Track race time in seconds

	7-8 years old			9-10 years old			11-12 year old		
Rank	Boys	Girls		Boys	Girls		Boys	Girls	
1	794.2	859.9	Difference #1	602.3	679.2	Difference #1	556.6	623.7	Difference #1
2	856.3		boy vs # 1	644.9	709.7	boy vs # 1	591.6	649.5	boy vs # 1
3			girl	646.6	714.2	girl	600.8	651.6	girl
4			7.6%	648.2	741.9	11.3%	607.1	654.9	10.8%
5	No further data	No Further Data		648.4	742.7		609.1	662.9	
6				652.8	756.6		611.5	664.1	
7			Average	658.9	760.2	Average	615.7	666.3	Average
8			difference	660.1	762.5	difference	617.3	666.8	difference
9			boys vs girls	662.7	780.2	boys vs girls	618.4	673.2	boys vs girls
10			NA%	671.6	792.3	12.7%	620.6	674.4	8.2%

2021 National Long Jump Distance (in inches)

	7-8 years old			9-10 years old			11-12 year old		
Rank	Boys	Girls		Boys	Girls		Boys	Girls	
1	156.0	176.0	Difference #1	256.8	213.8	Difference #1	224.0	201.3	Difference #1
2	156.0	163.8	boy vs # 1	247.0	212.0	boy vs # 1	222.5	197.3	boy vs # 1
3	155.0	153.0	girl	241.0	210.8	girl	220.5	195.8	girl
4	154.3	152.0	-11.4%	236.3	208.8	20.1%	210.3	193.5	11.3%
5	154.0	149.5		231.5	207.0		210.0	193.3	
6	152.8	146.0		225.0	204.8		206.8	192.5	
7	151.5	144.5	Average	224.0	194.5	Average	206.0	192.3	Average
8	150.8	137.5	difference	224.0	192.5	difference	205.5	192.0	difference
9	150.5	137.0	boys vs girls	221.8	192.3	boys vs girls	205.0	191.3	boys vs girls
10		No Further Data	1.4%			13.2%			9.1%
	150.5			219.0	187.5		204.5	189.0	

2021 National High Jump Distance (in inches)

	7-8 years old			9-10 years old			11-12 year old		
Rank	Boys	Girls		Boys	Girls		Boys	Girls	
1	38.0	37.5	Difference #1	72.0	58.0	Difference #1	63.0	56.0	Difference #1
2	38.0	34.0	boy vs # 1	70.0	58.0	boy vs # 1	61.0	56.0	boy vs # 1
3	36.0	32.0	girl	65.8	57.0	girl	60.0	57.0	girl
4	36.0	32.0	1.3	62.0	56.0	24.1%	59.0	56.0	12.5%
5	35.8	32.0		62.0	56.0		59.0	56.0	
6	35.5			62.0	55.0		59.0	55.0	
7	34.0		Average	61.0	54.0	Average	59.0	54.0	Average
8	32.0	No further Data	difference	60.0	54.0	difference	58.0	54.0	difference
9	59.0		boys vs girls	59.0	No	boys vs girls	57.8	56.0	boys vs girls
10			21.6%		Further	12.5%			6.9%
	56.0			56.0	Data		57.8	56.0	

Appendix 2 – Scholarly Publications in Past 10 Years

Refereed Publications

1. Brown GA, Shaw BS, Shaw I. How much water is in a mouthful, and how many mouthfuls should I drink? A laboratory exercise to help students understand developing a hydration plan. Adv Physiol Educ 45: 589–593, 2021.
2. Schneider KM and Brown GA (as Faculty Mentor). What's at Stake: Is it a Vampire or a Virus? International Journal of Undergraduate Research and Creative Activities. 11, Article 4. 2019.
3. Christner C and Brown GA (as Faculty Mentor). Explaining the Vampire Legend through Disease. UNK Undergraduate Research Journal. 23(1), 2019. (*This is an on-campus publication.)
4. Schneekloth B and Brown GA. Comparison of Physical Activity during Zumba with a Human or Video Game Instructor. 11(4):1019-1030. International Journal of Exercise Science, 2018.
5. Bice MR, Hollman A, Bickford S, Bickford N, Ball JW, Wiedenman EM, Brown GA, Dinkel D, and Adkins M. Kinesiology in 360 Degrees. International Journal of Kinesiology in Higher Education, 1: 9-17, 2017
6. Shaw I, Shaw BS, Brown GA, and Shariat A. Review of the Role of Resistance Training and Musculoskeletal Injury Prevention and Rehabilitation. Gavin Journal of Orthopedic Research and Therapy. 1: 5-9, 2016
7. Kahle A, Brown GA, Shaw I, & Shaw BS. Mechanical and Physiological Analysis of Minimalist versus Traditionally Shod Running. J Sports Med Phys Fitness. 56(9):974-9, 2016
8. Bice MR, Carey J, Brown GA, Adkins M, and Ball JW. The Use of Mobile Applications to Enhance Learning of the Skeletal System in Introductory Anatomy & Physiology Students. Int J Kines Higher Educ 27(1) 16-22, 2016
9. Shaw BS, Shaw I, & Brown GA. Resistance Exercise is Medicine. Int J Ther Rehab. 22: 233-237, 2015.
10. Brown GA, Bice MR, Shaw BS, & Shaw I. Online Quizzes Promote Inconsistent Improvements on In-Class Test Performance in Introductory Anatomy & Physiology. Adv. Physiol. Educ. 39: 63-6, 2015
11. Brown GA, Heiserman K, Shaw BS, & Shaw I. Rectus abdominis and rectus femoris muscle activity while performing conventional unweighted and weighted seated abdominal trunk curls. Medicina dello Sport. 68: 9-18. 2015
12. Botha DM, Shaw BS, Shaw I & Brown GA. Role of hyperbaric oxygen therapy in the promotion of cardiopulmonary health and rehabilitation. African Journal for

Physical, Health Education, Recreation and Dance (AJPHERD). Supplement 2 (September), 20: 62-73, 2014

13. Abbey BA, Heelan KA, Brown, GA, & Bartee RT. Validity of HydraTrend™ Reagent Strips for the Assessment of Hydration Status. J Strength Cond Res. 28: 2634-9. 2014

14. Scheer KC, Siebrandt SM, Brown GA, Shaw BS, & Shaw I. Wii, Kinect, & Move. Heart Rate, Oxygen Consumption, Energy Expenditure, and Ventilation due to Different Physically Active Video Game Systems in College Students. International Journal of Exercise Science: 7: 22-32, 2014

15. Shaw BS, Shaw I, & Brown GA. Effect of concurrent aerobic and resistive breathing training on respiratory muscle length and spirometry in asthmatics. African Journal for Physical, Health Education, Recreation and Dance (AJPHERD). Supplement 1 (November), 170-183, 2013

16. Adkins M, Brown GA, Heelan K, Ansorge C, Shaw BS & Shaw I. Can dance exergaming contribute to improving physical activity levels in elementary school children? African Journal for Physical, Health Education, Recreation and Dance (AJPHERD). 19: 576-585, 2013

17. Jarvi MB, Brown GA, Shaw BS & Shaw I. Measurements of Heart Rate and Accelerometry to Determine the Physical Activity Level in Boys Playing Paintball. International Journal of Exercise Science: 6: 199-207, 2013

18. Brown GA, Krueger RD, Cook CM, Heelan KA, Shaw BS & Shaw I. A prediction equation for the estimation of cardiorespiratory fitness using an elliptical motion trainer. West Indian Medical Journal. 61: 114-117, 2013.

19. Shaw BS, Shaw I, & Brown GA. Body composition variation following diaphragmatic breathing. African Journal for Physical, Health Education, Recreation and Dance (AJPHERD). 18: 787-794, 2012.

Refereed Presentations

1. Brown GA. Transwomen competing in women's sports: What we know, and what we don't. American Physiological Society New Trends in Sex and Gender Medicine conference. Held virtually due to Covid-19 pandemic. October 19 - 22, 2021, 2021.

2. Shaw BS, Boshoff VE, Coetzee S, Brown GA, Shaw I. A Home-based Resistance Training Intervention Strategy To Decrease Cardiovascular Disease Risk In Overweight Children Med Sci Sport Exerc. 53(5), 742. 68th Annual Meeting of the American College of Sports Medicine. Held virtually due to Covid-19 pandemic. June 1-5, 2021.

3. Shaw I, Cronje M, Brown GA, Shaw BS. Exercise Effects On Cognitive Function And Quality Of Life In Alzheimer's Patients In Long-term Care. Med

Sci Sport Exerc. 53(5), 743. 68th Annual Meeting of the American College of Sports Medicine. Held virtually due to Covid-19 pandemic. June 1-5, 2021.

4. Brown GA, Escalera M, Oleena A, Turek T, Shaw I, Shaw BS. Relationships between Body Composition, Abdominal Muscle Strength, and Well Defined Abdominal Muscles. Med Sci Sport Exerc. 53(5), 197. 68th Annual Meeting of the American College of Sports Medicine. Held virtually due to Covid-19 pandemic. June 1-5, 2021.

5. Brown GA, Jackson B, Szekely B, Schramm T, Shaw BS, Shaw I. A Pre-Workout Supplement Does Not Improve 400 M Sprint Running or Bicycle Wingate Test Performance in Recreationally Trained Individuals. Med Sci Sport Exerc. 50(5), 2932. 65th Annual Meeting of the American College of Sports Medicine. Minneapolis, MN. June 2018.

6. Paulsen SM, Brown GA. Neither Coffee Nor A Stimulant Containing "Pre-workout" Drink Alter Cardiovascular Drift During Walking In Young Men. Med Sci Sport Exerc. 50(5), 2409. 65th Annual Meeting of the American College of Sports Medicine. Minneapolis, MN. June 2018.

7. Adkins M, Bice M, Bickford N, Brown GA. Farm to Fresh! A Multidisciplinary Approach to Teaching Health and Physical Activity. 2018 spring SHAPE America central district conference. Sioux Falls, SD. January 2018.

8. Shaw I, Kinsey JE, Richards R, Shaw BS, and Brown GA. Effect Of Resistance Training During Nebulization In Adults With Cystic Fibrosis. International Journal of Arts & Sciences' (IJAS). International Conference for Physical, Life and Health Sciences which will be held at FHWien University of Applied Sciences of WKW, at Währinger Gürtel 97, Vienna, Austria, from 25-29 June 2017.

9. Bongers M, Abbey BM, Heelan K, Steele JE, Brown GA. Nutrition Education Improves Nutrition Knowledge, Not Dietary Habits In Female Collegiate Distance Runners. Med Sci Sport Exerc. 49(5), 389. 64th Annual Meeting of the American College of Sports Medicine. Denver, CO. May 2017.

10. Brown GA, Steele JE, Shaw I, Shaw BS. Using Elisa to Enhance the Biochemistry Laboratory Experience for Exercise Science Students. Med Sci Sport Exerc. 49(5), 1108. 64th Annual Meeting of the American College of Sports Medicine. Denver, CO. May 2017.

11. Brown GA, Shaw BS, and Shaw I. Effects of a 6 Week Conditioning Program on Jumping, Sprinting, and Agility Performance In Youth. Med Sci Sport Exerc. 48(5), 3730. 63rd Annual Meeting of the American College of Sports Medicine. Boston, MA. June 2016.

12. Shaw I, Shaw BS, Boshoff VE, Coetzee S, and Brown GA. Kinanthropometric Responses To Callisthenic Strength Training In Children. Med Sci Sport Exerc.

48(5), 3221. 63rd Annual Meeting of the American College of Sports Medicine. Boston, MA. June 2016.

13. Shaw BS, Shaw I, Gouveia M, McIntyre S, and Brown GA. Kinanthropometric Responses To Moderate-intensity Resistance Training In Postmenopausal Women. Med Sci Sport Exerc. 48(5), 2127. 63rd Annual Meeting of the American College of Sports Medicine. Boston, MA. June 2016.
14. Bice MR, Cary JD, Brown GA, Adkins M, and Ball JW. The use of mobile applications to enhance introductory anatomy & physiology student performance on topic specific in-class tests. National Association for Kinesiology in Higher Education National Conference. January 8, 2016.
15. Shaw I, Shaw BS, Lawrence KE, Brown GA, and Shariat A. Concurrent Resistance and Aerobic Exercise Training Improves Hemodynamics in Normotensive Overweight and Obese Individuals. Med Sci Sport Exerc. 47(5), 559. 62nd Annual Meeting of the American College of Sports Medicine. San Diego, CA. May 2015.
16. Shaw BS, Shaw I, McCrorie C, Turner S., Schnetler A, and Brown GA. Concurrent Resistance and Aerobic Training in the Prevention of Overweight and Obesity in Young Adults. Med Sci Sport Exerc. 47(5), 223. 62nd Annual Meeting of the American College of Sports Medicine. San Diego, CA. May 2015.
17. Schneekloth B, Shaw I, Shaw BS, and Brown GA. Physical Activity Levels Using Kinect™ Zumba Fitness versus Zumba Fitness with a Human Instructor. Med Sci Sport Exerc. 46(5), 326. 61st Annual Meeting of the American College of Sports Medicine. Orlando, FL. June 2014.
18. Shaw I, Lawrence KE, Shaw BS, and Brown GA. Callisthenic Exercise-related Changes in Body Composition in Overweight and Obese Adults. Med Sci Sport Exerc. 46(5), 394. 61st Annual Meeting of the American College of Sports Medicine. Orlando, FL June 2014.
19. Shaw BS, Shaw I, Fourie M, Gildenhuys M, and Brown GA. Variances In The Body Composition Of Elderly Woman Following Progressive Mat Pilates. Med Sci Sport Exerc. 46(5), 558. 61st Annual Meeting of the American College of Sports Medicine. Orlando, FL June 2014.
20. Brown GA, Shaw I, Shaw BS, and Bice M. Online Quizzes Enhance Introductory Anatomy & Physiology Performance on Subsequent Tests, But Not Examinations. Med Sci Sport Exerc. 46(5), 1655. 61st Annual Meeting of the American College of Sports Medicine. Orlando, FL June 2014.
21. Kahle, A. and Brown, G.A. Electromyography in the Gastrocnemius and Tibialis Anterior, and Oxygen Consumption, Ventilation, and Heart Rate During Minimalist versus Traditionally Shod Running. 27th National Conference on Undergraduate Research (NCUR). La Crosse, Wisconsin USA. April 11-13, 2013

22. Shaw, I., Shaw, B.S., and Brown, G.A. Resistive Breathing Effects on Pulmonary Function, Aerobic Capacity and Medication Usage in Adult Asthmatics Med Sci Sports Exerc 45 (5). S1602 2013. 60th Annual Meeting of the American College of Sports Medicine, Indianapolis, IN USA, May 26-30 3013
23. Shaw, B.S. Gildenhuys, G.A., Fourie, M. Shaw I, and Brown, G.A. Function Changes In The Aged Following Pilates Exercise Training. Med Sci Sports Exerc 45 (5). S1566 60th Annual Meeting of the American College of Sports Medicine, Indianapolis, IN USA, May 26-30 2013
24. Brown, G.A., Abbey, B.M., Ray, M.W., Shaw B.S., & Shaw, I. Changes in Plasma Free Testosterone and Cortisol Concentrations During Plyometric Depth Jumps. Med Sci Sports Exerc 44 (5). S598, 2012. 59th Annual Meeting of the American College of Sports Medicine. May 29 - June 2, 2012; San Francisco, California
25. Shaw, I., Fourie, M., Gildenhuys, G.M., Shaw B.S., & Brown, G.A. Group Pilates Program and Muscular Strength and Endurance Among Elderly Woman. Med Sci Sports Exerc 44 (5). S1426. 59th Annual Meeting of the American College of Sports Medicine. May 29 - June 2, 2012; San Francisco, California
26. Shaw B.S., Shaw, I., & Brown, G.A. Concurrent Inspiratory-Expiratory and Aerobic Training Effects On Respiratory Muscle Strength In Asthmatics. Med Sci Sports Exerc 44 (5). S2163. 59th Annual Meeting of the American College of Sports Medicine. May 29 - June 2, 2012; San Francisco, California
27. Scheer, K., Siebrandt, S., Brown, G.A, Shaw B.S., & Shaw, I. Heart Rate, Oxygen Consumption, and Ventilation due to Different Physically Active Video Game Systems. Med Sci Sports Exerc 44 (5). S1763. 59th Annual Meeting of the American College of Sports Medicine. May 29 - June 2, 2012; San Francisco, California
28. Jarvi M.B., Shaw B.S., Shaw, I., & Brown, G.A. (2012) Paintball Is A Blast, But Is It Exercise? Heart Rate and Accelerometry In Boys Playing Paintball. Med Sci Sports Exerc 44 (5). S3503. 59th Annual Meeting of the American College of Sports Medicine. May 29 - June 2, 2012; San Francisco, California

Book Chapters

1. Shaw BS, Shaw I, Brown G.A. Importance of resistance training in the management of cardiovascular disease risk. In Cardiovascular Risk Factors. IntechOpen, 2021.

2. Brown, G.A. Chapters on Androstenedione and DHEA. In: Nutritional Supplements in Sport, Exercise and Health an A-Z Guide. edited by Linda M. Castell, Samantha J. Stear, Louise M. Burke. Routledge 2015.

Refereed Web Content

1. Brown GA. Looking back and moving forward. The importance of reflective assessment in physiology education. (January 13, 2022) https://blog.lifescitrc.org/pecop/2022/01/13/looking-back-and-moving-forward-the-importance-of-reflective-assessment-in-physiology-education/
2. Brown GA. The Olympics, sex, and gender in the physiology classroom. Physiology Educators Community of Practice, managed by the Education group of the American Physiological Society (August 18, 2021) https://blog.lifescitrc.org/pecop/2021/08/18/the-olympics-sex-and-gender-in-the-physiology-classroom/

A complete CV is available at
https://www.unk.edu/academics/hperls/bio_pages/current-vita-gab.pdf

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA
CHARLESTON DIVISION

B.P.J., by her next friend and mother, HEATHER JACKSON, *Plaintiff,* vs. WEST VIRGINIA STATE BOARD OF EDUCATION; HARRISON COUNTY BOARD OF EDUCATION; WEST VIRGINIA SECONDARY SCHOOLS ACTIVITIES COMMISSION; W. CLAYTON BURCH, in his official capacity as State Superintendent, DORA STUTLER, in her official capacity as the Harrison County Superintendent, and the STATE OF WEST VIRGINIA, *Defendants,* and LAINEY ARMISTEAD, *Defendant-Intervenor.*	Case No. 2:21-cv-00316 Hon. Joseph R. Goodwin

DECLARATION OF DR. CHAD T. CARLSON, M.D., FACSM

I, Dr. Chad T. Carlson, pursuant to 28 U.S. Code § 1746, declare under penalty of perjury under the laws of the United States of America that the facts contained in my Expert Report of Dr. Chad T. Carlson, M.D., FACM prepared for *B.P.J. v. West Virginia*, attached hereto, are true and correct to the best of my knowledge and belief, and that the opinions expressed therein represent my own expert opinions.

Executed on February 23, 2022.

Chad T. Carlson, MD

Expert Report of Dr. Chad Thomas Carlson, M.D., FACM
prepared for *B.P.J. v. West Virginia*
February 23, 2022

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INTRODUCTION

Up to the present, the great majority of news, debate, and even scholarship about transgender participation in female athletics has focused on track and field events and athletes, and the debate has largely concerned questions of fairness and inclusion. However, the transgender eligibility policies of many high school athletic associations in the United States apply with equal force to all sports, including sports in which players frequently collide with each other, or can be forcefully struck by balls or equipment such as hockey or lacrosse sticks. And in fact, biologically male transgender athletes have competed in a wide range of high school, collegiate, and professional girls' or women's sports, including, at least, basketball,[1] soccer,[2] volleyball,[3] softball,[4] lacrosse,[5] and even women's tackle football.[6]

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[1]https://www.espn.com/espnw/athletes-life/story/_/id/10170842/espnw-gabrielle-ludwig-52-year-old-transgender-women-college-basketball-player-enjoying-best-year-life (accessed 2/17/22)

[2]https://www.unionleader.com/news/education/nh-bill-limits-women-s-sports-to-girls-born-female/article_d1998ea1-a1b9-5ba4-a48d-51a2aa01b910.html; https://www.outsports.com/2020/1/17/21069390/womens-soccer-mara-gomez-transgender-player-argentina-primera-division-villa-san-marcos (accessed 6/20/21)

[3]https://news.ucsc.edu/2016/09/challenging-assumptions.html (accessed 6/20/21); https://www.outsports.com/2017/3/20/14987924/trans-athlete-volleyball-tia-thompson (accessed 6/20/21)

[4]https://www.foxnews.com/us/californias-transgender-law-allows-male-high-schooler-to-make-girls-softball-team (accessed 6/20/21)

[5]https://savewomenssports.com/f/emilys-story?blogcategory=Our+Stories (accessed 6/20/21)

[6]https://www.outsports.com/2017/12/13/16748322/britney-stinson-trans-football-baseball (accessed 6/20/21); https://www.mprnews.org/story/2018/12/22/transgender-football-player-prevails-in-lawsuit (accessed 6/20/21)

The science of sex-specific differences in physiology, intersecting with the physics of sports injury, leaves little doubt that participation by biological males in these types of girls' or women's sports, based on gender identity, creates significant additional risk of injury for the biologically female participants competing alongside these transgender athletes.

In 2020, after an extensive review of the scientific literature, consultation with experts, and modeling of expected injuries, World Rugby published revised rules governing transgender participation, along with a detailed explanation of how the new policy was supported by current evidence. World Rugby concluded that "there is currently no basis with which safety and fairness can be assured to biologically female rugby players should they encounter contact situations with players whose biological male advantages persist to a large degree," and that after puberty, "the lowering of testosterone removes only a small proportion of the documented biological differences." Hence, World Rugby concluded that biological men should not compete in women's rugby. (World Rugby Transgender Women Guidelines 2020.) World Rugby has been criticized by some for its new guidelines, but those criticisms have often avoided discussions of medical science entirely, or have asserted that modeling scenarios can overstate true risk. What cannot be denied, however, is that World Rugby's approach is evidence-based, and rooted in concern for athlete safety. As a medical doctor who has spent my career in sports medicine, it is my opinion that World Rugby's assessment of the evidence is scientifically sound, and that injury modeling

meaningfully predicts that biologically male transgender athletes do constitute a safety risk for the biologically female athlete in women's sports.

In a similar vein, in 2021, the UK Sports Councils' Equality Group released new guidance for transgender inclusion in organized sports. This guidance was formulated after extensive conversations with stakeholders, a review of scientific findings related to transgender athletes in sport through early 2021, and an assessment of the use by some sport national governing bodies of case-by-case assessment to determine eligibility. Noteworthy within these stakeholder consultations was a lack of consensus on any workable solution, as well as concerns related to athlete safety and "adherence to rules which give sport validity." The Literature Review accompanying the guidance document further noted that "[t]here are significant differences between the sexes which render direct competition between males and females . . . unsafe in sports which allow physical contact and collisions." (UK Sports Councils' Equality Group Literature Review 2021 at 1.) Their review of the science "made clear that there are retained differences in strength, stamina and physique between the average woman compared with the average transgender woman….with or without testosterone suppression." (UK Sports Councils' Equality Group Guidance at 3.) This was also reflected in their ten guiding principles, stating that physical differences between the sexes will "impact safety parameters in sports which are combat, collision or contact in nature." (UK Sports Councils' Equality Group Guidance 2021 at 7.) Ultimately, UK Sport

concluded that the full inclusion of transgender athletes in women's sports "cannot be reconciled within the current structure of sport," stating that "the inclusion of transgender people into female sport cannot be balanced regarding transgender inclusion, fairness and safety in gender-affected sport where there is meaningful competition . . . . due to retained differences in strength, stamina and physique between the average woman compared with the average transgender woman…, with or without testosterone suppression." (UK Sports Councils' Equality Group Guidance 2021 at 6.) Finally, UK Sport affirmed the use of sex categorization in sport, along with age and disability, as important for the maintenance of safety and fairness. (UK Sports Councils' Equality Group Guidance 2021 at 7-8.)

Unfortunately, apart from World Rugby's careful review and the recent release of UK Sports Councils' guidance, the public discourse is lacking any careful consideration of the question of safety. As a physician who has spent my career caring for athletes, I find this silence about safety both surprising and concerning. It is my hope through this white paper to equip and motivate sports leagues and policy makers to give adequate attention to the issue of safety for female athletes when transgender policies are being considered. I first explain the nature and causes of common sports injuries. I then review physiological differences between male and female bodies that affect the risk and severity of injuries to females when biological males compete in the female category, and

explain why testosterone suppression does not eliminate these heightened risks to females. Finally, I explain certain conclusions about those risks.

CREDENTIALS

1. I am a medical doctor practicing Sports Medicine, maintaining an active clinical practice at Stadia Sports Medicine in West Des Moines, Iowa. I received my M.D. from the University of Nebraska College of Medicine in 1994 and completed a residency in family medicine at the University of Michigan in 1997.

2. Following my time in Ann Arbor, I matched to a fellowship in Sports Medicine at Ball Memorial Hospital in Muncie, Indiana, training from 1997 to 1999, with clinical time split between Central Indiana Orthopedics, the Ball State Human Performance Laboratory, and the Ball State University training room. I received my board certification in Sports Medicine in 1999, which I continue to hold. Since residency training, my practice has focused on Sports Medicine–the treatment and prevention of injuries related to sport and physical activity.

3. Since 1997, I have served in several clinical practices and settings as a treating physician, including time as team physician for both the University of Illinois and Ball State University, where I provided care to athletes in several sports, including football, ice hockey, basketball, field hockey, softball, gymnastics, soccer, and volleyball. In the course of my career, I have provided coverage for NCAA Power Five Conference championships and NCAA National

Championship events in basketball, field hockey and gymnastics, among other sports, as well as provided coverage for national championship events for U.S.A. gymnastics, and U.S. Swimming and Diving. I have also covered professional soccer in Des Moines.

4. Since 2006, I have been the physician owner of Stadia Sports Medicine in West Des Moines, Iowa. My practice focuses on treatment of sports and activity-related injury, including concussive injury, as well as problems related to the physiology of sport.

5. I have served in and provided leadership for several professional organizations over the course of my career. In 2004, I was designated a Fellow of the American College of Sports Medicine (ACSM). I have served on ACSM's Health and Science Policy Committee since 2010, and for a time chaired their Clinical Medicine Subcommittee. From 2009 to 2013, I served two elected terms on the Board of Directors of the American Medical Society for Sports Medicine (AMSSM), and during that time served as Chair of that body's Practice and Policy Committee. I was subsequently elected to a four-year term on AMSSM's executive committee in 2017, and from 2019-20, I served as AMSSM's President. AMSSM is the largest organization of sports medicine physicians in the world. I gained fellowship status through AMSSM in 2020–my first year of eligibility. My work for ACSM and AMSSM has brought with it extensive experience in public policy as relates to Sports Medicine.

6. In 2020, I was named as AMSSM's first board delegate to the newly-constituted Physical Activity Alliance. I am a named member of an NCAA advisory group on COVID-19, through which I provided input regarding the cancellation of the basketball tournament in 2020. I also serve as a member of the Iowa Medical Society's Sports Medicine Subcommittee and have been asked to serve on the Iowa High School Athletic Association's newly-forming Sports Medicine Advisory Committee.

7. I have served as a manuscript reviewer for organizational policy pronouncements, and for several professional publications, most recently a sports medicine board review book just published in 2021. I have published several articles on topics related to musculoskeletal injuries in sports and rehabilitation, which have been published in peer-reviewed journals such as Clinical Journal of Sports Medicine, British Journal of Sports Medicine, Current Reviews in Musculoskeletal Medicine, Athletic Therapy Today, and the Journal of Athletic Training. In conjunction with my work in policy advocacy, I have helped write several pieces of legislation, including the initial draft of what became the Sports Medicine Licensure Clarity Act, signed into law by President Trump in 2018, which eases the restrictions on certain practitioners to provide health services to athletes and athletic teams outside of the practitioner's home state. A list of my publications over the past ten (10) years is included as an appendix to this report.

8. In the past four years, I have not testified as an expert witness in a deposition or at trial.

9. I am being compensated for my services as an expert witness in this case at the rates of $650 per hour for consultation, $800 per hour for deposition testimony, and $3,500 per half-day of trial testimony.

I. OVERVIEW

10. In this statement, I offer information and my own professional opinion on the potential for increased injury risk to females in sports when they compete against biologically male transgender athletes.[7] At many points in this statement, I provide citations to published, peer-reviewed articles that provide relevant and supporting information to the points I make.

11. The principal conclusions that I set out in this white paper are as follows:

a. Government and sporting organizations have historically considered the preservation of athlete safety as one component of competitive equity.

b. Injury in sport is somewhat predictable based on modeling assumptions that take into account relevant internal and external risk factors.

[7] In the body of this paper, I use the terms "male" and "female" according to their ordinary medical meaning–that is to say, to refer to the two biological sexes. I also use the word "man" to refer to a biologically male human, and "woman" to refer to a biologically female human. In the context of this opinion, I include in these categories non-syndromic, biologically-normal males and females who identify as a member of the opposite sex, including those who use endogenous hormone suppression to alter their body habitus. In contexts that are not focused on questions of biology and physiology, terms of gender are sometimes used to refer to subjective identities rather than to biological categories – something I avoid for purposes of a paper focused on sports science

c. Males exhibit large average advantages in size, weight, and physical capacity over females—often falling far outside female ranges. Even before puberty, males have a performance advantage over females in most athletic events. Failure to preserve protected female-only categories in contact sports (broadly defined) will ultimately increase both the frequency and severity of injury suffered by female athletes who share playing space with these males.

d. Current research supports the conclusion that suppression of testosterone levels by males who have already begun puberty will not fully reverse the effects of testosterone on skeletal size, strength, or muscle hypertrophy, leading to persistence of sex-based differences in power, speed, and force-generating capacity.

12. In this white paper, I use the term "contact sports" to refer broadly to all sports in which collisions between players, or collisions between equipment such as a stick or ball and the body of a player, occur with some frequency (whether or not permitted by the rules of the game), and are well recognized in the field of sports medicine as causes of sport-related injuries.[8] The 1975 Title IX implementing regulations (34 CFR § 106.41) say that "for purposes of this [regulation] contact sports include boxing, wrestling, rugby, ice hockey, football, basketball, *and other sports* the purpose or major activity of which involves bodily contact." Certainly, all of the sports specifically named in the regulation fall within my definition of "contact sport." Mixed martial arts, field hockey (Barboza 2018), soccer (Kuczinski 2018), rugby (Viviers 2018), lacrosse

[8] It is common to see, within the medical literature, reference to distinctions between "contact" and "collision" sports. For purposes of clarity, I have combined these terms, since in the context of injury risk modeling, there is no practical distinction between them.

(Pierpoint 2019), volleyball,[9] baseball, and softball also involve collisions that can and do result in injuries, and so also fall within my definition.

II. A BRIEF HISTORY OF THE RATIONALE FOR SEPARATION OF SPORT BY SEX

13. World Rugby is correct when it notes that "the women's category exists to ensure protection, safety, and equality" for women. (World Rugby Transgender Women Guidelines 2020.) To some extent, those in charge of sport governing bodies in the modern era have always recognized the importance of grouping athletes together based on physical attributes, in order to ensure both safety and competitive balance. Weight classifications have existed in wrestling since it reappeared as an Olympic event in 1904. Women and men have participated in separate categories since the advent of intercollegiate sporting clubs early in the 20th century. When Title IX went into effect in 1975, there were just under 300,000 female high school athletes, and fewer than 10,000 female collegiate athletes. With the changes that resulted from Title IX, it was assumed that newly-available funds for women in sport would ensure the maintenance of existing, or creation of new, sex-segregated athletic teams that would foster greater participation by women. This has been borne out subsequently; by the first half of the 1980's these numbers had risen to 1.9 million and nearly 100,000 respectively. (Hult 1989.)

[9] See https://www.latimes.com/sports/story/2020-12-08/stanford-volleyball-hayley-hodson-concussions-cte-lawsuit, and https://volleyballmag.com/corinneatchison/ (both accessed 6/20/21).

14. The rationale for ongoing "separate but equal" status when it came to sex-segregated sports was made clear within the language of the original implementing regulations of Title IX , which, acknowledging real, biologically-driven differences between the sexes, created carve-out exceptions authorizing sex-separation of sport for reasons rooted in the maintenance of competitive equity. Importantly, the effect of these innate sex-based differences on the health and safety of the athlete were acknowledged by the express authorization of sex-separated teams for sports with higher perceived injury risk—i.e., "contact sports." (Coleman 2020.)

15. In the almost half century since those regulations were adopted, the persistent reality of sex-determined differences in athletic performance and safety has been recognized by the ongoing and nearly universal segregation of men's and women's teams–even those that are not classically defined as being part of a contact or collision sport.

16. Now, however, many schools and sports leagues in this country are permitting males to compete in female athletics—including in contact sports—based on gender identity. In my view, these policies have been adopted without careful analysis of safety implications. Other researchers and clinicians have addressed questions of the negative impact of such policies on fairness, or equality of athletic experiences for girls and women, in published articles, and in court submissions. One recent review of track and field performances, including sprints, distance races and field events, noted that men surpass the

top female performance in each category between 1000 and 10,000 times *each year*, with hundreds or thousands of men beating the top women in each event. (Coleman & Shreve.) Although this was not their primary focus, World Rugby well-summarized the point when it observed that in a ranking list of the top thousand performances in most sports, every year, *every one* will have been achieved by a biological male. (World Rugby Transgender Women Guidelines 2020.) Although most easily documented in athletes who have gone through puberty, these differences are not exclusively limited to post-pubescent athletes either.

17. I have reviewed the expert declaration of Gregory A. Brown, Ph.D., FACM of February 23, 2022, provided in this case, which includes evidence from a wide variety of sources, including population-based mass testing data, as well as age-stratified competition results, all of which support the idea that prepubertal males run faster, jump higher and farther, exhibit higher aerobic power output, and have greater upper body strength (evidenced by stronger hand grip and better performance with chin-ups or bent arm hang) than comparably aged females. This performance gap is well-documented in population-based physiologic testing data that exists in databases such as the Presidential Fitness Test, the Eurofit Fitness test, and additional mass testing data from the UK and Australia. Collectively, this data reveals that pre-pubertal males outperform comparably aged females in a wide array of athletic tests including but not limited to the countermovement jump test, drop jump test, change of direction

test, long jump, timed sit-up test, the 10 X 5 meter shuttle run test, the 20 meter shuttle run test, curl-ups, pull-ups, push-ups, one mile run, standing broad jump, and bent arm hang test. Dr. Brown further references studies showing a significant difference in the body composition of males and females before puberty. In sum, a large and unbridgeable performance gap between the sexes is well-studied and equally well-documented, beginning in many cases before puberty. In this white paper, I focus on some of these differences as they touch on the question of athlete safety.

III. UNDERSTANDING THE CAUSES OF SPORTS INJURIES

18. The causes for injury in sport are multifactorial. In recent decades, medical researchers have provided us an evolving understanding of how sports injuries occur, as well as the factors that make them more or less probable, and more or less severe. Broadly speaking, there are two ways of modeling injury: the epidemiological model, and the biomechanical model. These models are not mutually exclusive, but provide complementary conceptual frameworks to help us stratify risk in sport.

A. The epidemiological model of injury

19. From a practical standpoint, sports medicine researchers and clinicians often use the "epidemiological model" to explain, prevent and manage sports injuries. Broadly speaking, this model views an injury in sport as the product of internal and external risk factors, triggered by an inciting event. In other words, a given injury is "caused" by a number of different factors that are

unique to a given situation. (Meeuwise 1994.) When the interplay of these factors exceeds the injury threshold, injury occurs. One example of how this interplay might work would be a female distance runner in track who develops a tibial stress fracture, with identified risks of low estrogen state from amenorrhea (suppression of menses), an aggressive winter training program on an indoor tile surface, and shoes that have been used for too many miles, and are no longer providing proper shock absorption. Most risk factors ebb and flow, with the overall injury risk at any given time fluctuating as well. Proper attention to risk factor reduction *before* the start of the sports season (including appropriate rule-making) is the best way to reduce actual injury rates *during* the season.

20. As alluded to, the risk factors associated with injury can be broadly categorized as internal or external. Internal risk factors are internal to the athlete. These include relatively fixed variables, such as the athlete's age, biological sex, bone mineral density (which affects bone strength) and joint laxity, as well as more mutable variables such as body weight, fitness level, hydration state, current illness, prior injury, or psychosocial factors such as aggression.

21. External risk factors are, as the name suggests, external to the athlete. These include non-human risks such as the condition of the playing surface or equipment, athletic shoe wear, or environmental conditions. Other external risk factors come from opposing competitors, and include such

variables as player size, speed, aggressiveness, and overall adherence to the rules of the game. As already mentioned, these risks can be minimized through the proper creation and enforcement of rules, as well as the appropriate grouping of athletes together for purposes of competition. To the latter point, children don't play contact sports with adults and, in the great majority of cases, men and women compete in categories specific to their own biological sex. Certainly these categorical separations are motivated in part by average performance differences and considerations of fairness and opportunity. But they are also motivated by safety concerns. When properly applied, these divisions enhance safety because, when it comes to physical traits such as body size, weight, speed, muscle girth, and bone strength, although a certain amount of variability exists within each group, the averages and medians differ widely *between* the separated groups.[10]

22. Thus, each of these commonly utilized groupings of athletes represents a pool of individuals with predictable commonalities. Epidemiological risk assessment is somewhat predictable and translatable as long as these pools remain intact. But the introduction of outside individuals

[10] In some cases, safety requires even further division or exclusion. A welterweight boxer would not compete against a heavyweight, nor a heavyweight wrestle against a smaller athlete. In the case of youth sports, when children are at an age where growth rates can vary widely, leagues will accommodate for naturally-occurring large discrepancies in body size by limiting larger athletes from playing positions where their size and strength is likely to result in injury to smaller players. Thus, in youth football, players exceeding a certain weight threshold may be temporarily restricted to playing on the line and disallowed from carrying the ball, or playing in the defensive secondary, where they could impose high-velocity hits on smaller players.

into a given pool (e.g. an adult onto a youth football team, or males into most women's sports) would change the balance of risk inside that pool. Simply put, when you introduce larger, faster, and stronger athletes from one pool into a second pool of athletes who are *categorically* smaller (whether as a result of age or sex), you have altered the characteristics of the second pool, and, based on known injury modeling, have statistically increased the injury risk for the original athletes in that pool. This, in a nutshell, is the basis for World Rugby's recommendations.

23. Most clinical studies of the epidemiology of sports injuries use a multivariate approach, identifying multiple independent risk factors and examining how these factors might interact, in order to determine their relative contribution to injury risk, and make educated inferences about causation. (Meeuwise 1994.)

24. In applying the multivariate approach, the goal is to keep as many variables as possible the same so as to isolate the potential effect of a single variable (such as age or biological sex) on injury risk, as well as to determine how the isolated variable interacts with the other analyzed variables to affect injury risk. Failure to consider relevant independent variables can lead to error. Researchers focusing on differences between male and female athletes, for example, would not compare concussion rates of a high school girls' soccer team to concussion rates of a professional men's soccer team, because differences in the concussion rate might be due to a number of factors besides sex, such as age,

body mass, relative differences in skill, speed, or power, as well as differences in training volume and intensity.

25. As indicated earlier, an injury event is usually the end product of a number of different risk factors coming together. (Bahr 2005.) A collision between two soccer players who both attempt to head the ball, for example, might be the inciting event that causes a concussion. Although the linear and angular forces that occur through sudden deceleration would be the proximate cause of this injury, the epidemiological model of injury would also factor in "upstream" risks, predicting the possibility of an injury outcome for each athlete differently depending on the sum of these risks. If the collision injury described above occurs between two disparately-sized players, the smaller athlete will tend to decelerate more abruptly than the larger athlete, increasing the smaller athlete's risk for injury. Additional discrepancies in factors such as neck strength, running speeds, and muscle force generation capacity all result in differing risks and thus, the potential for differing injury outcomes from the same collision. As I discuss later in this white paper, there are significant statistical differences between the sexes when it comes to each of these variables, meaning that in a collision sport where skeletally mature males and females are playing against one another, there is a higher statistical likelihood that injury will result when collisions occur, and in particular there is a higher likelihood that a female will suffer injury. This again is the basis for the recent decision by World Rugby to disallow the crossover of men into women's rugby,

regardless of gender identity. (World Rugby Transgender Women Guidelines 2020.) The decision-making represented by this policy change is rational and rooted in objective facts and objective risks of harm, because it takes real, acknowledged, and documented physical differences between the sexes (in many cases before adolescence), and models expected injury risk on the basis of the known differences that persist even after hormone manipulation.

B. The biomechanical model of injury

26. Sports medicine researchers and clinicians also consider a biomechanical approach when it comes to understanding sports injuries. In the biomechanical model of injury, injury is considered to be analogous to the failure of a machine or other structure. Every bone, muscle, or connective tissue structure in an athlete's body has a certain load tolerance. Conceptually, when an external "load" exceeds the load tolerance of a given structure in the human body, an injury occurs. (Fung 1993 at 1.) Thus, researchers focus on the mechanical load—the force exerted on a bone, ligament, joint or other body part—and the load tolerance of that impacted or stressed body part, to understand what the typical threshold for injury is, and how predictable this might be. (McIntosh 2005 at 2-3.) Biomechanical models of injury usually consider forces in isolation. The more consistent the movement pattern of an individual, and the fewer the contributions of unexpected outside forces to the athlete, the more accurate biomechanical predictions of injury will be.

27. Biomechanical modeling can be highly predictive in relatively simple settings. For example, in blunt trauma injury from falls, mortality predictably rises the greater the fall. About 50% of people who fall four stories will survive, while only 10% will survive a fall of seven stories. (Buckman 1991.) As complexity increases, predictability in turn decreases. In sport, the pitching motion is highly reproducible, and strain injury to the ulnar collateral ligament (UCL) of the elbow can be modeled. The load tolerance of the UCL of a pitcher's elbow is about 32 Newton-meters, but the failure threshold of a ligament like this in isolation is not the only determinant of whether injury will occur. During the pitching motion, the valgus force imparted to the elbow (gapping stress across the inner elbow that stretches the UCL) routinely reaches 64 Newtons, which is obviously greater than the failure threshold of the ligament. Since not all pitchers tear their UCLs, other variables innate to an athlete must mitigate force transmission to the ligament and reduce risk. The load tolerance of any particular part of an athlete's body is thus determined by other internal factors such as joint stiffness, total ligament support, muscle strength across the joint, or bone mineral density. Injury load can be self-generated, as in the case of a pitcher's elbow, or externally-generated, as in the case of a linebacker hitting a wide receiver. While load tolerance will vary by individual, as described above, and is often reliant on characteristics innate to a given athlete, external load is determined by outside factors such as the nature of the playing surface or

equipment used, in combination with the weight and speed of other players or objects (such as a batted ball) with which the player collides. (Bahr 2005.)

28. As this suggests, the two "models" of sports injuries described above are not in any sense inconsistent or in tension with each other. Instead, they are complementary ways of thinking about injuries that can provide different insights. But the important point to make regarding these models is that in either model, injury risk (or the threshold for injury) rises and falls depending on the size of an externally-applied force, and the ability of a given athlete to absorb or mitigate that force.

IV. THE PHYSICS OF SPORTS INJURY

29. Sports injuries often result from collisions between players, or between a player and a rapidly moving object (e.g. a ball or hockey puck, a lacrosse or hockey stick). In soccer, for example, most head injuries result from collisions with another player's head or body, collision with the goal or ground, or from an unanticipated blow from a kicked ball. (Boden 1998; Mooney 2020.) In basketball, players often collide with each other during screens, while diving for a loose ball, or while driving to the basket. In lacrosse or field hockey, player-to-player, or player-to-stick contact is common.

30. But what are the results of those collisions on the human body? Basic principles of physics can cast light on this question from more than one angle. A general understanding of these principles can help us identify factors

that will predictably increase the relative risk, frequency, and severity of sports injuries, given certain assumptions.

31. First, we can consider **energy**. Every collision involves an object or objects that possess energy. The energy embodied in a moving object (whether a human body, a ball, or anything else) is called kinetic energy.

32. Importantly, the kinetic energy of a moving object is expressed as: $\boldsymbol{E_k = \frac{1}{2}mv^2}$. That is, kinetic energy is a function of the mass of the object multiplied by the *square* of its velocity. (Dashnaw 2012.) To illustrate with a simple but extreme example: if athletes A and B are moving at the same speed, but athlete A is twice as heavy, athlete A carries twice as much kinetic energy as athlete B. If the two athletes weigh the same amount, but athlete A is going twice as fast, athlete A carries four times as much kinetic energy as athlete B. But as I have noted, the kinetic energy of a moving object is a function of the mass of the object multiplied by the square of its velocity. Thus, if athlete A is twice as heavy, and moving twice as fast, athlete A will carry eight times the kinetic energy of athlete B into a collision.[11]

33. The implication of this equation means that what appear to be relatively minor discrepancies in size and speed can result in major differences in energy imparted in a collision, to the point that more frequent and more severe injuries can occur. To use figures that correspond more closely to average

[11] $2 \times 2^2 = 8$

differences between men and women, if Player M weighs only 20% more than Player F, and runs only 15% faster, Player M will bring *58% more kinetic energy* into a collision than Player F.[12]

34. The law of conservation of energy tells us that energy is never destroyed or "used up." If kinetic energy is "lost" by one body in a collision, it is inevitably transferred to another body, or into a different form. In the case of collision between players, or between (e.g.) a ball and a player's head, some of the energy "lost" by one player, or by the ball, may be transformed into (harmless) sound; some may result in an increase in the kinetic energy of the player who is struck (through acceleration, which I discuss below); but some of it may result in *deformation* of the player's body—which, depending on its severity, may result in injury. Thus, the greater the kinetic energy brought into a collision, the greater the potential for injury, all other things being equal.

35. Alternately, we can consider force and *acceleration*, which is particularly relevant to concussion injuries.

36. Newton's third law of motion tells us that when two players collide, their bodies experience equal and opposite forces at the point of impact.

37. Acceleration refers to the rate of change in speed (or velocity). When two athletes collide, their bodies necessarily accelerate (or decelerate) rapidly: stopping abruptly, bouncing back, or being deflected in a different

[12] $1.2 \times (1.15)^2 = 1.587$

direction. Newton's second law of motion tells us that: $\boldsymbol{F = ma}$ (that is, force equals mass multiplied by acceleration). From this equation we see that when a larger and a smaller body collide, and (necessarily) experience equal and opposite forces, the smaller body (or smaller player, in sport) will experience more rapid acceleration. We observe this physical principle in action when we watch a bowling ball strike bowling pins: the heavy bowling ball only slightly changes its course and speed; the lighter pins go flying.

38. This same equation also tells us that if a given player's body or head is hit with a *larger* force (e.g., from a ball that has been thrown or hit faster), it will experience *greater* acceleration, everything else being equal.

39. Of course, sport is by definition somewhat chaotic, and forces are often not purely linear. Many collisions also involve angular velocities, with the production of rotational force, or torque. Torque can be thought of as force that causes rotation around a central point. A different but similar equation of Newtonian physics governs the principles involved.[13] Torque is relevant to injury in several ways. When torque is applied through joints in directions those joints are not able to accommodate, injury can occur. In addition, rotational force can cause different parts of the body to accelerate at different rates—in some cases, very rapid rates, also leading to injury. For example, a collision where the

[13] In this equation, $\boldsymbol{\tau = I\alpha}$, torque equals moment of inertia multiplied by angular acceleration, where "moment of inertia" is defined as $\boldsymbol{I = mr^2}$, that is, mass multiplied by the square of the distance to the rotational axis.

body is impacted at the waist can result in high torque and acceleration on the neck and head.

40. Sport-related concussion—a common sports injury and one with potentially significant effects—is attributable to linear, angular, or rotational acceleration and deceleration forces that result from impact to the head, or from an impact to the body that results in a whiplash "snap" of the head. (Rowson 2016.) In the case of a concussive head injury, it is the brain that accelerates or decelerates on impact, colliding with the inner surface of the skull. (Barth 2001 at 255.)

41. None of this is mysterious: each of us, if we had to choose between being hit either by a large, heavy athlete running at full speed, or by a small, lighter athlete, would intuitively choose collision with the small, light athlete as the lesser of the two evils. And we would be right. One author referred to the "increase in kinetic energy, and therefore imparted forces" resulting from collision with larger, faster players as "profound." (Dashnaw 2012.)

V. GENDER DIFFERENCES RELEVANT TO INJURY

42. It is important to state up front that it is self-evident to most people familiar with sport and sport injuries that if men and women were to consistently participate together in competitive contact sports, there would be higher rates of injury in women. This is one reason that rule modifications often

exist in leagues where co-ed participation occurs.[14] Understanding the physics of sports injuries helps provide a theoretical framework for why this is true, but so does common sense and experience. All of us are familiar with basic objective physiological differences between the sexes, some of which exist in childhood, and some of which become apparent after the onset of puberty, and persist throughout adulthood. And as a result of personal experience, all of us also have some intuitive sense of what types of collisions are likely to cause pain or injury. Not surprisingly, our "common sense" on these basic facts about the human condition is also consistent with the observations of medical science. Below, I provide quantifications of some of these well-known differences between the sexes that are relevant to injury risk, as well as some categorical differences that may be less well known.

A. Height and weight

43. It is an inescapable fact of the human species that males as a group are statistically larger and heavier than females. On average, men are 7% to 8% taller than women. (Handelsman 2018 at 818.) According to the most recently available Centers for Disease Control and Prevention (CDC) statistics, the weight of the average U.S. adult male is 16% greater than that of the average U.S. adult female. (CDC 2018.) This disparity persists into the athletic cohort.

[14] For example, see https://www.athleticbusiness.com/college/intramural-coed-basketball-playing-rules-vary-greatly.html (detailing variety of rule modifications applied in co-ed basketball). Similarly, coed soccer leagues often prohibit so-called "slide tackles," which are not prohibited in either men's or women's soccer. See, e.g.., http://www.premiercoedsports.com/pages/rulesandpolicies/soccer.

Researchers find that while athletes tend on average to be lighter than non-athletes, the weight difference between the average adult male and female athlete remains within the same range—between 14% and 23%, depending on the sport analyzed. (Santos 2014; Fields 2018.) Indeed, World Rugby estimates that the typical male rugby player weighs 20% to 40% more than the typical female rugby player. (World Rugby Transgender Women Guidelines 2020.) This size advantage by itself allows men to bring more force to bear in a collision.

B. Bone and connective tissue strength

44. Men have bones in their arms, legs, feet, and hands that are both larger and stronger per unit volume than those of women, due to greater cross-sectional area, greater bone mineral content, and greater bone density. The advantage in bone size (cross-sectional area) holds true in both upper and lower extremities, even when adjusted for lean body mass. (Handelsman 2018 at 818; Nieves 2005 at 530.) Greater bone size in men is also correlated with stronger tendons that are more adaptable to training (Magnusson 2007), and an increased ability to withstand the forces produced by larger muscles (Morris 2020 at 5). Male bones are not merely larger, they are stronger per unit of volume. Studies of differences in arm and leg bone mineral density – one component of bone strength – find that male bones are denser, with measured advantages of between 5% and 14%. (Gilsanz 2011; Nieves 2005.)

45. Men also have larger ligaments than women (Lin 2019 at 5), and stiffer connective tissue (Hilton 2021 at Table 1), providing greater protection against joint injury.

C. Speed

46. When it comes to acceleration from a static position to a sprint, men are consistently faster than women. World record sprint performance gaps between the sexes remain significant at between 7% and 10.5%, with world record times in women now exhibiting a plateau (no longer rapidly improving with time) similar to the historical trends seen in men. (Cheuvront 2005.) This performance gap has to do with, among other factors, increased skeletal stiffness, greater cross-sectional muscle area, denser muscle fiber composition and greater limb length. (Handelsman 2018.) Collectively, males, on average, run about 10% faster than females. (Lombardo 2018 at 93.) This becomes important as it pertains to injury risk, because males involved in sport will often be travelling at faster speeds than their female counterparts in comparable settings, with resultant faster speed at impact, and thus greater impact force, in a given collision.

D. Strength/Power

47. In 2014, a male mixed-martial art fighter identifying as female and fighting under the name Fallon Fox fought a woman named Tamikka Brents, and caused significant facial injuries in the course of their bout. Speaking about their fight later, Brents said:

> "I've fought a lot of women and have never felt the strength that I felt in a fight as I did that night. I can't answer whether it's because she was born a man or not because I'm not a doctor. I can only say, I've never felt so overpowered ever in my life, and I am an abnormally strong female in my own right."[15]

48. So far as I am aware, mixed martial arts is not a collegiate or high school interscholastic sport. Nevertheless, what Brent experienced in an extreme setting is true and relevant to safety in all sports that involve contact. In absolute terms, males as a group are substantially stronger than women.

49. Compared to women, men have "larger and denser muscle mass, and stiffer connective tissue, with associated capacity to exert greater muscular force more rapidly and efficiently." (Hilton 2021 at 201.) Research shows that on average, during the prime athletic years (ages 18-29) men have, on average, 54% greater total muscle mass than women (33.7 kg vs. 21.8 kg) including 64% greater muscle mass in the upper body, and 47% greater in the lower body. (Janssen 2000 at Table 1.) The cross-sectional area of muscle in women is only 50% to 60% that of men in the upper arm, and 65% to 70% of that of men in the thigh. This translates to women having only 50% to 60% of men's upper limb strength and 60% to 80% of men's lower limb strength. (Handelsman 2018 at 812.) Male weightlifters have been shown to be approximately 30% stronger than female weightlifters of equivalent stature and mass. (Hilton 2021 at 203.) But in competitive athletics, since the stature and mass of the average male

[15] https://bjj-world.com/transgender-mma-fighter-fallon-fox-breaks-skull-of-her-female-opponent/

exceeds that of the average female, actual differences in strength between average body types will, on average, exceed this. The longer limb lengths of males augment strength as well. Statistically, in comparison with women, men also have lower total body fat, differently distributed, and greater lean muscle mass, which increases their power-to-weight ratios and upper-to-lower limb strength ratios as a group. Looking at another common metric of strength, males average 57% greater grip strength (Bohannon 2019) and 54% greater knee extension torque (Neder 1999). Research shows that sex-based discrepancies in lean muscle mass begin to be established from infancy, and persist through childhood to adolescence. (Davis 2019; Kirchengast 2001; Taylor 1997; Taylor 2010; McManus 2011.)

50. Using their legs and torso for power generation, men can apply substantially larger forces with their arms and upper body, enabling them to generate more ball velocity through overhead motions, as well as to generate more pushing or punching power. In other words, isolated sex-specific differences in muscle strength in one region (even differences that in isolation seem small) can, and do combine to generate even greater sex-specific differences in more complex sport-specific functions. One study looking at moderately-trained individuals found that males can generate 162% more punching power than females. (Morris 2020.) Thus, multiple small advantages aggregate into larger ones.

E. Throwing and kicking speed

51. One result of the combined effects of these sex-determined differences in skeletal structure is that men are, on average, able to throw objects faster than women. (Lombardo 2018; Chu 2009; Thomas 1985.) By age seventeen, the *average* male can throw a ball farther than 99% of seventeen-year-old females—which necessarily means at a faster initial speed assuming a similar angle of release— despite the fact that factors such as arm length, muscle mass, and joint stiffness individually don't come close to exhibiting this degree of sex-defined advantage. One study of elite male and female baseball pitchers showed that men throw baseballs 35% faster than women—81 miles/hour for men vs. 60 miles/hour for women. The authors of this study attribute this to a sex-specific difference in the ability to generate muscle torque and power. (Chu 2009.) A study showing greater throwing velocity in male versus female handball players attributed it to differences in body size, including height, muscle mass, and arm length. (Van Den Tillaar 2012.) Interestingly, significant sex-related difference in throwing ability has been shown to manifest even before puberty, but the difference increases rapidly during and after puberty. (Thomas 1985 at 266.) These sex-determined differences in throwing speed are not limited to sports where a ball is thrown. Males have repeatedly been shown to throw a javelin more than 30% farther than females. (Lombardo 2018 Table 2; Hilton 2021 at 203.) Even in preadolescent children, differences exist. International youth records for 5- to

12-year-olds in the javelin show 34-55% greater distance in males vs. females using a 400g javelin.[16]

52. Men also serve and spike volleyballs with higher velocity than women, with a performance advantage in the range of 29-34%. (Hilton 2021.) Analysis of first and second tier Belgian national elite male volleyball players shows ball spike speeds of 63 mph and 56 mph respectively. (Forthomme 2005.) NCAA Division I female volleyball players—roughly comparable to the second-tier male elite group referenced above—average a ball spike velocity of approximately 40 mph (18.1 m/s). (Ferris 1995 at Table 2.) Notably, based on the measurements of these studies, male spiking speed in *lower* elite divisions is almost 40% greater than that of NCAA Division I female collegiate players. Separate analyses of serving speed between elite men and women Spanish volleyball players showed that the average power serving speed in men was 54.6 mph (range 45.3–64.6 mph), with maximal speed of 76.4 mph. In women, average power serving speed was 49 mph (range 41–55.3 mph) with maximal speed of 59 mph. This translates to an almost 30% advantage in maximal serve velocity in men. (Palao 2014.)

53. Recall that kinetic energy is dependent on mass and the square of velocity. A volleyball (with fixed mass) struck by a male, and traveling an

[16] http://age-records.125mb.com/.

average 35% faster than one struck by a female, will deliver 82% more energy to a head upon impact.

54. The greater leg strength and jumping ability of men confer a further large advantage in volleyball that is relevant to injury risk. In volleyball, an "attack jump" is a jump to position a player to spike the ball downward over the net against the opposing team. Research on elite national volleyball players found that on average, males exhibited a 50% greater vertical jump height during an "attack" than did females. (Sattler 2015.) Similar data looking at countermovement jumps (to block a shot) in national basketball players reveals a 35% male advantage in jump height. (Kellis 1999.) In volleyball, this dramatic difference in jump height means that male players who are competing in female divisions will more often be able to successfully perform a spike, and this will be all the more true considering that the women's net height is seven inches lower than that used in men's volleyball. Confirming this inference, research also shows that the successful attack percentage (that is, the frequency with which the ball is successfully hit over the net into the opponent's court in an attempt to score) is so much higher with men than women that someone analyzing game statistics can consistently identify games played by men as opposed to women on the basis of this statistic alone. These enhanced and more consistently successful attacks by men directly correlate to their greater jumping ability and attack velocity at the net. (Kountouris 2015.)

55. The combination of the innate male-female differences cited above, along with the lower net height in women's volleyball, means that if a reasonably athletic male is permitted to compete against women, the participating female players will likely be exposed to higher ball velocities that are outside the range of what is typically seen in women's volleyball. When we recall that ball-to-head impact is a common cause of concussion among women volleyball players, this fact makes it clear that participation in girls' or women's volleyball by biologically male individuals will increase concussion injury risk for participating girls or women.

56. Male sex-based advantages in leg strength also lead to greater kick velocity. In comparison with women, men kick balls harder and faster. A study comparing kicking velocity between university-level male and female soccer players found that males kick the ball with an average 20% greater velocity than females. (Sakamoto 2014.) Applying the same principles of physics we have just used above, we see that a soccer ball kicked by a male, travelling an average 20% faster than a ball kicked by a female, will deliver 44% more energy on head impact. Greater force-generating capacity will thus increase the risk of an impact injury such as concussion.

VI. ENHANCED FEMALE VULNERABILITY TO CERTAIN INJURIES

57. Above, I have reviewed physiological differences that result in the male body bringing greater weight, speed, and force to the athletic field or court,

and how these differences can result in a greater risk of injury to females when males compete against them. It is also true that the female body is more vulnerable than the male body to certain types of injury even when subject to comparable forces. This risk appears to extend to the younger age cohorts as well. An analysis of Finnish student athletes from 1987-1991, analyzing over 600,000 person-years of activity exposures, found, in students under fifteen years of age, higher rates of injury in girls than boys in soccer, volleyball, judo and karate. (Kujala 1995.) Another epidemiological study looking specifically at injury rates in over 14,000 middle schoolers over a 20 year period showed that "in sex-matched sports, middle school girls were more likely to sustain *any* injury (RR = 1.15, 95% CI = 1.1, 1.2) or a time-loss injury (RR = 1.09, 95% CI = 1.0, 1.2) than middle school boys." In analyzed both-sex sports (i.e., sex-separated sports that both girls and boys play, like soccer), girls sustained higher injury rates, and greater rates of time-loss injury. (Beachy 2014.) Another study of over 2000 middle school students at nine schools showed that the injury rate was higher for girls' basketball than for football (39.4 v 30.7/1000 AEs), and injury rates for girls' soccer were nearly double that of boys' soccer (26.3 v. 14.7/1000 AEs). (Caswell 2017.) In this regard, I will focus on two areas of heightened female vulnerability to collision-related injury which have been extensively studied: concussions, and anterior cruciate ligament injuries.

A. Concussions

58. Females are more likely than males to suffer concussions in comparable sports, and on average suffer more severe and longer lasting disability once a concussion does occur. (Harmon 2013 at 4; Berz 2015; Blumenfeld 2016; Covassin 2003; Rowson 2016.) Females also seem to be at higher risk for post-concussion syndrome than males. (Berz 2015; Blumenfeld 2016; Broshek 2005; Colvin 2009; Covassin 2012; Dick 2009; Marar 2012; Preiss-Farzanegan 2009.)

59. The most widely-accepted definition of sport-related concussion comes from the Consensus Statement on Concussion in Sport (see below).[17] (McCrory 2018.) To summarize, concussion is "a traumatically induced transient

[17] "Sport related concussion is a traumatic brain injury induced by biomechanical forces. Several common features that may be utilised in clinically defining the nature of a concussive head injury include:

SRC may be caused either by a direct blow to the head, face, neck or elsewhere on the body with an impulsive force transmitted to the head.

SRC typically results in the rapid onset of short-lived impairment of neurological function that resolves spontaneously. However, in some cases, signs and symptoms evolve over a number of minutes to hours.

SRC may result in neuropathological changes, but the acute clinical signs and symptoms largely reflect a functional disturbance rather than a structural injury and, as such, no abnormality is seen on standard structural neuroimaging studies.

SRC results in a range of clinical signs and symptoms that may or may not involve loss of consciousness. Resolution of the clinical and cognitive features typically follows a sequential course. However, in some cases symptoms may be prolonged.

The clinical signs and symptoms cannot be explained by drug, alcohol, or medication use, other injuries (such as cervical injuries, peripheral vestibular dysfunction, etc) or other comorbidities (e.g., psychological factors or coexisting medical conditions)."

disturbance of brain function and involves a complex pathophysiological process" that can manifest in a variety of ways. (Harmon 2013 at 1.)

60. Sport-related concussions have undergone a significant increase in societal awareness and concurrent injury reporting since the initial passage of the Zachery Lystedt Concussion Law in Washington State in 2009 (Bompadre 2014), and the subsequent passage of similar legislation governing return-to-play criteria for concussed athletes in most other states in the United States. (Nat'l Cnf. of State Leg's 2018). Concussion is now widely recognized as a common sport-related injury, occurring in both male and female athletes. (CDC 2007.) Sport-related concussions can result from player-surface contact or player-equipment contact in virtually any sport. However, sudden impact via a player-to-player collision, with rapid deceleration and the transmission of linear or rotational forces through the brain, is also a common cause of concussion injury. (Covassin 2012; Marar 2012; Barth 2001; Blumenfeld 2016; Boden 1998; Harmon 2013 at 4.)

61. A large retrospective study of U.S. high school athletes showed a higher rate of female concussions in soccer (79% higher), volleyball (0.6 concussions/10,000 exposures, with 485,000 reported exposures, vs. no concussions in the male cohort), basketball (31% higher), and softball/baseball (320% higher). (Marar 2012.) A similarly-sized, similarly-designed study comparing concussion rates between NCAA male and female collegiate athletes showed, overall, a concussion rate among females 40% higher than that of

males. Higher rates of injury were seen across individual sports as well, including ice hockey (10% higher); soccer (54% higher); basketball (40% higher); and softball/baseball (95% higher). (Covassin 2016.) The observations of these authors, my own observations from clinical practice, and the acknowledgment of our own Society's Position Statement (Harmon 2013), all validate the higher frequency and severity of sport-related concussions in women and girls.

62. Most epidemiological studies to date looking at sport-related concussion in middle schoolers show that more boys than girls are concussed. There are fewer studies estimating concussion *rate*. This is, in part, because measuring injury rate is more time and labor-intensive. Researchers at a childrens' hospital, for example, could analyze the number of children presenting to the emergency department with sport-related concussion and publish findings of absolute number. However, to study concussion incidence, athlete exposures also have to be recorded. Generally speaking, an athlete exposure is a single practice or game where an athlete is exposed to playing conditions that could reasonably supply the necessary conditions for an injury to occur. Rates of athletic injury, concussion among them, are then, by convention, expressed in terms of injury rate per 1000 athletic exposures. More recently, some studies have been published that analyze the rates of concussion in the middle school population. Looking at the evidence, the conclusion can be made that females experience increased susceptibility to concussive injuries before puberty. For example, Ewing-Cobbs, et al. (2018) found elevated post-

concussion symptoms in girls across all age ranges studied, including children between the ages of 4 and 8. Kerr's 2017 study of middle school students showed over three times the rate of female vs male concussion in students participating in sex-comparable sports [0.18 v. 0.66/1000 A.E.'s]. (Kerr 2017.) This is the first study I am aware of that mimics the trends seen in adolescent injury epidemiology showing a higher rate of concussion in girls than boys in comparable sports.

63. More recent research looking at the incidence of sport-related concussions in U.S. middle schoolers between 2015 and 2020, found that the rate of concussion was higher in middle school athletes than those in high school. In this study, girls had more than twice the rate of concussion injury (0.49/1000 athletic exposures vs 0.23/1000 AE) in analyzed sports (baseball/softball, basketball, soccer and track), as well as statistically greater time loss. (Hacherl 2021 (Journal of Athletic Training); Hacherl 2021 (Archives of Clinical Neuropsychology).) The authors hypothesized that the increasing incidence of concussion in middle school may relate to "other distinct differences associated with the middle school sport setting itself, such as, the large variations in player size and skill."[18]

64. In addition, females on average suffer materially greater cognitive impairment than males when they do suffer a concussion. Group differences in

[18] https://www.nata.org/press-release/062421/middle-school-sports-have-overall-higher-rate-concussion-reported-high-school.

cognitive impairment between females and males who have suffered concussion have been extensively studied. A study of 2340 high school and collegiate athletes who suffered concussions determined that females had a 170% higher frequency of cognitive impairment following concussions, and that in comparison with males, female athletes had significantly greater declines in simple and complex reaction times relative to their preseason baseline levels. Moreover, the females experienced greater objective and subjective adverse effects from concussion even after adjusting for potentially protective effect of helmets used by some groups of male athletes. (Broshek 2005 at 856, 861; Colvin 2009; Covassin 2012.)

65. This large discrepancy in frequency and severity of concussion injury is consistent with my own observations across many years of clinical practice. The large majority of student athletes who have presented at my practice with severe and long-lasting cognitive disturbance have been adolescent girls. I have seen girls remain symptomatic for over a year, and lose ground academically and become isolated from their peer groups due to these ongoing symptoms. For patients who experience these severe effects, post-concussion syndrome can be life-altering.

66. Some of the anatomical and physiological differences that we have considered between males and females help to explain the documented differences in concussion rates and in symptoms between males and females. (Covassin 2016; La Fountaine 2019; Lin 2019; Tierney 2005; Wunderle 2014.)

Anatomically, there are significant sex-based differences in head and neck anatomy, with females exhibiting in the range of 30% to 40% less head-neck segment mass and neck girth, and 49% lower neck isometric strength. This means that when a female athlete's head is subjected to the same load as an analogous male, there will be a greater tendency for head acceleration, and resultant injury. (Tierney 2005 at 276-277.)

67. When modeling the effect of the introduction of male mass, speed, and strength into women's rugby, World Rugby gave particular attention to the resulting increases in forces and acceleration (and injury risk) experienced in the head and neck of female players. Their analysis found that "the magnitude of the known risk factors for head injury are . . . predicted by the size of the disparity in mass between players. The addition of [male] speed as a biomechanical variable further increases these disparities," and their model showed an increase of up to 50% in neck and head acceleration that would be experienced in a typical tackle scenario in women's rugby. As a result, "a number of tackles that currently lie beneath the threshold for injury would now exceed it, causing head injury." (World Rugby Transgender Women Guidelines 2020.) While rugby is notoriously contact-intensive, similar increases to risk of head and neck injury to women are predictable in any sport context in which males and females collide at significant speed, as happens from time to time in sports including soccer, softball, and basketball.

68. In addition, even when the heads of female and male athletes are subjected to identical accelerative forces, there are sex-based differences in neural anatomy and physiology, cerebrovascular organization, and cellular response to concussive stimuli that make the female more likely to suffer concussive injury, or more severe concussive injury. For instance, hypothalamic-pituitary disruption is thought to play a role in post-concussion symptomatology that differentially impacts women. (McGroarty 2020; Broshek 2005 at 861.) Another study found that elevated progesterone levels during one portion of the menstrual cycle were associated with more severe post-concussion symptomatology that differentially impacted women. (Wunderle 2014.)

69. As it stands, when females compete against each other, they already have higher rates of concussive injury than males, across most sports. The addition of biologically male athletes into women's contact sports will inevitably increase the risk of concussive injury to girls and women, for the multiple reasons I have explained above, including, but not limited to, the innate male advantage in speed and lean muscle mass. Because the effects of concussion can be severe and long-lasting, particularly for biological females, we can predict with some confidence that if participation by biological males in women's contact sports based on gender identity becomes more common, more biological females will suffer substantial concussive injury and the potential for long-term harm as a result.

B. Anterior Cruciate Ligament injuries

70. The Anterior Cruciate Ligament ("ACL") is a key knee stabilizer that prevents anterior translation of the tibia relative to the femur and also provides rotatory and valgus knee stability.[19] (Lin 2019 at 4.) Girls and women are far more vulnerable to ACL injuries than are boys and men. The physics of injury that we have reviewed above makes it inevitable that the introduction of biologically male athletes into the female category will increase still further the occurrence of ACL injuries among girls or women who encounter these players on the field.

71. Sports-related injury to the ACL is so common that it is easy to overlook the significance of it. But it is by no means a trivial injury, as it can end sports careers, require surgery, and usually results in early-onset, post-traumatic osteoarthritis, triggering long-term pain and mobility problems later in life. (Wang 2020.)

72. Even in the historic context in which girls and women limit competition to (and so only collide with) other girls and women, the rate of ACL injury is substantially higher among female than male athletes. (Flaxman 2014; Lin 2019; Agel 2005.) One meta-analysis of 58 studies reports that female athletes have a 150% relative risk for ACL injury compared with male athletes, with other estimates suggesting as much as a 300% increased risk. (Montalvo 2019; Sutton 2013.) Particularly in those sports designated as contact sports, or

[19] Valgus force at the knee is a side-applied force that gaps the medial knee open.

sports with frequent cutting and sharp directional changes (basketball, field hockey, lacrosse, soccer), females are at greater risk of ACL injury. In basketball and soccer, this risk extends across all skill levels, with female athletes between two and eight times more likely to sustain an ACL injury than their male counterparts. (Lin 2019 at 5.) These observations are widely validated, and consistent with the relative frequencies of ACL injuries that I see in my own practice.

73. When the reasons underlying the difference in the incidence of ACL injury between males and females were first studied in the early 1990s, researchers speculated that the difference might be attributable to females' relative inexperience in contact sports, or to their lack of appropriate training. However, a follow-up 2005 study looking at ACL tear disparities reported that, "Despite vast attention to the discrepancy between anterior cruciate ligament injury rates between men and women, these differences continue to exist." (Agel 2005 at 524.) Inexperience and lack of training do not explain the differences. Sex seems to be an independent predictor of ACL tear risk.

74. In fact, as researchers have continued to study this discrepancy, they have determined that multiple identifiable anatomical and physiological differences between males and females play significant roles in making females more vulnerable to ACL injuries than males. (Flaxman 2014; Lin 2019; Wolf 2015.) Summarizing the findings of a number of separate studies, one researcher recently cited as anatomical risk factors for ACL injury smaller ligament size,

decreased femoral notch width, increased posterior-inferior slope of the lateral tibia plateau, increased knee and generalized laxity, and increased body mass index (BMI). With the exception of increased BMI, each of these factors is more likely to occur in female than male athletes. (Lin 2019 at 5.) In addition, female athletes often stand in more knee valgus (that is, in a "knock-kneed" posture) due to wider hips and a medially-oriented femur. Often, this is also associated with a worsening of knee valgus during jump landings. The body types and movement patterns associated with these valgus knee postures are more common in females and increase the risk for ACL tear. (Hewett 2005.)

75. As with concussion, the cyclic fluctuation of sex-specific hormones in women is also thought to be a possible risk factor for ACL injury. Estrogen acts on ligaments to make them more lax, and it is thought that during the ovulatory phase of menses (when estrogen levels peak), the risk of ACL tear is higher. (Chidi-Ogbolu 2019 at 1; Herzberg 2017.)

76. Whatever the factors that increase the injury risk for ACL tears in women, the fact that a sex-specific difference in the rate of ACL injury exists is well established and widely accepted.

77. Although non-contact mechanisms are the most common reason for ACL tears in females, tears related to contact are also common, with ranges reported across multiple studies of from 20%-36% of all ACL injuries in women. (Kobayashi 2010 at 672.) For example, when a soccer player who is kicking a ball is struck by another player in the lateral knee of the stance leg, medial and

rotational forces can tear the medial collateral ligament (MCL), the ACL, and the meniscus. Thus, as participation in the female category based on identity rather than biology becomes more common (entailing the introduction of athletes with characteristics such as greater speed and lean muscle mass), and as collision forces suffered by girls and women across the knee increase accordingly, the risk for orthopedic injury and in particular ACL tears among impacted girls and women will inevitably rise.

78. Of course there exists variation in all these factors within a given group of males or females. However, it is also true that within sex-specific pools, size differential is somewhat predictable and bounded, even considering outliers. When males are permitted to enter into the pool of female athletes based on gender identity rather than biological sex, there is an increased possibility that a statistical outlier in terms of size, weight, speed, and strength—and potentially an extreme outlier—is now entering the female pool. Although injury is not guaranteed, risks to female participants will increase. And as I discuss later, the available evidence together suggests that this will be true even with respect to males who have been on testosterone suppression for a year or more. World Rugby relied heavily upon this when they were determining their own policy, and I think it is important to reiterate that this policy, rooted in concern for athlete safety, is justifiable based upon current evidence from medical research and what we know about biology.

VII. TESTOSTERONE SUPPRESSION WILL NOT PREVENT THE HARM TO FEMALE SAFETY IN ATHLETICS

79. A recent editorial in the New England Journal of Medicine opined that policies governing transgender participation in female athletics "must safeguard the rights of all women—whether cisgender or transgender." (Dolgin 2020.) Unfortunately, the physics and medical science reviewed above tell us that this is not practically possible. If biological males are given a "right" to participate in the female category based on gender identity, then biological women will be denied the right to reasonable expectations of safety and injury risk that have historically been guaranteed by ensuring that females compete (and collide) only with other females.

80. Advocates of unquestioning inclusion based on gender identity often contend that hormonal manipulation of a male athlete can feminize the athlete enough that he is comparable with females for purposes of competition. The NCAA's Office of Inclusion asserts (still accessible on the NCAA website as of this writing) that "It is also important to know that any strength and endurance advantages a transgender woman arguably may have as a result of her prior testosterone levels dissipate after about one year of estrogen or testosterone suppression therapy."[20] (NCAA 2011 at 8.) Whether or not this is true is a critically important question.

[20] https://www.ncaa.org/sports/2016/3/2/lesbian-gay-bisexual-transgender-and-questioning-lgbtq.aspx

81. At the outset, we should note that while advocates sometimes claim that testosterone suppression *can* eliminate physiological advantages in a biological male, none of the relevant transgender eligibility policies that I am aware of prior to 2021 requires any demonstration that it has *actually* achieved that effect in a particular male who seeks admission into the female category. The Connecticut policy that is currently at issue in ongoing litigation permits admission to the female category at the high school level without requiring any testosterone suppression at all. Prior to their new policy, just announced in January 2022, the NCAA's policy required no demonstration of any reduction of performance capability, change in weight, or regression of any other physical attribute of the biological male toward female levels. It did not require achievement of any particular testosterone level, and did not provide for any monitoring of athletes for compliance. Moving forward, through a phasing process, the NCAA will ultimately require athletes in each sport to meet requirements of their sport's national governing body (NGB). If no policy exists, the policy of that sport's international governing body applies, or, finally, if no policy exists there, the 2015 policy of the International Olympic Committee (IOC) will apply. The 2015 IOC policy requires no showing of any diminution of any performance capability or physical attribute of the biological male, and requires achievement and compliance monitoring only of a testosterone level below 10nmol/liter—a level far above levels occurring in normal biological

females (0.06 to 1.68 nmol/L).[21] Indeed, female athletes with polycystic ovarian disorder—a condition that results in elevated testosterone levels—rarely exceed 4.8 nmol/L, which is the basis for setting the testing threshold to detect testosterone *doping* in females at 5.0 nmol/L. Thus, males who qualify under the 2015 IOC policy to compete as transgender women may have testosterone levels—even after hormone suppression—*double* the level that would disqualify a biological female for doping with testosterone.[22]

82. As Dr. Emma Hilton has observed, the fact that there are over 3000 sex-specific differences in skeletal muscle alone makes the hypothesis that sex-linked performance advantages are attributable solely to current circulating testosterone levels improbable at best. (Hilton 2021 at 200-01.)

83. In fact, the available evidence strongly indicates that no amount of testosterone suppression can eliminate male physiological advantages relevant to performance and safety. Several authors have recently reviewed the science and statistics from numerous studies that demonstrate that one year (or more) of testosterone suppression does not substantially eliminate male performance advantages. (Hilton 2021; De Varona 2021; Harper 2021.) As a medical doctor, I will focus on those specific sex-based characteristics of males who have

[21] Normal testosterone range in a healthy male averages between 7.7 and 29.4 nmol/L.

[22] In November 2021, the IOC released new guidelines, deferring decision-making about a given sport's gender-affectedness to its governing body. The current NCAA policy, however, still utilizes the 2015 IOC policy to determine an athlete's eligibility in event that the sport's national and international governing bodies lack policies to determine eligibility.

undergone normal sex-determined pubertal skeletal growth and maturation that are relevant to the *safety* of female athletes. Here, too, the available science tells us that testosterone suppression does not eliminate the increased risk to females or solve the safety problem.

84. The World Rugby organization reached this same determination based on the currently available science, concluding that male physiological advantages that "create risks [to female players] appear to be only minimally affected" by testosterone suppression. (World Rugby Transgender Women Guidelines 2020.)

85. Surprisingly, so far as public information reveals, the NCAA's Committee on Competitive Safeguards is not monitoring and documenting instances of transgender participation on women's teams for purposes of injury reporting. In practice, the NCAA is conducting an experiment which in theory predicts an increased frequency and severity of injuries to women in contact sports, while at the same time failing to collect the relevant data from its experiment.

86. In their recent guidelines, UK Sport determined that, "based upon current evidence, testosterone suppression is unlikely to guarantee fairness between transgender women and natal females in gender-affected sports." (UK Sports Councils' Equality Group Guidance 2021 at 7.) They also warned that migration to a scenario by NGBs where eligibility is determined through case-by-case assessment "is unlikely to be practical nor verifiable for entry into

gender-affected sports," in part because "many tests related to sports performance are volitional," and incentives on the part of those tested would align with intentional poor performance. (UK Sports Councils' Equality Group Guidance 2021 at 8.)

87. Despite these concerns, this appears to be exactly the route that the IOC is taking, as reflected in their Framework on Fairness, Inclusion and Non-Discrimination on the Basis of Gender Identity, released in November of 2021.[23] In it, the IOC lists two disparate goals. First, that "where sports organizations elect to issue eligibility criteria for men's and women's categories for a given competition, they should do so with a view to . . . [p]roviding confidence that no athlete within a category has an unfair and disproportionate competitive advantage . . . [and] preventing a risk to the physical safety of other athletes." (IOC Framework 2021 § 4.1.) At the same time, governing bodies are not to preclude any athlete from competing until evidence exists based upon "robust and peer-reviewed research that . . . demonstrates a consistent, unfair, disproportionate competitive advantage in performance and/or an unpreventable risk to the physical safety of other athletes" – research moreover that "is largely based on data collected *from a demographic group that is consistent in gender and athletic engagement with the group that the eligibility*

[23] The IOC Framework on Fairness, Inclusion and Non-Discrimination on the Basis of Gender Identity and Sex Variations is available at https://stillmed.olympics.com/media/Documents/News/2021/11/IOC-Framework-Fairness-Inclusion-Non-discrimination-2021.pdf?_ga=2.72651665.34591192.1645554375-759350959.1644946978

criteria aim to regulate." (IOC Framework 2021 § 6.1) Finally, affected athletes may appeal any evidence-based decision-making process through a further "appropriate internal mediation mechanism, such as a Court of Arbitration for Sport." (IOC Framework 2021 § 6.1.) Rather than cite any of the growing evidence that testosterone suppression cannot mitigate sex-based performance differences, the IOC's new policy remains aspirational and opaque. And yet the research relating to hormonal suppression in transgender athletes, as confirmed by World Rugby and UK Sport, already speaks very clearly to the fact that males retain a competitive advantage over women that cannot be eliminated through testosterone suppression alone. What follows is a brief summary of some of these retained differences as they relate to sport safety.

A. Size and weight

88. Males are, on average, larger and heavier. As we have seen, these facts alone mean that males bring more kinetic energy into collisions, and that lighter females will suffer more abrupt deceleration in collisions with larger bodies, creating heightened injury risk for impacted females.

89. I start with what is obvious and so far as I am aware undisputed—that after the male pubertal growth spurt, suppression of testosterone does not materially *shrink* bones so as to eliminate height, leverage, performance, and weight differences that follow from simply having longer, larger bones, and being subsequently taller.

90. In addition, multiple studies have found that testosterone suppression may modestly reduce, but does not come close to eliminating the male advantage in muscle mass and lean body mass, which together contribute to the greater average male weight. Researchers looking at transitioning adolescents found that the weight of biological male subjects *increased* rather than decreased after treatment with an antiandrogen testosterone suppressor. (Tack 2018.) In one recent meta-analysis, researchers looking at the musculoskeletal effects of hormonal transition found that even after males had undergone 36 months of therapy, their lean body mass and muscle area remained above those of females. (Harper 2021.) Another group in 2004 studied the effects of testosterone suppression to less than 1 nmol/L in men after one or more years, but still found only a 12% total loss of muscle area by the end of thirty-six months. (Gooren 2004.)

B. Bone density

91. Bone mass (which includes both size and density) is maintained over *at least* two years of testosterone suppression (Singh-Ospina 2017; Fighera 2019), and one study found it to be preserved even over a median of 12.5 years of suppression (Hilton 2021; Ruetsche 2005).

C. Strength

92. A large number of studies have now observed minimal or no reduction in strength in male subjects following testosterone suppression. In one recent meta-analysis, strength loss after twelve months of hormone therapy

ranged from negligible to 7%. (Harper 2021.) Given the baseline male strength advantage in various muscle groups of from approximately 25% to 100% above female levels that I have noted in Section V.D above, even a 7% reduction leaves a large retained advantage in strength. Another study looking at handgrip strength—which is a proxy for general strength—showed a 9% loss of strength after two years of hormonal treatment in males who were transitioning, leaving a 23% retained advantage over the female baseline. (Hilton 2021.) Yet another study which found a 17% retained grip strength advantage noted that this placed the median of the group treated with hormone therapy in the 95th percentile for grip strength among age-matched females. (Scharff 2019.) Researchers looking at transitioning adolescents showed no loss of grip strength after hormone treatment. (Tack 2018.)

93. One recent study on male Air Force service members undergoing transition showed that they retained more than two thirds of pretreatment performance advantage over females in sit-ups and push-ups after between one and two years of testosterone-reducing hormonal treatment. (Roberts 2020.) Another recently-published observational cohort study looked at thigh strength and thigh muscle cross-sectional area in men undergoing hormonal transition to transgender females. After one year of hormonal suppression, this group saw only a 4% decrease in thigh muscle cross-sectional area, and a negligible decrease in thigh muscle strength. (Wiik 2020.) Wiik and colleagues looked at isokinetic strength measurements in individuals who had undergone at least 12

months of hormonal transition and found that muscle strength was comparable to baseline, leaving transitioned males with a 50% strength advantage over reference females. (Wiik 2020.) Finally, one cross-sectional study that compared men who had undergone transition at least three years prior to analysis, to age-matched, healthy males found that the transgender individuals had retained enough strength that they were still outside normative values for women. This imbalance continued to hold even after *eight* years of hormone suppression. The authors also noted that since males who identify as women often have lower baseline (i.e., before hormone treatment) muscle mass than the general population of males, and since baseline measures for this study were unavailable, the post-transition comparison may actually represent an overestimate of muscle mass regression in transgender females. (Lapauw 2008; Hilton 2021.)

94. World Rugby came to the same conclusion based on its own review of the literature, reporting that testosterone suppression "does not reverse muscle size to female levels," and in fact that "studies assessing [reductions in] mass, muscle mass, and/or strength suggest that reduction in these variables range between 5% and 10%. Given that the typical male vs female advantages range from 30% to 100%, these reductions are small." (World Rugby Transgender Women Guidelines 2020.)

95. It is true that most studies of change in physical characteristics or capabilities over time after testosterone suppression involve untrained subjects

rather than athletes, or subjects with low to moderate training. It may be assumed that all of the Air Force members who were subjects in the study I mention above were physically fit and engaged in regular physical training. But neither that study nor those studies looking at athletes quantify the volume or type of strength training athletes are undergoing. The important point to make is that the only effect strength training could have on these athletes is to *counteract* and reduce the limited loss of muscle mass and strength that does otherwise occur to some extent over time with testosterone blockade. There has been at least one study that illustrates this, although only over a short period, measuring strength during a twelve-week period where testosterone was suppressed to levels of 2 nmol/L. During that time, subjects actually increased leg lean mass by 4%, and total lean mass by 2%, and subject performance on the 10 rep-max leg press improved by 32%, while their bench press performance improved by 17%. (Kvorning 2006.)

96. The point for safety is that superior strength enables a biological male to apply greater force against an opponent's body during body contact, or to throw, hit, or kick a ball at speeds outside the ranges normally encountered in female-only play, with the attendant increased risks of injury that I have already explained.

D. Speed

97. As to speed, the study of transitioning Air Force members found that these males retained a 9% running speed advantage over the female control

group after one year of testosterone suppression, and their average speed had not declined significantly farther by the end of the 2.5 year study period. (Roberts 2020.) Again, I have already explained the implications of greater male speed on safety for females on the field and court, particularly in combination with the greater male body weight.

CONCLUSION

Since the average male athlete is larger and exerts greater power than the average female athlete in similar sports, male–female collisions will produce greater energy at impact, and impart greater risk of injury to a female, than would occur in most female-female collisions. Because of the well-documented physiological testing and elite performance differences in speed and strength, as well as differences in lean muscle mass that exist across all age ranges, the conclusions of this paper can apply to a certain extent before, as well as during, and after puberty. We have seen that males who have undergone hormone therapy in transition toward a female body type nevertheless retain musculoskeletal "legacy" advantages in muscle girth, strength, and size. We have also seen that the additive effects of these individual advantages create multiplied advantages in terms of power, force generation and momentum on the field of play. In contact or collision sports, sports involving projectiles, or sports where a stick is used to strike something, the physics and physiology reviewed above tell us that permitting male-bodied athletes to compete against, or on the same team as females—even when undergoing testosterone

suppression—must be expected to create predictable, identifiable, substantially increased, and unequal risks of injuries to the participating women.

Based on its independent and extensive analysis of the literature coupled with injury modeling, World Rugby recognized the inadequacy of the International Olympic Committee's policy to preserve safety for female athletes in their contact sport (the NCAA policy is even more lax in its admission of biological males into the female category). Among the explicit findings of the World Rugby working group were the following:

- Forces and inertia faced by a smaller and slower player during collisions are significantly greater when in contact with a larger, faster player.
- Discrepancies in mass and speed (such as between two opponents in a tackle) are significant determinants of various head and other musculoskeletal injury risks.
- The risk of injury to females is increased by biological males' greater ability to exert force (strength and power), and also by females' reduced ability to receive or tolerate that force.
- Testosterone suppression results in only "small" reductions in the male physiological advantages. As a result, heightened injury risks remain for females who share the same field or court with biological males.
- These findings together predict a significant increase in injury rates for females in rugby if males are permitted to participate based on gender identity, *with or without testosterone suppression*, since the magnitude of forces and energy transfer during collisions will increase substantially, directly correlated to the differences in physical attributes that exist between the biological sexes.

Summarizing their work, the authors of the World Rugby Guidelines said that, "World Rugby's number one stated priority is to make the game as safe as

possible, and so World Rugby cannot allow the risk to players to be increased to such an extent by allowing people who have the force and power advantages conferred by testosterone to play with and against those who do not." (World Rugby Transgender Guidelines 2020.) As my own analysis above makes clear, I agree with the concerns of UK Sport and the conclusions of World Rugby regarding risk to female athletes. Importantly, I also agree that it must be a high priority for sports governing bodies (and other regulatory or governmental bodies governing sports) to make each sport as safe as reasonably possible. And in my view, medical practitioners with expertise in this area have an obligation to advocate for science-based policies that promote safety.

The *performance* advantages retained by males who participate in women's sports based on gender identity are readily recognized by the public. When an NCAA hurdler who ranked 200th while running in the collegiate male division transitions and immediately leaps to a number one ranking in the women's division;[24] when a high school male sprinter who ranked 181st in the state running in the boys' division transitions and likewise takes first place in the girls' division (De Varona 2021), the problem of fairness and equal opportunities for girls and women is immediately apparent, and indeed this problem is being widely discussed today in the media.

[24] https://en.wikipedia.org/wiki/Cece_Telfer (accessed 6/20/21)

The causes of sports injuries, however, are multivariate and not always as immediately apparent. While, as I have noted, some biological males have indeed competed in a variety of girls' and women's contact sports, the numbers up till now have been small. But recent studies have reported very large increases in the number of children and young people identifying as transgender compared to historical experience. For example, an extensive survey of 9th and 11th graders in Minnesota found that 2.7% identified as transgender or gender-nonconforming— well over 100 times historical rates (Rider 2018), and many other sources likewise report this trend.[25]

Faced with this rapid social change, it is my view as a medical doctor that policymakers have an important and pressing duty not to wait while avoidable injuries are inflicted on girls and women, but instead to proactively establish policies governing participation of biological males in female athletics that give proper and scientifically-based priority to safety in sport for these girls and women. Separating participants in contact sports based on biological sex preserves competitive equity, but also promotes the safety of female athletes by protecting them from predictable and preventable injury. Otherwise, the hard science that I have reviewed in this white paper leaves little doubt that eligibility policies based on ideology or gender identity rather than science, will,

[25] https://www.nytimes.com/2016/07/01/health/transgender-population.html?.?mc=aud_dev&ad-keywords=auddevgate&gclid=Cj0KCQjwkZiFBhD9ARIsAGxFX8BV5pozB9LI5Ut57OQzuMhurWThv BMisV9NyN9YTXIzWl7OAnGT6VkaAu0jEALw_wcB&gclsrc=aw.ds (accessed 6/20/21)

over time, result in increased, and more serious, injuries to girls and women who are forced to compete against biologically male transgender athletes. When basic science and physiology both predict increased injury, then leagues, policy-makers, and legislators have a responsibility to act to protect girls and women before they get hurt.

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BIBLIOGRAPHY

Agel, J. et al., Anterior cruciate ligament injury in National Collegiate Athletic Association basketball and soccer: a 13-year review. Am. J. Sports Med. 33(4):524-531 (2005).

Athletic Business, "College intramural playing rules vary greatly." https://www.athleticbusiness.com/college/intramural-coed-basketball-playing-rules-vary-greatly.html.

Bahr, R. and T. Krosshaug, Understanding injury mechanisms: a key component of preventing injuries in sport. Br. J. Sports Med 39:324-329 (2005).

Barboza, S.D. et al., Injuries in field hockey players: a systematic review. Sports Med. 48:849-66 (2018).

Barth, J.T. et al., Acceleration-deceleration sport-related concussion: the gravity of it all. J. Athletic Training 36(3):253-56 (2001).

Beachy, G. and M. Rauh, Middle school injuries: a 20-year (1988-2008) multisport evaluation. J. Athl. Train. 49(4):493-506 (2014).

Berz, K. et al., Sex-specific differences in the severity of symptoms and recovery rate following sports-related concussion in young athletes. The Physician and Sports Med. 41(2):58-63 (2015).

BJJ World, "Transgender MMA Fighter Fallon Fox Breaks Skull of Her Female Opponent." https://bjj-world.com/transgender-mma-fighter-fallon-fox-breaks-skull-of-her-female-opponent/.

Blankenship, M.J. et al., Sex-based analysis of the biomechanics of pitching. 38th International Society of Biomechanics in Sport Conference (July 2020).

Blumenfeld, R.S. et al., The epidemiology of sports-related head injury and concussion in water polo. Front. Neurol. 7(98) (2016).

Boden, B.P. et al., Concussion incidence in elite college soccer players. Am. J. Sports Med. 26(2):238-241 (1998).

Bohannon, R.W. et al., Handgrip strength: a comparison of values obtained from the NHANES and NIH toolbox studies. Am. J. Occ. Therapy 73(2) (March/April 2019).

Bompadre, V. et al., Washington State's Lystedt Law in concussion documentation in Seattle public high schools. J. Athletic Training 49(4):486-92 (2014).

Broshek, D.K. et al., Sex differences in outcome following sports-related concussion, J. Neurosurg. 102:856-63 (May 2005).

Buckman, R. F. and Buckman, P.D., Vertical deceleration trauma: principles of management. Surg .Clin. N. Am. 71(2):331–44 (1991).

Caswell, S.V., et al., Epidemiology of sports injuries among middle school students. Brit. J. of Sports Med. 51(4):305 (2017).

Centers for Disease Control, CDC National Health Statistics Report Number 122, 12/20/2018.

Centers for Disease Control, Nonfatal traumatic brain injuries from sports and recreation activities–United States, 2001-2005, JAMA 298(11):1271-72 (Sept 2007).

Cheuvront, S.N. et al., Running performance differences between men and women: an update. Sports Med. 35(12):1017-24 (2005).

Chidi-Ogbolu, N. and K. Baar, Effect of estrogen on musculoskeletal performance and injury risk. Front. Physiol. 9:1834 (2019).

Chu, Y. et al., Biomechanical comparison between elite female and male baseball pitchers. J. Applied Biomechanics 25:22-31 (2009).

Coleman, D.L. and W. Shreve, Comparing athletic performances: the best elite women to boys and men. web.law.duke.edu/sites/default/files/centers/sportslaw/comparingathleticperform ances.pdf. (Accessed 06/20/21)

Coleman, D. L. et al., Re-affirming the value of the sports exception to Title IX's general non-discrimination rule. Duke J. of Gender and Law Policy 27(69):69134 (2020).

Colvin, A.C. et al., The role of concussion history and gender in recovery from soccer-related concussion. Am. J. Sports Med, 37(9):1699-1704 (2009).

Covassin, T. et al., Sex differences and the incidence of concussions among collegiate athletes. J. Ath. Training 38(3):238-244 (2003).

Covassin, T. et al., Sex differences in reported concussion injury rates and time loss from participation: an update of the National Collegiate Athletic

Association Injury Surveillance Program from 2004-2005 through 2009-2009. J. Ath. Training 51(3):189-194 (2016).

Covassin, T. et al., The role of age and sex in symptoms, neurocognitive performance, and postural stability in athletes after concussion. Am. J. Sports Med. 40(6):1303-1312 (2012).

Dashnaw, M.L. et al., An overview of the basic science of concussion and subconcussion: where we are and where we are going. Neurosurg. Focus 33(6) E5 (2012).

Davis, S.M., et al., Sex Differences in Infant Body Composition Emerge in First 5 Months of Life. J. Pediatr. Endocrinol. Metab. 32(11): 1235–1239 (2019)

De Varona, D. et al., Briefing book: a request to Congress and the Administration to preserve girls' and women's sport and accommodate transgender athletes. Women's Sports Policy Working Group (2021), available at https://womenssportspolicy.org/wp-content/uploads/2021/02/Congressional-Briefing-WSPWG-Transgender-Women-Sports-2.27.21.pdf.

Dick, R.W., Is there a gender difference in concussion incidence and outcomes? Br. J. Sports Med. 43(Supp I):i46-i50 (2009).

Dolgin, J., Transgender women on college athletic teams – the case of Lindsay Hecox. NEJM 383(21):2000-2002 (2020).

Ewing-Cobbs, et al., Persistent postconcussion symptoms after injury. Pediatrics 142(5):e20180939 (2018).

Ferris, D.P. et al., The relationship between physical and physiological variables and volleyball spiking velocity. J. Strength & Cond. Research 9(1):32-36 (1995).

Fields, J.B. et al., Body composition variables by sport and sport-position in elite collegiate athletics. J. Strength & Cond. Research 32(11):3153-3159 (Nov 2018).

Fighera, T.M. et al., Bone mass effects of cross-sex hormone therapy in transgender people: updated systematic review and meta-analysis. J. Endocrine Soc. 3(5):943-964 (May 2019).

Flaxman, T.E. et al., Sex-related differences in neuromuscular control: implications for injury mechanisms or healthy stabilization strategies? J. Ortho. Research 310-317 (Feb 2014).

Forthomme, B. et al., Factors correlated with volleyball spike velocity. AJSM 33(10):1513-1519 (2005).

Fung, Y.C.,The application of biomechanics to the understanding of injury and healing. A.M. Nahum et al. (eds), Accidental Injury, Springer Science & Business Media: New York (1993).

Gay, T., Football physics: the science of the game. Rodale Books (2004).

Gilsanz, V. et al., Age at onset of puberty predicts bone mass in young adulthood. J. Pediatr. 158(1):100-105 (Jan 2011).

Gooren, L.J.G. et al., Transsexuals and competitive sports. Eur. J. Endocrinol. 151:425-9 (2004).

Hacherl, S.L., et al., Concussion rates and sports participation time loss in sex-comparable middle school sports. Archives of Clinical Neuropsychology 36:650 (2021).

Hacherl, S.L., et al., Concussion rates in U.S. middle school athletes from the 2015-16 to 2019-20 school years. J. Athl. Train. 56(6s):S-21 (2021).

Handelsman, D.J. et al., Circulating testosterone as the hormonal basis of sex differences in athletic performance. Endocrine Reviews 39(5):803-829 (Oct 2018).

Harmon, K.G. et al., American Medical Society for Sports Medicine position statement: concussion in sport. Br. J. Sports Med. 47:15-26 (2013).

Harper, J. et al., How does hormone transition in transgender women change body composition, muscle strength and haemoglobin? Systematic review with a focus on the implications for sport participation. BJSM 55(15):865-72 (2021).

Herzberg, S.D. et al., The effect of menstrual cycle and contraceptives on ACL injuries and laxity: a systematic review and meta-analysis. Orthop. J. Sports Med. 5(7) (2017).

Hewett, T.E. et al., Biomechanical measures of neuromuscular control and valgus loading of the knee predict anterior cruciate ligament injury risk in female athletes: a prospective study. AJSM 33(4):492-501 (2005).

Hilton, E. N. and T.R. Lundberg, Transgender women in the female category of sport: perspectives on testosterone suppression and performance advantage. Sports Medicine 51:199-214 (2021).

Hon, W.H.C. and S.H. Kock, Sports related fractures: a review of 113 cases. J. Orhopaedic Surg. 9(1):35-38 (2001).

Howell, D.R. et al., Collision and contact sport participation and quality of life among adolescent athletes. J. Athletic Training 55(11):1174-1180 (2020).

Hult, J.S., Women's struggle for governance in U.S. amateur athletics. Int. Rev. for Soc. of Sports 24(3):249-61 (1989).

International Olympic Committee. IOC Framework on Fairness, Inclusion and Non-Discrimination on the Basis of Gender Identity and Sex Variations (2021).

Janssen, I. et al., Skeletal muscle mass and distribution in 468 men and women aged 18-88 yr. J. Appl. Physiol. 89:81-88 (2000).

Kellis, S.E. et al., The evaluation of jumping ability of male and female basketball players according to their chronological age and major leagues. J. Strength and Conditioning Res. 13(1):40-46 (1999).

Kerr, Z., et al., Concussion rates in U.S. middle school athletes, 2015-16 school year, Am. J. Prev. Med. 53(6):914-18 (2017).

Kirchengast, S., Sexual dimorphism in body composition, weight status and growth in prepubertal school children from rural areas of eastern Austria. Collegium Antropologicum 25(1):21-30 (2001).

Kobayashi, H. et al., Mechanisms of the anterior cruciate ligament injury in sports activities: A twenty-year clinical research of 1700 athletes. J. Sports Science & Medicine 9:669-675 (2010).

Kountouris, P. et al., Evidence for differences in men's and women's volleyball games based on skills effectiveness in four consecutive Olympic tournaments. Comprehensive Psychology 4(9) (2015).

Kuczinski, A. et al., Trends and epidemiologic factors contributing to soccer-related fractures that presented to emergency departments in the United States. Sports Health 11(1):27-31 (2018).

Kujala U.M., et al., Acute injuries in soccer, ice hockey, volleyball, basketball, judo, and karate: analysis of national registry data. BMJ 311(7018):1465-68 (1995).

Kvorning, T. et al., Suppression of endogenous testosterone production attenuates the response to strength training: a randomized, placebo-

controlled, and blinded intervention study. Am. J. Physiol .Metab. 291:E1325-E1332 (2006).

La Fountaine, M.F. et al., Preliminary evidence for a window of increased vulnerability to sustain a concussion in females: a brief report. Front. Neurol. 10:691 (2019).

Lapauw, B. et al., Body composition, volumetric and areal bone parameters in male-to-female transsexual persons. Bone 43:1016-21 (2008).

Lin, C. et al., Sex differences in common sports injuries. PM R 10(10):1073-1082 (2019).

Lombardo, M.P. and R. O. Deaner, On the evolution of sex differences in throwing. Qu. Review of Bio. 93(2):91-119 (2018).

Los Angeles Times, "Volleyball star Haley Hodson had it all, until blows to her head changed everything." https://www.latimes.com/sports/story/2020-12-08/stanford-volleyball-hayley-hodson-concussions-cte-lawsuit.

Magnusson, S.P. et al., The adaptability of tendon loading differs in men and women. Int. J. Exp. Pathol. 88:237-40 (2007).

Marar, M. et al., Epidemiology of concussions among United States high school athletes in 20 sports. Am. J. Sports Med. 40(4):747-755 (2012).

McCrory, P. et al., Consensus statement on concussion in sport—the 5th international conference on concussion in sport held in Berlin, October 2016. BJSM 51:838-847 (2018).

McGroarty, N.K. et al., Sport-related concussion in female athletes: a systematic review. Orthop. J. Sports Med. 8(7) (2020).

McIntosh, A.S., Risk compensation, motivation, injuries, and biomechanics in competitive sport, Br. J. Sports Med (39):2-3 (2005).

McManus, A. and N. Armstrong, Physiology of elite young female athletes. J Med & Sport Sci 56:23-46 (2011).

Meeuwise, W.H., Assessing causation in sports injury: a multifactorial model. Clinical J. of Sports Med. 4(3):166-70 (1994).

Montalvo, A.M. et al., Anterior cruciate ligament injury risk in sport: a systematic review and meta-analysis of injury incidence by sex and sport classification. J. Ath. Training 54(5):472-482 (2019).

Montalvo, A.M. et al., "What's my risk of sustaining an ACL injury while playing sports?": a systematic review with meta-analysis. Br. J. Sports Med. 53:10031012 (2019).

Mooney, J. et al., Concussion in soccer: a comprehensive review of the literature. Concussion 5(3) (2020).

Morris, J.S. et al., Sexual dimorphism in human arm power and force: implications for sexual selection on fighting ability. J. Exp. Biol. 223(Pt 2) (2020).

National Collegiate Athletic Association, Inclusion of transgender student-athletes. https://ncaaorg.s3.amazonaws.com/inclusion/lgbtq/INC_TransgenderHandbook.pdf (August 2011).

National Conference of State Legislatures, Report on traumatic brain injury legislation. https://www.ncsl.org/research/health/traumatic-brain-injury-legislation.aspx#1 (2018).

Neder, J.A. et al., Reference values for concentric knee isokinetic strength and power in nonathletic men and women from 20 to 80 years old. J. Orth. & Sports Phys. Therapy 29(2):116-126 (1999).

New York Times, “Estimate of U.S. transgender population doubles to 1.4 Million adults.” https://www.nytimes.com/2016/07/01/health/transgender-population.html?.?mc=aud_dev&ad-keywords=auddevgate&gclid=Cj0KCQjwkZiFBhD9ARIsAGxFX8BV5pozB9LI5Ut57OQzuMhurWThvBMisV9NyN9YTXIzWl7OAnGT6VkaAu0jEALw_wcB&gclsr c=aw.ds. (July 1, 2016).

Nieves, J.W. et al., Males have larger skeletal size and bone mass than females, despite comparable body size. J. Bone Mineral Res. 20(3):529-35 (2005).

Palao, J.M. et al., Normative profiles for serve speed for the training of the serve and reception in volleyball. The Sport Journal (July 2014).

Pierpoint, L. et al., The first decade of web-based sports injury surveillance: descriptive epidemiology of injuries in US high school boys’ (and girls) lacrosse (2008–2009 Through 2013–2014) and National Collegiate Athletic Association men’s lacrosse (2004–2005 Through 2013–2014). J. Athl. Training 54(1):30-41 (2019).

Preiss-Farzanegan, S.J. et al., The relationship between gender and postconcussion symptoms after sport-related mild traumatic brain injury. PM R 1(3):245-53 (2009).

Rider, G.N. et al., Health and care utilization of transgender and gender nonconforming youth: a population-based study. Pediatrics 141:3 (March 2018).

Roberts, T.A. et al., Effect of gender affirming hormones on athletic performance in transwomen and transmen: implications for sporting organisations and legislators. BJSM 0:1-7 (2020).

Rowson, S. et al., Biomechanical perspectives on concussion in sport, Sports Med. Arthrosc. 24(3):100-107 (Sept 2016).

Ruetsche, A.G. et al., Cortical and trabecular bone mineral density in transsexuals after long-term cross-sex hormonal treatment: a cross-sectional study. Osteoporos. Int. 16:791-798 (2005).

Sakamoto, K. et al., Comparison of kicking speed between female and male soccer players. Procedia Engineering 72:50-55 (2014).

Santos, D.A. et al., Reference values for body composition and anthropometric measurements in athletes. PLOSOne 9(5) (May 2014).

Sattler, T. et al., Vertical jump performance of professional male and female volleyball players: effects of playing position and competition level. J. Strength and Conditioning Res. 29(6):1486-93 (2015).

Scharff, M. et al., Change in grip strength in trans people and its association with lean body mass and bone density. Endocrine Connections 8:1020-28 (2019).

Singh-Ospina, N. et al., Effect of sex steroids on the bone health of transgender individuals: a systematic review and meta-analysis. J. Clin. Endocrinol. Metab. 102(11):3904-13 (Nov 2017).

Sutton, K.M. et al., Anterior cruciate ligament rupture: differences between males and females. J. Am. Acad. Orthop. Surg. 21(1):41-50 (2013).

Tack, L.J.W. et al., Proandrogenic and antiandrogenic progestins in transgender youth: differential effects on body composition and bone metabolism. J. Clin. Endocrinol. Metab, 103(6):2147-56 (2018).

Taylor, R.W., et al., Gender differences in body fat content are present well before puberty. Int. J. Obes. Relat. Metab. Disord. 21(11): 1082-4 (1997).

Taylor, R.W., et al., Sex differences in regional body fat distribution from pre- to postpuberty. Obesity 18(7): 1410-16 (2010).

Thomas, J.R. and K. E. French, Gender differences across age in motor performance: a meta-analysis. Psych. Bull. 98(2):260-282 (1985).

Tierney, R.T. et al., Gender differences in head-neck segment dynamic stabilization during head acceleration. Med. and Sci. in Sports and Exercise, American College of Sports Medicine 37(2):272-9 (2005).

UK Sports Councils' Equality Group, Guidance for Transgender Inclusion in Domestic Sport, https://equalityinsport.org/docs/300921/Guidance%20for%20Transgender%20Inclusion%20in%20Domestic%20Sport%202021.pdf (2021).

UK Sports Councils' Equality Group, International Research Literature Review, https://equalityinsport.org/docs/300921/Transgender%20International%20Research%20Literature%20Review%202021.pdf (2021).

Van Den Tillaar, R. and J. M. H. Cabri, Gender differences in the kinematics and ball velocity of overarm throwing in elite team handball players. J. Sports Sciences 30(8):807-813 (2012).

Viviers, P. et al., A review of a decade of rugby union injury epidemiology: 20072017. Sports Health 10(3):223-27 (2018).

VolleyballMag.com, "Hit by volleyballs: concussions have changed coach Corinne Atchison's life." https://volleyballmag.com/corinneatchison/ (9/25/16).

Wang, L. et al., Post-traumatic osteoarthritis following ACL injury. Arthritis Res. and Therapy 22(57) (2020)

Wiik, A., T. R Lundberg et al., Muscle strength, size, and composition following 12 months of gender-affirming treatment in transgender individuals. J. Clinical Endocrin. & Metab. 105(3):e805-813 (2020).

Wikipedia, "Cece Telfer." https://en.wikipedia.org/wiki/Cece_Telfer.

Wolf, J.M. et al., Male and female differences in musculoskeletal disease. J. Am. Acad. Orthop. Surg. 23:339-347 (2015).

World Regby Transgender Guidelines. https://www.world.rugby/the-game/player-welfare/guidelines/transgender (2020).

World Rugby Transgender Women Guidelines. https://www.world.rugby/the-game/player-welfare/guidelines/transgender/women (2020).

Wunderle, K. et al, Menstrual phase as predictor of outcome after mild traumatic brain injury in women. J. Head Trauma Rehabil. 29(5):E1-E8 (2014).

APPENDIX – LIST OF PUBLICATIONS

Publications of Dr. Chad Thomas Carlson, M.D., FACSM

Sports Medicine CAQ Study Guide, Healthy Learning, 2021 [editor].

SEXUAL VIOLENCE IN SPORT: AMERICAN MEDICAL SOCIETY FOR SPORTS MEDICINE POSITION STATEMENT. Published in Curr Sports Med Reports June 2020;19(6):232-4; Clin J Sports Med June 8 2020; Br J Sports Med 2020;0:1-3.

Traveling with Medication. NCAA Sports Science Institute Bulletin, 2015 http://www.ncaa.org/sport-science-institute/traveling-medication.

A SURVEY OF STATE MEDICAL LICENSING BOARDS: CAN THE TRAVELING TEAM PHYSICIAN PRACTICE IN YOUR STATE? 2013. Jan (47)1:60-62.

AXIAL BACK PAIN IN THE ATHLETE: PATHOPHYSIOLOGY AND APPROACH TO REHABILITATION. Curr Rev Musculoskel Med. 2009 (2):88-93.

THE NATURAL HISTORY AND MANAGEMENT OF HAMSTRING INJURIES. Curr Rev Musculoskel Med 2008 (1):120-128.

SPONDYLOLYSIS AND THE ATHLETE. Athletic Ther Today. 2007 (12)4:37-39.

"ACUTE SUBDURAL HEMATOMA IN A HIGH SCHOOL FOOTBALL PLAYER," J Athl Training, 38;2(63), 2003.

THE RELATIONSHIP OF EXCESSIVE WEIGHT LOSS TO PERFORMANCE IN HIGH SCHOOL WRESTLERS – A PILOT STUDY; presented at the AMSSM national meeting, San Diego, CA, 2000; Clinical Journal of Sport Medicine 10(4):310, October, 2000.

CURRICULUM VITAE (ABBREVIATED)

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Phone (515) 221-1102

Active professional licenses: IA, NE, CA, TX, TN, NC, AZ, FL (telemed)

Board certified family medicine, ABMS 1998; recertified 2005, 2012

Board certified sports medicine, ABMS 1999; recertified 2009, 2019

EDUCATION:

- Fellowship: Sports Medicine -- Ball Memorial Hospital/Central Indiana Orthopedics, 1997-1999; Completed 4/99
- Residency: University of Michigan Department of Family Medicine,1994-97
- University of Nebraska College of Medicine
  M.D. obtained May 1994
- University of Nebraska at Lincoln
  B.S. with majors in history (emphasis American) and biology obtained May 1990

EMPLOYMENT HISTORY:

- Physician Owner, Stadia Sports Medicine, West Des Moines, IA, 2006 - present
- Staff Physician, University of Illinois, 9/04-6/06
- Director, Carle Sports Medicine, Carle Foundation Hospital, Urbana, IL, 2001-2004; Team physician, University of Illinois.
- Private practice, Ionia County Hospital, Ionia, MI, 1999-2001.

HOSPITAL AFFILIATIONS:

- Iowa Methodist Hospital, Des Moines
- Mercy Medical Center, Des Moines

PROFESSIONAL HONORS/AWARDS:

- Appointed to Board of Directors, Physical Activity Alliance, 2020
- Appointed to joint AMSSM/NCAA COVID-19 Working Group, March 2020-present
  - Medical advisory panel, 2021 Women's Division I NCAA Basketball Tournament
- AMSSM Founders Award 2019, awarded once annually for the Sports Medicine Physician nationally who best exemplifies the practice of Sports Medicine
- Fellow designation, American Medical Society for Sports Medicine, 2019
- Elected to Executive Committee, American Medical Society for Sports Medicine, 2017-21
  - **President of AMSSM, 2019-2020**

- Practice/Policy Committee, AMSSM, 2007-2016 (Former Chair)
    - Author of US HR 921, the Sports Medicine Licensure Clarity Act, which passed the US House of Representatives and Senate in January 2017, and was signed into law by President Trump, 2017
- Appointed member of physician liaison group to the NCAA to discuss return to sport strategies in the COVID-19 pandemic, 2020
- Appointed to Board of Directors, Running the Race, 2018-present
- Sports Ultrasound Committee, Policy Co-Chair, AMSSM, 2015-2017
- Elected to Board of Directors, American Medical Society for Sports Medicine, 2009-2013.
- Member, Health and Science Policy Committee, ACSM, 2010-present
    - Chair, Clinical Medicine Subcommittee, HSPC, ACSM, 2012-2015
- Iowa Medical Society Leadership Development Committee, 2022
- Member of Sports Medicine Subcommittee for the Iowa State Medical Society, 2007-present
    - Iowa designate to National Youth Sports Safety Summit
        - New York City – 2015
        - Indianapolis – 2016
        - Kansas City – 2017
- AMSSM designate for the American Academy of Orthopaedic Surgeons' Knee Osteoarthritis Quality Measure review committee, 2014-2016
- Associate Editor, Current Reviews in Musculoskeletal Medicine, 2006-2010.
- Fellow, American College of Sports Medicine: Designated in 2004

SPECIAL QUALIFICATIONS:

- Prior legal consulting work in cases with both local and national reach
- Extensive training in office musculoskeletal injury
- Oversight of treadmill stress testing/metabolic stress testing
- Independent consultation regarding establishment of individual exercise programs consistent with revised ACSM guidelines
- Proficient at evaluation/management of bone mineral density problems at all ages

- Qualified procedurally for:
    - Ultrasound diagnostic testing and guided injections
    - Joint injection/aspiration
    - Percutaneous tenotomy (TENEX)
    - Rotator cuff barbotage
    - Lactate/Anaerobic threshold, $VO_{2\,MAX}$/ exercise testing
    - Laryngoscopy for vocal cord assessment
    - Compartment pressure assessment
    - Ultrasound-guided nerve blocks
- Extensive experience speaking to large national groups on issues pertaining to sports medicine, including, but not limited to:
    - Overuse Injury
    - Head and Neck Injuries on the Field
    - Exercise-Induced Asthma
    - The Shoulder Exam
    - Principles of Exercise Prescription
    - Traumatic Brain Injury in Sport
    - The Knee Exam
    - The Ankle Exam
    - The Hip Exam
    - The Pre-Participation Exam
    - Cardiopulmonary Exercise Testing for Determination of Training Zone Estimates and to Identify Causes of Exercise-Related Dyspnea
    - Athletic Amenorrhea
    - Advocacy in Sports Medicine
    - Medical Practice Economics

PUBLICATIONS/RESEARCH:

- Sports Medicine CAQ Study Guide, Healthy Learning, Monterey, CA. 2021.[editor].
- AXIAL BACK PAIN IN THE ATHLETE: PATHOPHYSIOLOGY AND APPROACH TO REHABILITATION. Curr Rev Musculoskel Med. 2009 (2):88-93
- SPONDYLOLYSIS AND THE ATHLETE. Athletic Ther Today. 2007 (12)4:37-39.
- THE NATURAL HISTORY AND MANAGEMENT OF HAMSTRING INJURIES. Curr Rev Musculoskel Med 2008 (1):120-128.
- A SURVEY OF STATE MEDICAL LICENSING BOARDS: CAN THE TRAVELING TEAM PHYSICIAN PRACTICE IN YOUR STATE? BJSM. 2013. Jan (47)1:60-62.
- SEXUAL VIOLENCE IN SPORT: AMERICAN MEDICAL SOCIETY FOR SPORTS MEDICINE POSITION STATEMENT
    - Curr Sports Med Reports June 2020;19(6):232-4.
    - Clin J Sports Med June 8 2020;
    - Br J Sports Med 2020;0:1-3
- "ACUTE SUBDURAL HEMATOMA IN A HIGH SCHOOL FOOTBALL PLAYER," J Athl Training, 38;2(63), 2003
- Traveling with Medication. NCAA Sports Science Institute Bulletin, 2015 http://www.ncaa.org/sport-science-institute/traveling-medication
- THE RELATIONSHIP OF EXCESSIVE WEIGHT LOSS TO PERFORMANCE IN HIGH SCHOOL WRESTLERS – A PILOT STUDY; presented at the AMSSM national meeting, San Diego, CA, 2000 Clinical Journal of Sport Medicine 10(4):310, October, 2000

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA
CHARLESTON DIVISION

B.P.J., by her next friend and mother, HEATHER JACKSON,

Plaintiff,

vs.

WEST VIRGINIA STATE BOARD OF EDUCATION, et al.,

Defendants,

and

LAINEY ARMISTEAD,

Defendant-Intervenor.

Case No. 2:21-cv-00316

Hon. Joseph R. Goodwin

DECLARATION OF STEPHEN B. LEVINE, MD

I, Dr. Stephen B. Levine, pursuant to 28 U.S. Code § 1746, declare under penalty of perjury under the laws of the United States of America that the facts contained in my Expert Report of Stephen B. Levine, MD., in the Case of B.P.J. v. West Virginia State Board of Education, dated February 23, 2022 and attached hereto, are true and correct to the best of my knowledge and belief, and that the opinions expressed therein represent my own expert opinions.

Executed on February 23, 2022.

Stephen B. Levine MD

Stephen B. Levine, MD

Expert Report of

Stephen B. Levine, MD

In the case of B.P.J. vs. West Virginia State Board of Education.

February 23, 2022

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I. CREDENTIALS & SUMMARY

1. I am Clinical Professor of Psychiatry at Case Western Reserve University School of Medicine, and maintain an active private clinical practice. I received my MD from Case Western Reserve University in 1967, and completed a psychiatric residency at the University Hospitals of Cleveland in 1973. I became an Assistant Professor of Psychiatry at Case Western in 1973, became a Full Professor in 1985, and in 2021 was honored to be inducted into the Department of Psychiatry's "Hall of Fame."

2. Since July 1973, my specialties have included psychological problems and conditions relating to individuals' sexuality and sexual relations, therapies for sexual problems, and the relationship between love, intimate relationships, and wider mental health. In 2005, I received the Masters and Johnson Lifetime Achievement Award from the Society of Sex Therapy and Research. I am a Distinguished Life Fellow of the American Psychiatric Association.

3. I have served as a book and manuscript reviewer for numerous professional publications. I have been the Senior Editor of the first (2003), second (2010), and third (2016) editions of the *Handbook of Clinical Sexuality for Mental Health Professionals*. In addition to five previously solo-authored books for professionals, I have recently published *Psychotherapeutic Approaches to Sexual Problems* (2020). The book has a chapter titled "The Gender Revolution."

4. In total I have authored or co-authored over 180 journal articles and book chapters, 20 of which deal with the issue of gender dysphoria. I am an invited member of a Cochrane Collaboration subcommittee that is currently preparing a review of the scientific literature on the effectiveness of puberty blocking hormones and of cross-sex hormones for

gender dysphoria for adolescents. Cochrane Reviews are a well-respected cornerstone of evidence-based practice, comprising a systematic review that aims to identify, appraise, and synthesize all the empirical evidence that meets pre-specified eligibility criteria in response to a particular research question.

5. I first encountered a patient suffering what we would now call gender dysphoria in July 1973. In 1974, I founded the Case Western Reserve University Gender Identity Clinic, and have served as Co-Director of that clinic since that time. Across the years, our Clinic treated hundreds of patients who were experiencing a transgender identity. An occasional child was seen during this era. I was the primary psychiatric caregiver for several dozen of our patients and supervisor of the work of other therapists. I was an early member of the Harry Benjamin International Gender Dysphoria Association (later known as WPATH) and served as the Chairman of the committee that developed the 5th version of its Standards of Care. In 1993 the Gender Identity Clinic was renamed, moved to a new location, and became independent of Case Western Reserve University. I continue to serve as Co-Director.

6. In the course of my five decades of practice treating patients who suffered from gender dysphoria, I have at one time or another recommended or prescribed or supported social transition, cross-sex hormones, and surgery for particular patients, but only after extensive diagnostic and psychotherapeutic work.

7. In 2006, Judge Mark Wolf of the Eastern District of Massachusetts asked me to serve as an independent, court-appointed expert in a litigation involving the treatment of a transgender inmate within the Massachusetts prison system. In that litigation, the U.S. Court of Appeals for the First Circuit in a 2014 (En Banc) opinion cited and relied on my expert

testimony. I have been retained by the Massachusetts Department of Corrections as a consultant on the treatment of transgender inmates since 2007.

8. In 2019, I was qualified as an expert and testified concerning the diagnosis, understanding, developmental paths and outcomes, and therapeutic treatment of transgenderism and gender dysphoria, particularly as it relates to children, in the matter of *In the Interest of J.A.D.Y. and J.U.D.Y.*, Case No. DF-15-09887-S, 255th Judicial District, Dallas County, TX (the "*Younger* litigation"). I have provided expert testimony in other litigation as listed in my curriculum vitae. In 2019, I provided written expert testimony in the landmark case in the United Kingdom; *Bell v. The Tavistock and Portman NHS Foundation Trust*.

9. I am regularly requested to speak on the topic of gender dysphoria and have given countless presentations to academic conferences and Departments of Psychiatry around the country. In May of this year, I will be co-presenting a symposium on the management of adolescent-onset transgender identity at American Psychiatric Association's Annual Meeting.

10. A fuller review of my professional experience, publications, and awards is provided in my curriculum vitae, a copy of which is attached hereto as Exhibit A.

11. I am being compensated for my time spent in connection with this case at a rate of $400.00 per hour for consultation and $500.00 per hour for time spent testifying.

12. I have reviewed the "Declaration and Expert Report of Deanna Adkins, MD," dated January 21, 2022 ("Adkins"). In that declaration Dr. Adkins makes a variety of statements about gender dysphoria, therapies for gender dysphoria, and outcomes of therapies, which I believe to be inaccurate, or unsupported by scientific evidence. Dr. Adkins is a pediatric endocrinologist. I note with some concern that Dr. Adkins makes a number of sweeping and

purportedly scientific assertions but cites almost no peer-reviewed articles or studies that support her opinions.

13. Based on her declaration, Dr. Adkins' practice is focused on children and adolescents; her CV and declaration do not suggest substantial experience in working with adults or older young adults who are living in a transgender identity, or who suffer from gender dysphoria. (This diagnosis requires "clinically significant" distress.) The wider lifecycle view that derives from experience with these adults (and familiarity with the literature concerning them) provides an important cautionary perspective. The psychiatrist or psychologist treating a trans child or adolescent, of course seeks to make the young patient happy, but the overriding consideration is the creation of a happy, highly functional, mentally healthy person for the next 50 to 70 years of life. I refer to treatment that keeps this goal in view as the "life course" perspective.

14. Dr. Adkins' stated belief that the only way to avoid harm is affirmative care is just one of many questionable assumptions that lack firm scientific foundation. Others that frequently ride along with advocates' convictions about affirmative care include:

a. A trans identity is immutable;

b. Trans identities are primarily caused by biological forces;

c. Gender identity and orientation are distinct stable dimensions of identity;

d. There are no alternative treatments to affirmative care;

e. Affirmative care lastingly improves mental health and social function;

f. Affirmative care reduces the rates of suicidal ideation and suicide;

g. Young teens can give informed consent for hormones because they know best what will make them happy now and in the future;

h. De-transition of affirmed youth is rare;

i. Associated psychopathology during and after affirmative care is primarily due to minority stress.

15. These assertions are inaccurate or unsupported, for reasons that I explain in this Declaration. I will provide citations to published, peer-reviewed articles that inform my judgments.

16. I have also reviewed the "Expert Report and Declaration of Joshua D. Safer, MD," dated January 21, 2022 ("Safer"). In that declaration Dr. Safer similarly makes a variety of statements about gender dysphoria, therapies for gender dysphoria, and outcomes of therapies, which I believe to be inaccurate, or unsupported by scientific evidence. Dr. Safer also makes a number of sweeping and purportedly scientific assertions that are not substantiated by peer-reviewed articles or studies.

17. It is also my opinion that a number of Dr. Safer's assertions are inaccurate or unsupported, for reasons that I explain in this Declaration. Similarly, I will provide citations to published, peer-reviewed articles that inform my judgments.

18. A summary of the key points that I explain in this report is as follows:

a. Sex as defined by biology and reproductive function is clear, binary, and cannot be changed. While hormonal and surgical procedures may enable some individuals to "pass" as the opposite gender during some or all of their lives, such procedures carry with them physical, psychological, and social risks, and no procedures can enable an individual to perform the reproductive role of the opposite sex. (Section II.A.)

b. The diagnosis of "gender dysphoria" encompasses a diverse array of conditions, with widely differing pathways and characteristics depending on age of onset, biological sex, mental health, intelligence, motivations for gender transition, socioeconomic status, country of origin, etc. Data from one population (e.g., adults) cannot be assumed to be applicable to others (e.g., children). (Section II.B.)

c. Among practitioners in the field, there are currently widely varying views concerning both the causes of and appropriate therapeutic response to gender dysphoria in children or adolescents. There are no generally accepted "standards of care" and existing studies do not provide a basis for a scientific conclusion as to which therapeutic response results in the best long-term outcomes for affected individuals. (Section III.)

d. Transgender identity is not biologically based. Rather, gender dysphoria is a psychiatric condition that cannot be identified by any biological test or measurement. (Sections IV.A, IV.B.)

e. Disorders of sexual development ("DSDs") are biological phenomena. It is an error to conflate and/or scientifically link DSDs with incidents of gender dysphoria. (Sections IV.C, IV.D.)

f. The large majority of children who are diagnosed with gender dysphoria "desist"—that is, their gender dysphoria does not persist—by puberty or adulthood. Desistance is also increasingly observed among teens and young adults who have experienced "rapid onset gender dysphoria" — first manifesting gender dysphoria during or shortly after adolescence. (Section V.A., V.B.)

g. "Social transition" —the active affirmation of transgender identity—in young children is a powerful psychotherapeutic intervention that will substantially reduce the

number of children "desisting" from transgender identity. Therefore, the profound implications of "affirmative" treatment—which include taking puberty blockers and cross-sex hormones—must be taken into account where social transition is being considered. (Section VI.A,, VI.B.)

h. Administration of puberty blockers is not a benign "pause" of puberty, but rather a powerful medical and psychotherapeutic intervention that almost invariably leads to persistence in a transgender identity and, ultimately, to the administration of cross-sex hormones. (Section VI.C.)

i. The knowledge base concerning the "affirmative" treatment of gender dysphoria available today has very low scientific quality with many long-term implications remaining unknown. (Section VII.A)

j. There are no studies that show that affirmation of transgender identity in young children reduces suicide or suicidal ideation, or improves long-term outcomes, as compared to other therapeutic approaches. Meanwhile, multiple studies show that adult individuals living transgender lives suffer much higher rates of suicidal ideation, completed suicide, and negative physical and mental health conditions than does the general population. This is true before and after transition, hormones, and surgery. (Section VII.B., VII.C.)

k. In light of what is known and not known about the impact of affirmation on the incidence of suicide, suicidal ideation, and other indicators of mental and physical health, it is scientifically baseless, and therefore unethical, to assert that a child or adolescent who express an interest in a transgender identity will kill him- or herself unless adults and peers affirm that child in a transgender identity. (Section VIII.)

l. Hormonal interventions to treat gender dysphoria are experimental in nature and have not been shown to be safe, but rather put an individual at risk of a wide range of long-term and even life-long harms including: physical health risks; sterilization and the associated emotional response; impaired sexual response; surgical complications and life-long after-care; alienation of family and romantic relationships; elevated mental health risks of depression, anxiety, and substance abuse. (Section IX.)

II. BACKGROUND ON THE FIELD

A. The biological baseline of the binary sexes

19. Dr. Adkins asserts that "the terms biological sex and biological male or female are imprecise and should be avoided." (Adkins at 10.) Dr. Safer further asserts that the term biological sex "can cause confusion," and moreover that a person's sex encompasses gender identity. (Safer at 6.) These statements are untrue. Biological sex is very well defined in all biological sciences including medicine. It is pervasively important in human development throughout the lifecycle.

20. Sex is not "assigned at birth" by humans visualizing the genitals of a newborn; it is not imprecise. Rather, it is clear, binary, and determined at conception. The sex of a human individual at its core structures the individual's biological reproductive capabilities—to produce ova and bear children as a mother, or to produce semen and beget children as a father. As physicians know, sex determination occurs at the instant of conception, depending on whether a sperm's X or Y chromosome fertilizes the egg. A publication of the federal government's National Institute of Health accurately summarizes the scientific facts:

> "Sex is a biological classification, encoded in our DNA. Males have XY chromosomes, and females have XX chromosomes. Sex makes us male or female. Every cell in your body has a sex—making up tissues and organs, like your skin, brain, heart, and

> stomach. Each cell is either male or female depending on whether you are a man or a woman." (NIH 2022.)

21. The binary of biological sex is so fundamental and wide-ranging in its effects on human (and mammal) development and physiology that since 2014 the NIH has required all funded research on humans or vertebrate animals to include "sex as a biological variable" and give "adequate consideration of both sexes in experiments." (NIH 2015). In 2021, the Endocrine Society issued a position paper elaborating on the application of the NIH requirement. The Endocrine Society correctly stated that "Sex is a biological concept . . . all mammals have 2 distinct sexes;" that "biological sex is . . . a fundamental source of intraspecific variation in anatomy and physiology;" and that "In mammals, numerous sexual traits (gonads, genitalia, etc.) that typically differ in males and females are tightly linked to each other because one characteristic leads to sex differences in other traits." (Bhargava et al. 2021 at 221, 229.)

22. The Endocrine Society emphasized that "The terms sex and gender should not be used interchangeably," and noted that even in the case of those "rare" individuals who suffer from some defect such that they "possess a combination of male- and female-typical characteristics, those clusters of traits are sufficient to classify most individuals as either biologically male or female." They concluded, "Sex is an essential part of vertebrate biology, but gender is a human phenomenon. Sex often influences gender, but gender cannot influence sex." (Bhargava et al. 2021 at 220-221, 228.) For purposes of this litigation, Dr. Bhargava's statement that gender cannot influence sex is of central importance.

23. As these statements and the NIH requirement suggest, biological sex pervasively influences human anatomy, its development and physiology. This includes, of course, the development of the human brain, in which many sexually dimorphic characteristics have now been identified. In particular, the Endocrine Society and countless other researchers have

determined that human brains undergo particular sex-specific developmental stages during puberty. This predictable developmental process is a genetically controlled coordinated endocrine response that begins with pituitary influences leading to increases in circulating sex hormones. (Bhargava et al. 2021 at 225, 229; Blakemore et al. 2010 at 926-927, 929; NIH 2001.).

24. Humans have viewed themselves in terms of binary sexes since the earliest historical records. Recognizing a concept of "gender identity" as something distinct from sex is a rather recent innovation whose earliest manifestations likely began in the late 1940s. Its usage became common in medicine in the 1980s and subsequently in the larger culture. Definitions of gender have been evolving and remain individual-centric and subjective. In a statement on "Gender and Health," the World Health Organization defines "gender" as "the characteristics of women, men, girls and boys that are socially constructed" and that "var[y] from society to society and can change over time," and "gender identity" as referring to "a person's deeply felt, internal and individual experience of gender." (WHO Gender and Health.) As these definitions indicate, a person's "felt" "experience of gender" is inextricably bound up with and affected by societal gender roles and stereotypes—or, more precisely, by the affected individual's *perception* of societal gender roles and stereotypes and their personal idiosyncratic meanings. Typically, gendered persons also have subtly different, often idiosyncratic, reactions to societal gender roles and stereotypes without preoccupation with changing their anatomy.

25. Thus, the self-perceived gender of a child begins to develop along with the early stages of identity formation generally, influenced in part from how others label the infant: "I love you, son (daughter)." This designation occurs thousands of times in the first two years of life when a child begins to show awareness of the two possibilities. As acceptance of the designated

gender corresponding to the child's sex is the outcome in >99% of children everywhere, anomalous gender identity formation begs for understanding. Is it biologically shaped? Is it biologically determined? Is it the product of how the child was privately regarded and treated? Is it a product of the quality of early life caregiver attachments? Does it stem from trauma-based rejection of maleness or femaleness, and if so, flowing from what trauma? Does it derive from a tense, chaotic interpersonal parental relationship without physical or sexual abuse? Is it a symptom of another, as of yet unrevealed, emotional disturbance or neuropsychiatric condition (autism)? The answers to these relevant questions are not scientifically known but are not likely to be the same for every trans-identified child, adolescent, or adult.

26. Under the influence of hormones secreted by the testes or ovaries, numerous additional sex-specific differences between male and female bodies continuously develop postnatally, culminating in the dramatic maturation of the primary and secondary sex characteristics with puberty. These include differences in hormone levels, height, weight, bone mass, shape, musculature, body fat levels and distribution, and hair patterns, as well as physiological differences such as menstruation and ejaculation. These are genetically programmed biological consequences of sex—the actual meaning of sex over time. Among the consequences of sex is the consolidation of gender identity during and after puberty.

27. Despite the increasing ability of hormones and various surgical procedures to reconfigure some male bodies to visually pass as female, or vice versa, the biology of the person remains as defined by his (XY) or her (XX) chromosomes, including cellular, anatomic, and physiologic characteristics and the particular disease vulnerabilities associated with that chromosomally defined sex. For instance, the XX (genetically female) individual who takes testosterone to stimulate certain male secondary sex characteristics will nevertheless remain

unable to produce sperm and father children. It is certainly true, as Dr. Adkins writes, that "[h]ormone therapy and social transition significantly change a person's physical appearance." (Adkins at 8.) But in critical respects this change can only be "skin deep." Contrary to assertions and hopes that medicine and society can fulfill the aspiration of the trans individual to become "a complete man" or "a complete woman," this is not biologically attainable. (Levine 2018 at 6; Levine 2016 at 238.) It is possible for some adolescents and adults to pass unnoticed—that is, to be perceived by most individuals as a member of the gender that they aspire to be—but with limitations, costs, and risks, as I detail later.

B. Definition and diagnosis of gender dysphoria

28. Specialists have used a variety of terms over time, with somewhat shifting definitions, to identify and speak about a distressing incongruence between an individual's genetically determined sex and the gender with which they identify or to which they aspire. Today's American Psychiatric Association *Diagnostic and Statistical Manual of Mental Disorders* ("DSM-5") employs the term Gender Dysphoria and defines it with separate sets of criteria for adolescents and adults on the one hand, and children on the other.

29. There are at least five distinct pathways to gender dysphoria: early childhood onset; onset near or after puberty with no prior cross gender patterns; onset after defining oneself as gay for several or more years and participating in a homosexual lifestyle; adult onset after years of heterosexual transvestism; and onset in later adulthood with few or no prior indications of cross-gender tendencies or identity. (Levine 2021.) The early childhood onset pathway and the more recently observed onset around puberty pathway are most relevant to this matter.

30. Gender dysphoria has very different characteristics depending on age and sex at onset. Young children who are living a transgender identity commonly suffer materially fewer symptoms of concurrent mental distress than do older patients. (Zucker 2018 at 10.) The

developmental and mental health patterns for each of these groups are sufficiently different that data developed in connection with one of these populations cannot be assumed to be applicable to another.

31. The criteria used in DSM-5 to identify Gender Dysphoria include a number of signs of discomfort with one's natal sex and vary somewhat depending on the age of the patient, but in all cases require "clinically significant distress or impairment in . . . important areas of functioning" such as social, school, or occupational settings. The symptoms must persist for at least six months.

32. Children who conclude that they are transgender are often unaware of a vast array of adaptive possibilities for how to live life as a man or a woman—possibilities that become increasingly apparent over time to both males and females. A boy or a girl who claims or expresses interest in pursuing a transgender identity often does so based on stereotypical notions of femaleness and maleness that reflect constrictive notions of what men and women can be. (Levine 2017 at 7.) A young child's—or even an adolescent's—understanding of this topic is quite limited. Nor can they grasp what it may mean for their future to be sterile. These children and adolescents consider themselves to be relatively unique; they do not realize that discomfort with the body and perceived social role is neither rare nor new to civilization. What is new is that such discomfort is thought to indicate that they must be a trans person.

C. Impact of gender dysphoria on minority and vulnerable groups

33. Given that, as I discuss later, a diagnosis of gender dysphoria is now frequently putting even young children on a pathway that leads to irreversible physical changes and sterilization by young adulthood, it should be of serious concern to all practitioners that minority and vulnerable groups are receiving this diagnosis at disproportionately high rates. These include: children of color (Rider et al. 2018), children with mental developmental disabilities

(Reisner et al. 2015), children on the autistic spectrum (at a rate more than 7x the general population) (Shumer et al. 2016; van der Miesen et al. 2018), children with ADHD (Becerra-Culqui et al. 2018), children residing in foster care homes, adopted children (at a rate more than 3x the general population) (Shumer et al. 2017), victims of childhood sexual or physical abuse or other "adverse childhood events" (Thoma 2021 et al.; Newcomb et al. 2020; Kozlowska et al. 2021), children with a prior history of psychiatric illness (Edwards-Leeper et al. 2017; Kaltiala-Heino et al. 2015; Littman 2018), and more recently adolescent girls (in a large recent study, at a rate more than 2x that of boys) (Rider et al. 2018 at 4).

D. Three competing conceptual models of gender dysphoria and transgender identity

34. Discussions about appropriate responses by mental health professionals ("MHPs") to actual or sub-threshold gender dysphoria are complicated by the fact that various speakers and advocates (or a single speaker at different times) view transgenderism through at least three very different paradigms, often without being aware of, or at least without acknowledging, the distinctions.

35. Gender dysphoria is **conceptualized and described by some professionals and laypersons as though it were a serious, physical medical illness that causes suffering**, comparable to diseases that are curable before it spreads, such as melanoma or sepsis. Within this paradigm, whatever is causing distress associated with gender dysphoria—whether secondary sex characteristics such as facial hair, nose and jaw shape, presence or absence of breasts, or the primary anatomical sex organs of testes, ovaries, penis, or vagina—should be removed to alleviate the illness. The promise of these interventions is the cure of the gender dysphoria.

36. Dr. Adkins appears to endorse this perspective, asserting that gender dysphoria is a "medical condition." (Adkins at 4.) It should be noted, however, that gender dysphoria is a psychiatric, not a medical, diagnosis. Since its inception in DSM-III in 1983, it has always been specified in the psychiatric DSM manuals and has not been specified in medical diagnostic manuals. Notably, gender dysphoria is the only psychiatric condition to be treated by surgery, even though no endocrine or surgical intervention package corrects any identified biological abnormality. (Levine 2016 at 240.)

37. Gender dysphoria is alternatively **conceptualized in developmental terms**, as an adaptation to a psychological problem that may have been first manifested as a failure to establish a comfortable conventional sense of self in early childhood. This paradigm starts from the premise that all human lives are influenced by past processes and events. Trans lives are not exceptions to this axiom. (Levine 2016 at 238.) MHPs who think of gender dysphoria through this paradigm may work both to identify and address causes of the basic problem of the deeply uncomfortable self or a sense of self impaired by later adversity or abuse. The purpose is to ameliorate suffering when the underlying problem cannot be solved. MHPs first work with the patient and (ideally) family to learn about the events and processes that may have led to the trans person repudiating the gender associated with his sex. The developmental paradigm is mindful of temperamental, parental bonding, psychological, sexual, and physical trauma influences, and the fact that young children work out their psychological issues through fantasy and play and adolescents work out their issues by adopting various interests and identity labels.

38. There is evidence among adolescents that peer social influences through "friend groups" (Littman 2018) or through the internet can increase the incidence of gender dysphoria or claims of transgender identity. Responsible MHPs will want to probe these potential influences

to better understand what is truly deeply tied to the psychology of the patient, and what may instead be being "tried on" by the youth as part of the adolescent process of self-exploration and self-definition.

39. In addition, the developmental paradigm recognizes that, with the important exception of genetic sex, essentially all aspects of an individual's identity evolve—often markedly—across the individual's lifetime. This includes gender. Some advocates assert that a transgender identity is biologically caused, fixed from early life, and eternally present in an unchanging manner. As I review later, however, this assertion is not supported by science.[1]

40. The third paradigm through which gender dysphoria is alternatively conceptualized is from **a sexual minority rights perspective**. Under this paradigm, any response other than medical and societal affirmation and implementation of a patient's claim to "be" the opposite gender is a violation of the individual's civil right to self-expression. Any effort to ask "why" questions about the patient's condition, or to address underlying causes, is viewed as a violation of autonomy and civil rights. In the last few years, this paradigm has been successful in influencing public policy and the education of pediatricians, endocrinologists, and many mental health professionals. Obviously, however, this is not a medical or psychiatric perspective. Unfortunately, it appears to be the most powerful perspective that exists in the public, non-scientific debate.

E. Four competing models of therapy

41. Few would disagree that the human psyche is complex. Few would disagree that children's and adolescents' developmental pathways typically have surprising twists and turns. The complexity and unpredictability of childhood and adolescent development equally applies to

[1] Even the advocacy organization The Human Rights Campaign asserts that a person can have "a fluid or unfixed gender identity." https://www.hrc.org/resources/glossary-of-terms.

trans-identifying youth. Because of past difficulties of running placebo-controlled clinical trials in the transgender treatment arena, substantial disagreements among professionals about the causes of trans identities and their ideal treatments exist. These current disagreements might have been minimized if trans treated persons were carefully followed up to determine long term outcomes. They have not been. When we add to this to the very different current paradigms for understanding transgender phenomena, it is not scientifically surprising that disagreements are sharply drawn. It is with this in mind that I summarize below the leading approaches, and offer certain observations and opinions concerning them.

(1) The "watchful waiting" therapy model

42. In Section V.A below I review the uniform finding of eleven follow-up studies that the large majority of children who present with gender dysphoria will desist from desiring a transgender identity by adulthood if left untreated by social transition approaches.

43. When a pre-adolescent child presents with gender dysphoria, a "watchful waiting" approach seeks to allow for the fluid nature of gender identity in children to naturally evolve—that is, take its course from forces within and surrounding the child. Watchful waiting has two versions:

a. Treating any other psychological co-morbidities—that is, other mental illnesses as defined by DSM-5 (separation anxiety disorder, attention deficit hyperactivity disorder, autism spectrum disorder, obsessive compulsive disorder, etc), or subthreshold for diagnosis but behavioral problems that the child may exhibit (school avoidance, bedwetting, inability to make friends, aggression/defiance) without a focus on gender (**model #1**); and

b. No treatment at all for anything but a regular follow-up appointment. This might be labeled a "hands off" approach **(model #2**).

(2) The psychotherapy model: Alleviate distress by identifying and addressing causes (model #3)

44. One of the foundational principles of psychotherapy has long been to work with a patient to identify the causes of observed psychological distress and then to address those causes as a means of alleviating the distress. The National Institute of Mental Health has promulgated the idea that 75% of adult psychopathology has its origins in childhood experience.

45. Many experienced practitioners in the field of gender dysphoria, including myself, have believed that it makes sense to employ these long-standing tools of psychotherapy for patients suffering gender dysphoria, asking the question as to what factors in the patient's life are the determinants of the patient's repudiation of his or her natal sex. (Levine 2017 at 8; Levine 2021.) I and others have reported success in alleviating distress in this way for at least some patients, whether the patient's sense of discomfort or incongruence with his or her natal sex entirely disappeared or not. Relieving accompanying psychological co-morbidities leaves the patient freer to consider the pros and cons of transition as he or she matures.

46. Among other things, the psychotherapist who is applying traditional methods of psychotherapy may help—for example—the male patient appreciate the wide range of masculine emotional and behavioral patterns as he grows older. He may discuss with his patient, for example, that one does not have to become a "woman" in order to be kind, compassionate, caring, noncompetitive, to love the arts, and to be devoted to others' feelings and needs. (Levine 2017 at 7.) Many biologically male trans individuals, from childhood to older ages, speak of their perceptions of femaleness as enabling them to discuss their feelings openly, whereas they perceive boys and men to be constrained from emotional expression within the family and larger culture, and to be aggressive. Men, of course, can be emotionally expressive, just as they can

wear pink. Converse examples can be given for girls and women. These types of ideas regularly arise during psychotherapies.

47. As I note above, many gender-nonconforming children and adolescents in recent years derive from minority and vulnerable groups who have reasons to feel isolated and have an uncomfortable sense of self. A trans identity may be a hopeful attempt to redefine the self in a manner that increases their comfort and decreases their anxiety. The clinician who uses traditional methods of psychotherapy may not focus on their gender identity, but instead work to help them to address the actual sources of their discomfort. Success in this effort may remove or reduce the desire for a redefined identity. This often involves a focus on disruptions in their attachment to parents in vulnerable children, for instance, those in the foster care system.

48. Because "watchful waiting" can include treatment of accompanying psychological co-morbidities, and the psychotherapist who hopes to relieve gender dysphoria may focus on potentially causal sources of psychological distress rather than on the gender dysphoria itself, there is no sharp line between "watchful waiting" and the psychotherapy model in the case of prepubescent children.

49. To my knowledge, there is no evidence beyond anecdotal reports that psychotherapy can enable a return to male identification for genetically male boys, adolescents, and men, or return to female identification for genetically female girls, adolescents, and women. On the other hand, anecdotal evidence of such outcomes does exist; I and other clinicians have witnessed reinvestment in the patient's biological sex in some individual patients who are undergoing psychotherapy. The Internet contains many such reports, and I have published a paper on a patient who sought my therapeutic assistance to reclaim his male gender identity after 30 years living as a woman and is in fact living as a man today. (Levine 2019.) I have seen

children desist even before puberty in response to thoughtful parental interactions and a few meetings of the child with a therapist. There are now a series of articles and at least one major book on the psychological treatment of adolescents. (D'Angelo et al. 2021 at 7-16; Evans & Evans 2021.)

(3) The affirmation therapy model (model #4)

50. While it is widely agreed that the therapist should not directly challenge a claimed transgender identity in a child, some advocates and practitioners go much further, and promote and recommend that any expression of transgender identity should be immediately accepted as decisive, and thoroughly affirmed by means of consistent use of clothing, toys, pronouns, etc., associated with transgender identity. They argue that the child should be comprehensively re-socialized in grade school in their aspired-to gender. As I understand it, this is asserted as a reason why male students who assert a female gender identity must be permitted to compete in girls' or women's athletic events. These advocates treat any question about the causes of the child's transgender identification as inappropriate. They may not recognize the child's ambivalence. They assume that observed psychological co-morbidities in the children or their families are unrelated or will get better with transition, and need not be addressed by the MHP who is providing supportive guidance concerning the child's gender identity.

51. Some advocates, indeed, assert that unquestioning affirmation of any claim of transgender identity in children is essential, and that the child will otherwise face a high risk of suicide or severe psychological damage. Dr. Adkins appears to follow this line, asserting that "My clinical experience . . . has been that [patients] suffer and experience worse health outcomes" when they are not permitted to enter all spaces and participate in all activities in a manner "consistent with gender identity." (Adkins at 9.) This claim is simply not supported by the clinical data we have available to us. Indeed, available long-term data contradicts Dr.

Adkins' claim. I address physical and mental health outcomes in Section VII below, and suicide in Section VIII below.

52. Dr. Adkins also asserts that fully supported social transition is the "only treatment for prepubertal children." (Adkins at 6.) As I review in the next section, this is not correct. This may be the only treatment that Dr. Adkins considers, but my own conversations and contacts lead me to believe that Dr. James Cantor was correct when he wrote that "almost all clinics and professional associations in the world" do not use "gender affirmation" for prepubescent children and instead "delay any transitions after the onset of puberty." (Cantor 2019 at 1.)

53. I do not know what proportion of practitioners are using which model. However, in my opinion, in the case of young children, prompt and thorough affirmation of a transgender identity disregards the principles of child development and family dynamics and is not supported by science. Instead of science, this approach is currently being reinforced by an echo-chamber of approval from other like-minded child-oriented professionals who do not sufficiently consider the known negative medical and psychiatric outcomes of trans adults. Rather than recommend social transition in grade school, the MHP must focus attention on the child's underlying internal and familial issues. Ongoing relationships between the MHP and the parents, and the MHP and the child, are vital to help the parents, child, other family members, and the MHP to understand over time the issues that need to be dealt with by each of them.

54. Likewise, since the child's sense of gender develops in interaction with his parents and their own gender roles and relationships, the responsible MHP will almost certainly need to delve into family and marital dynamics.

III. THERE IS NO CONSENSUS OR AGREED "STANDARD OF CARE" CONCERNING THERAPEUTIC APPROACHES TO CHILD OR ADOLESCENT GENDER DYSPHORIA.

55. Dr. Adkins states that "[t]he only treatment to avoid [ ] serious harm is to recognize the gender identity of patients with gender dysphoria and follow appropriate treatment protocols to affirm gender identity and alleviate distress," and appears to believe that transition and affirmation of children who suffer from gender dysphoria is a generally accepted "standard of care." (Adkins at 5.) It is not.

56. As I review in separate sections later, there is far too little firm clinical evidence in this field to permit any evidence-based standard of care. Given the lack of scientific evidence, it is neither surprising nor improper that—as I detailed in Section II—there is a diversity of views among practitioners as to as to the best therapeutic response for the child, adolescent, or young adult who suffers from gender dysphoria. Dr. Adkins is unwittingly confusing therapeutic precedent among those who agree with her views, armed with ideas promulgated by WPATH, with careful scientific documentation of her concepts. She presumes that her views have been scientifically established even though much has been published highlighting the lack of supportive definitive evidence.

57. Reviewing the state of opinion and practice in 2021, the Royal Australian and New Zealand College of Psychiatrists observed that "There are polarised views and mixed evidence regarding treatment options for people presenting with gender identity concerns, especially children and young people." (RANZCP, 2021.) Similarly, a few years earlier prominent Dutch researchers noted: "[T]here is currently no general consensus about the best approach to dealing with the (uncertain) future development of children with GD, and making decisions that may influence the function and/or development of the child — such as social

transition." (Ristori & Steensma 2016 at 18.)[2] In this Section, I comment on some of the more important areas of disagreement within the field.

A. Experts and organizations disagree as to whether "distress" is a necessary element for diagnoses that justifies treatment for gender identity issues.

58. As outlined in Section II.B above, "clinically significant distress" is one of the criteria used in DSM-5 to identify gender dysphoria. This indicates a heightened level of distress that rises beyond a threshold level of social awkwardness or discomfort with the changing body. It is known that many trans-identified youth with incongruence between their sexed bodies and their gender identity choose not to take hormones; their incongruence is quite tolerable as they further clarify their sexual identity elements. This population raises the questions of what distress is being measured when DSM-5 criteria are met and what else might be done about it.

59. I note that there is no "clinically significant distress" requirement in World Health Organization's International Classification of Diseases (ICD-11) criteria for gender incongruence, which rather indicates "a marked and persistent incongruence between an individual´s experienced gender and the assigned sex." (World Health Organization 2019.)

60. Therefore, even between these two committee-based authorities, there is a significant disagreement as to what constitutes a gender condition justifying life-changing interventions. To my knowledge, some American gender clinics and practitioners are essentially operating under the ICD-11 criteria rather than the APA's DSM-5 criteria, prescribing transition for children, hormonal interventions for slightly older children, and different hormones for adolescents who assert a desire for a transgender identity whether or not they are exhibiting "clinically significant distress." Others adhere to the DSM-5 diagnostic standard.

[2] *See also* Zucker 2020 which questions the merit of social transition as a first-line treatment.

61. I will add that even from within one "school of thought," such as embodied by Dr. Adkins, it is not responsible to make a single, categorical statement about the proper treatment of children or adolescents presenting with gender dysphoria or other gender-related issues. There is no single pathway to the development of a trans identity and no reasonably uniform short- or long-term outcome of medically treating it. As individuals grow physically, mature psychologically, and experience or fail to experience satisfying romantic relationships, their life course depends on their differing psychological, social, familial, and life experiences. There should be no trust in assertions that trans identified youth must be treated in a particular manner to avoid harm for two reasons: first, there is no systematic data on the nature of, and the rate of harms of either affirmative treatment, no treatment, or psychological only treatment. Second, as in other youthful psychiatric and other challenges, outcomes vary.

B. Opinions and practices vary widely about the utilization of social transition for children and adolescents.

62. Dr. Adkins notes that she is a member of the World Professional Association for Transgender Health (WPATH), invokes a guidance document that that organization has chosen to publish under the title of "standards of care," and asserts that the WPATH Standards of Care are "widely accepted." (Adkins at 3, 5.) Below, I will provide some explanation of WPATH and its "Standards of Care," which are not the product of a strictly scientific organization, and are by no means accepted by all or even most practitioners as setting out best practices.

63. Here, however, I will note that WPATH does not take a position concerning whether or when social transition may be appropriate for pre-pubertal children. Instead, the WPATH "Standards of Care" states that the question of social transition for children is a "controversial issue" and calls for mental health professionals to support families in what it describes as "difficult decisions" concerning social transition.

64. Dr. Erica Anderson is a prominent practitioner in this area who identifies as a transgender woman, who was the first transgender president of USPATH, and who is a former board member of WPATH. Dr. Anderson recently resigned from those organizations and has condemned automatic approval of transition upon the request of a child or adolescent, noting that "adolescents . . . are notoriously susceptible to peer influence," that transition "doesn't cure depression, doesn't cure anxiety disorders, doesn't cure autism-spectrum disorder, doesn't cure ADHD," and instead that "a comprehensive biopsychosocial evaluation" should proceed allowing a child to transition. (Davis 2022.) And as I have explained previously, my own view based on 50 years of experience in this area favors strong caution before approving life-altering interventions such as social transition, puberty blockers, or cross-sex hormones.

C. The WPATH "Standards of Care" is not an impartial or evidence-based document.

65. Because WPATH is frequently cited by advocates of social, hormonal, and surgical transition, I provide some context concerning that private organization and its "Standards of Care."

66. I was a member of the Harry Benjamin International Gender Dysphoria Association from 1974 until 2001. From 1997 through 1998, I served as the Chairman of the eight-person International Standards of Care Committee that issued the fifth version of the Standards of Care. I resigned my membership in 2002 due to my regretful conclusion that the organization and its recommendations had become dominated by politics and ideology, rather than by scientific process, as it was years earlier. In approximately 2007, the Harry Benjamin International Gender Dysphoria Association changed its name to the World Professional Association for Transgender Health.

67. WPATH is a voluntary membership organization. Since at least 2002, attendance at its biennial meetings has been open to trans individuals who are not licensed professionals. While this ensures taking patients' needs into consideration, it limits the ability for honest and scientific debate, and means that WPATH can no longer be considered a purely professional organization.

68. WPATH takes a decided view on issues as to which there is a wide range of opinion among professionals. WPATH explicitly views itself as not merely a scientific organization, but also as an advocacy organization. (Levine 2016 at 240.) WPATH is supportive to those who want sex reassignment surgery ("SRS"). Skepticism as to the benefits of SRS to patients, and strong alternate views, are not well tolerated in discussions within the organization or their educational outreach programs. Such views have been known to be shouted down and effectively silenced by the large numbers of nonprofessional adults who attend the organization's biennial meetings. Two groups of individuals that I regularly work with have attended recent and separate WPATH continuing education sessions. There, questions about alternative approaches were quickly dismissed with "There are none. This is how it is done." Such a response does not accurately reflect what is known, what is unknown, and the diversity of clinical approaches in this complex field.

69. The Standards of Care ("SOC") document is the product of an effort to be balanced, but it is not politically neutral. WPATH aspires to be both a scientific organization and an advocacy group for the transgendered. These aspirations sometimes conflict. The limitations of the Standards of Care, however, are not primarily political. They are caused by the lack of rigorous research in the field, which allows room for passionate convictions on how to care for the transgendered. And, of course, once individuals have socially, medically, and surgically

transitioned, WPATH members and the trans people themselves at the meetings are committed to supporting others in their transitions. Not only have some trans participants been distrustful or hostile to those who question the wisdom of these interventions, their presence makes it difficult for professionals to raise their concerns. Vocal trans rights advocates have a worrisome track record of attacking those who have alternative views. (Dreger 2015.)

70. In recent years, WPATH has fully adopted some mix of the medical and civil rights paradigms. It has downgraded the role of counseling or psychotherapy as a requirement for these life-changing processes. WPATH no longer considers preoperative psychotherapy to be a requirement. It is important to WPATH that the person has gender dysphoria; the pathway to the development of this state is not. (Levine 2016 at 240.) The trans person is assumed to have thoughtfully considered his or her options before seeking hormones, for instance.

71. Most psychiatrists and psychologists who treat patients suffering sufficiently severe distress from gender dysphoria to seek inpatient psychiatric care are not members of WPATH. Many psychiatrists, psychologists, and pediatricians who treat some patients suffering gender dysphoria on an outpatient basis are not members of WPATH. WPATH represents a self-selected subset of the profession along with its many non-professional members; it does not capture the clinical experiences of others. WPATH claims to speak for the medical profession; however, it does not welcome skepticism and therefore, deviates from the philosophical core of medical science. There are pediatricians, psychiatrists, endocrinologists, and surgeons who object strongly, on professional grounds, to transitioning children and providing affirmation in a transgender identity as the first treatment option. WPATH does not speak for all of the medical profession.

72. In 2010 the WPATH Board of Directors issued a statement advocating that incongruence between sex and felt gender identity should cease to be identified in the DSM as a pathology.[3] This position was debated but not adopted by the (much larger) American Psychiatric Association, which maintained the definitions and diagnoses of gender dysphoria as a pathology in the DSM-5 manual issued in 2013.

73. In my experience some current members of WPATH have little ongoing experience with the mentally ill, and many trans care facilities are staffed by MHPs who are not deeply experienced with recognizing and treating frequently associated psychiatric co-morbidities. Further, being a mental health professional, per se, does not guarantee experience and skill in recognizing and effectively intervening in serious or subtle patterns. Because the 7th version of the WPATH SOC deleted the requirement for therapy, trans care facilities that consider these Standards sufficient are permitting patients to be counseled to transition by means of social presentation, hormones, and surgery by individuals with masters rather than medical degrees.

D. Opinions and practices differ widely with respect to the proper role of psychological counseling before, as part of, or after a diagnosis of gender dysphoria.

74. In Version 7 of its Standards of Care, released in 2012, WPATH downgraded the role of counseling or psychotherapy, and the organization no longer sees psychotherapy without transition and hormonal interventions as a potential path to eliminate gender dysphoria by enabling a patient to return to or achieve comfort with the gender identity aligned with his or her biology.

[3] WPATH *De-Psychopathologisation Statement* (May 26, 2010), available at wpath.org/policies (last accessed January 21, 2020).

75. Around the world, many prominent voices and practitioners disagree. For example, renowned gender therapists Dr. Laura Edwards-Leeper and Dr. Erica Anderson (who, as mentioned above, identifies as a transgender woman) have recently spoken out arguing that children and adolescents are being subjected to puberty blockers and hormonal intervention far too quickly, when careful and extended psychotherapy and investigation for potential causes of feelings of dysphoria (such as prior sexual abuse) should be the first port of call and might resolve the dysphoria. (Edwards-Leeper & Anderson 2021; Davis 2022.)

76. In a recently published position statement on gender dysphoria, the Royal Australian and New Zealand College of Psychiatrists emphasized the critical nature of mental health treatment for gender dysphoric minors, stressing "the importance of the psychiatrist's role to undertake thorough assessment and evidence-based treatment ideally as part of a multidisciplinary team, especially highlighting co-existing issues which may need addressing and treating." The Royal College also emphasized the importance of assessing the "psychological state and context in which Gender Dysphoria has arisen," before any treatment decisions are made. (RANZCP, 2021.)

77. Dr. Paul Hruz of the University of Washington St. Louis Medical School has noted, "The WPATH has rejected psychological counseling as a viable means to address sex–gender discordance with the claim that this approach has been proven to be unsuccessful and is harmful (Coleman et al. 2012). Yet the evidence cited to support this assertion, mostly from case reports published over forty years ago, includes data showing patients who benefited from this approach (Cohen-Kettenis and Kuiper 1984)." (Hruz 2020.)

E. Opinions and practices vary widely with respect to the administration of puberty blockers and cross-sex hormones.

78. There is likewise no broadly accepted standard of care with respect to use of puberty blockers. The WPATH Standards of Care explicitly recognize the lack of any consensus on this important point, stating: "Among adolescents who are referred to gender identity clinics, the number considered eligible for early medical treatment—starting with GnRH analogues to suppress puberty in the first Tanner stages—differs among countries and centers. Not all clinics offer puberty suppression. . . The percentages of treated adolescents are likely influenced by the organization of health care, insurance aspects, cultural differences, opinions of health professionals, and diagnostic procedures offered in different settings."

79. The use of puberty blockers as a therapeutic intervention for gender dysphoria is often justified by reference to the seminal work of a respected Dutch research team that developed a protocol that administered puberty blockers to children no younger than age 14. However, it is well known that many clinics in North America now administer puberty blockers to children at much younger ages than the "Dutch Protocol" allows. (Zucker 2019.) The Dutch protocol only treated children with these characteristics: a stable cross gender identity from early childhood; dysphoria that worsened with the onset of puberty; were otherwise psychologically healthy; had healthy families; the patient and family agreed to individual and family counselling throughout the protocol. But the experience and results of the Dutch model is being used as a justification for giving puberty blockers to children who differ considerably from these criteria. Its authors have also recently noted this fact. (de Vries 2020.)

80. However, Zucker notes that "it is well known" that clinicians are administering cross-sex hormones, and approving surgery, at ages lower than the minimum age thresholds set by that "Dutch Protocol." (Zucker 2019 at 5.)

81. Similarly, at least one prominent clinic—that of Dr. Safer at Columbia's Mt. Sinai Medical Center—is quite openly admitting patients for even *surgical* transition who are not eligible under the criteria set out in WPATH's Standards of Care. A recent study published by Dr. Safer and colleagues revealed that of a sample of 139 individuals, 45% were eligible for surgery "immediately" under the center's own criteria, while only 15% were eligible under WPATH's criteria. That is, *three times* as many patients immediately qualified for surgery under the center's loose standards than would have qualified under WPATH criteria. (Lichenstein et al. 2020.)

82. Internationally, there has been a recent marked trend *against* use of puberty blockers, as a result of extensive evidence reviews by national medical bodies, which I discuss later. The main gender clinic in Sweden has declared that it will no longer authorize use of puberty blockers for minors below the age of 16. Finland has similarly reversed its course, issuing new guidelines that allow puberty blockers only on a case-by-case basis after an extensive psychiatric assessment. A landmark legal challenge against the UK's National Health Service in 2020 by "detransitioner" Keira Bell led to the suspension of the use of puberty blockers and new procedures to ensure better psychological care, as well as prompting a thorough evidence review by the National Institute for Health and Care Excellence (NICE 2021a; NICE 2021b).[4]

83. In this country, some voices in the field are now publicly arguing that *no* comprehensive mental health assessment at all should be required before putting teens on puberty blockers or cross-sex hormones (Ghorayshi 2022), while Dr. Anderson and Dr.

[4] The decision requiring court approval for administration of hormones to any person younger than age 16 was later reversed on procedural grounds by the Court of Appeal and is currently under consideration by the UK Supreme Court.

Edwards-Leeper argue that U.S. practitioners are already moving too quickly to hormonal interventions. (Edwards-Leeper & Anderson 2021; Davis 2022.) It is evident that opinions and practices are all over the map.

84. It is true that a committee of the American Academy of Pediatricians has issued a statement supporting administration of puberty blockers to children diagnosed with gender dysphoria. It is also true that no other American medical association has endorsed the use of puberty blockers, and that pediatricians are neither endocrinologists nor psychiatrists. Dr. James Cantor published a peer-reviewed paper detailing that the Academy's statement is not evidence-based and misdescribed the few scientific sources it did reference. (Cantor 2019.) It has been well noted in the field that the AAP has declined invitations to publish any rebuttal to Dr. Cantor's analysis. But this is all part of ongoing debate, simply highlighting the absence of any generally agreed standard of care.

85. Dr. Adkins asserts that the Society's 2017 Practice Guidelines on Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons (Hembree et al. 2017) amount to "widely accepted standards of care" that were "developed through rigorous scientific processes." (Adkins at 2, 5 and 6.)

86. Contrary to Dr. Adkins' assertion, the 2017 Endocrine Society Guidelines themselves expressly state that they are *not* "standards of care." The document states: "The guidelines cannot guarantee any specific outcome, *nor do they establish a standard of care*. The guidelines are not intended to dictate the treatment of a particular patient." (Hembree et al. 2017 at 3895 (emphasis added).) Nor do the Guidelines claim to be the result of a "rigorous scientific process." Rather, they expressly advise that their recommendations concerning use of puberty blockers are based only on "low quality" evidence.

87. Dr. Adkins notes that the 2017 Guidelines assert that: "patients with gender dysphoria often must be treated with 'a safe and effective hormone regimen. . .'" (Adkins at 6.) Notably, however, the Guidelines do not make any firm statement that use of puberty blockers for this purpose *is* safe, and the Guidelines go no further than "suggest[ing]" use of puberty blockers—language the Guidelines warn represents only a "weak recommendation." (Hembree 2017 at 3872.) Several authors have pointed out that not only were the Endocrine Society suggestions regarding use of puberty blockers reached on the basis of "low quality" evidence, but its not-quite claims of 'safety' and 'efficacy' are starkly contradicted by several in-depth evidence reviews. (Laidlaw et al., 2019; Malone et al. 2021.) I detail these contradictory findings in more detail in Section VII below.

88. While there is too little meaningful clinical data and no consensus concerning best practices or a "standard of care" this area, there are long-standing ethical principles that do or should bind all medical and mental health professionals as they work with, counsel, and prescribe for these individuals.

89. One of the oldest and most fundamental principles guiding medical and psychological care—part of the Hippocratic Oath—is that the physician must "do no harm." This states an ethical responsibility that cannot be delegated to the patient. Physicians themselves must weigh the risks of treatment against the harm of not treating. If the risks of treatment outweigh the benefits, principles of medical ethics prohibit the treatment.

IV. TRANSGENDER IDENTITY IS NOT BIOLOGICALLY BASED.

90. Dr. Safer asserts that "Although the detailed mechanisms are unknown, there is a medical consensus that there is a significant biologic component underlying gender identity" and

that gender identity is a "largely biological phenomenon." (Safer at 5, 6.) Many advocates of affirmative care assert this belief.

91. However, it is not true. There is no medical consensus that transgender identity has any biological basis. Furthermore, there is considerable well-documented evidence that is inconsistent with the hypothesis of a biological basis for gender identity—at least in the large majority of currently-presenting patients.

A. No theory of biological basis has been scientifically validated.

92. At the outset, the attempt to identify a single "typically . . . biological" cause for psychiatric conditions (including gender dysphoria) has been strongly criticized as "out of step with the rest of medicine" and as a lingering "ghost" of an understanding of the nature of psychiatric conditions that is now broadly disproven. (Kendler 2019 at 1088-1089.) Gender dysphoria is defined and diagnosed only as a psychiatric, not a medical, condition.

93. Nonetheless, in a published article, Dr. Safer has referred to data that he asserts supports the existence of "a fixed, biologic basis for gender identity." (Saraswat et al. 2015 at 199.) But on the contrary, this article itself states that studies attempting to find an association between genetics and transgender identification "have been contradictory," and that "no statistically significant association between particular genes [and transgender identity] has been described." (Saraswat 2015 at 202.)

94. Similarly, while some have pointed to very small brain scan studies as evidence of a biological basis, no studies of brain structure of individuals identifying as transgender have found any statistically significant correlation between any distinct structure or pattern and transgender identification, after controlling for sexual orientation and exposure to exogenous hormones. (Sarawat et al. 2015 at 202; Frigerio et al. 2021.)

95. Indeed, the Endocrine Society 2017 Guidelines recognizes: "With current knowledge, we cannot predict the psychosexual outcome for any specific child" and "there are currently no criteria to identify the GD/gender-incongruent children to whom this applies. At the present time, clinical experience suggests that persistence of GD/gender incongruence can only be reliably assessed after the first signs of puberty." (Hembree et al. 2017 at 3876.)

96. In short, no biological test or measurement has been identified that provides any ability to predict which children will exhibit, and which children will persist in, gender dysphoria or a transgender identification. Unless and until such a test is identified, the theory of a biological basis is a hypothesis still searching for support. A hypothesis is not a fact, and responsible scientists will not confuse hypothesis with fact.

B. Large changes across time and geography in the epidemiology of transgender identification are inconsistent with the hypothesis of a biological basis for transgender identity.

97. In fact, there is substantial evidence that the "biological basis" theory is incorrect, at least with respect to the large majority of patients presenting with gender dysphoria today.

98. **Vast changes in incidence:** Historically, there were very low reported rates of gender dysphoria or transgender identification. In 2013, the DSM-5 estimated the incidence of gender dysphoria in adults to be at 2-14 per 100,000, or between 0.002% and 0.014%. (APA 2013 at 454.) Recently however, these numbers have increased dramatically, particularly in adolescent populations. Recent surveys estimate that between 2-9% of high school students self-identify as transgender or "gender non-conforming." with a significantly large increase in adolescents claiming "nonbinary" gender identity as well. (Johns et al. 2019; Kidd et al. 2021.) Consistent with these surveys, gender clinics around the world have seen numbers of referrals increase rapidly in the last decade, with the Tavistock clinic in London seeing a 30-fold increase in the last decade (GIDS 2019), and similar increases being observed in Finland (Kaltiala-Heino

et al. 2018), the Netherlands (de Vries 2020), and Canada (Zucker 2019). The rapid change in the number of individuals experiencing gender dysphoria points to social and cultural, not biological, causes.

99. **Large change in sex ratio:** In recent years there has been a marked shift in the sex ratio of patients presenting with gender dysphoria or transgender identification. The Tavistock clinic in London saw a ratio of 4 biological females(F):5 biological males(M) shift to essentially 11F:4M in a decade. (GIDS 2019.) One researcher summarizing multiple sources documented a swing of 1F:2M or 1F:1.4M through 2005 to 2F:1M generally (but as high as 7F:1M) in more recent samples. (Zucker 2019 at 2.) This phenomenon has been noted by Dr. Erica Anderson, who said: "The data are very clear that adolescent girls are coming to gender clinics in greater proportion than adolescent boys. And this is a change in the last couple of years. And it's an open question: What do we make of that? We don't really know what's going on. And we should be concerned about it." (Davis 2022.) Again, this large and rapid change in who is experiencing gender dysphoria points to social, not biological, causes.

100. **Clustering**: Dr. Littman's recent study documented "clustering" of new presentations of gender dysphoria among natal females in specific schools and among specific friend groups. This again points strongly to social causes for gender dysphoria at least among the adolescent female population. (Littman 2018.)

101. **Desistance:** As I discuss later, there are very high levels of desistance among children diagnosed with gender dysphoria, as well as increasing (or at least increasingly vocal) numbers of individuals who first asserted a transgender identity during or after adolescence, underwent substantial medical interventions to "affirm" that trans-identity, and then "desisted"

and reverted to a gender identity congruent with their sex. (See Section V.B below.) These narratives, too, point to a social and/or psychological cause, rather than a biological one.

102. **"Fluid" gender identification:** Advocates and some practitioners assert that gender identity is not binary, but can span an almost endless range of gender identity self-labels, which a given individual may try on, inhabit, and often discard. (A recent article identifies 72.[5]) I have not heard any theory offered for how there is or could be a biological basis for gender identity as now expansively defined.

103. I frequently read attempts to explain away the points in this Section IV. They include: these problems always existed, but children are now learning that there are effective treatments for their dilemma and are simply seeking them. And; children have hidden their trans identity throughout childhood and now that trans people are recognized and accepted, they are presenting themselves. And; now pediatricians realize that girls can have gender dysphoria and are referring them to gender clinics. But these are all mere hypotheses unsupported by concrete evidence. One set of unproven hypotheses cannot provide support for the unproven hypothesis of biological basis. And none of these hypotheses could even potentially explain the failure of science thus far to identify any predictive biological marker of transgender identification.

104. **Therapies affect gender identity outcomes:** Finally, the evidence shows that therapeutic choices can have a powerful effect on whether and how gender identity does change, or gender dysphoria desists. Social transition of juveniles, for instance, strongly influences gender identity outcomes to such an extent that it has been described a "unique predictor of

[5] Allarakha, *What Are the 72 Other Genders?*, MedicineNet, available at: https://www.medicinenet.com/what_are_the_72_other_genders/article.htm

persistence." (See Section V.B below.) Again, this observation cuts against the hypothesis of biological origin.

C. Disorders of sexual development (or DSDs) and gender identity are very different phenomena, and it is an error to conflate the two.

105. Dr. Adkins spends much of her report discussing individuals who suffer from disorders of sexual development (DSDs), apparently as evidence that sex is not binary or clearly defined, or as somehow supporting the idea that transgender identification has a biological basis. (Adkins at 9.) I have extensively detailed that sex is clear, binary, and determined at conception. (Section II.) Here I explain that gender dysphoria is an entirely different phenomenon than DSDs—which unlike transgender identity are indeed biological phenomena. It is an error to conflate the two distinct concepts.

106. Every DSD reflects a genetic enzymatic defect with negative anatomic and physiological consequences. As the Endocrine Society recognized in a 2021 statement: "Given the complexities of the biology of sexual determination and differentiation, it is not surprising that there are dozens of examples of variations or errors in these pathways associated with genetic mutations that are now well known to endocrinologists and geneticists; in medicine, these situations are generally termed *disorders of sexual development* (DSD) or *differences in sexual development*." Gender Identity on the other hand is uniformly defined as a subjective "sense" of being, a feeling or state of mind. (Section II.C.)

107. The vast majority of those who experience gender dysphoria or a transgender identity do not suffer from any DSD, nor from any genetic enzymatic disorder at all. Conversely, many who suffer from a DSD do not experience a gender identity different from their chromosomal sex (although some may). In short, those who suffer from gender dysphoria are not a subset of those who suffer from a DSD, nor are those who suffer from a DSD a subset of those

who suffer from gender dysphoria. The two are simply different phenomena, one physical, the other mental, defined only as a psychiatric condition. The issue here is not whether biological forces play a role in personality development; it is whether there is strong evidence that it is determinative. Science has come too far to revert to single explanations for gender dysphoria or any psychiatric diagnosis.

108. The importance of this distinction is evident from the scientific literature. For example, in a recent study of clinical outcomes for gender dysphoric patients, Tavistock Clinic researchers *excluded* from their analysis any patients who did not have "normal endocrine function and karyotype consistent with birth registered sex." (Carmichael et al. 2021 at 4.) In other words, the researchers specifically *excluded* from their study anyone who suffered from genetic-based DSD, or a DSD comprising any serious defect in hormonal use pathways, in order to ensure the study was focused only on individuals experiencing the psychological effects of what we might call "ordinary" gender dysphoria.

D. Studies of individuals born with DSDs suggest that there may be a biological predisposition towards *typical* gender identifications, but provide no support for a biological basis for *trans*gender identification.

109. Studies of individuals born with serious DSDs have been pointed to as evidence of a biological basis for transgender identification. They provide no such support.

110. One well-known study by Meyer-Bahlburg reviewed the case histories of a number of XY (i.e. biologically male) individuals born with severe DSDs who were surgically "feminized" in infancy and raised as girls. (Meyer-Bahlburg 2005.) The majority of these individuals nevertheless later adopted male gender identity—suggesting a strong biological predisposition towards identification aligned with genetic sex, even in the face of feminized genitalia from earliest childhood, and parental "affirmation" in a transgender identity. But at the same time, the fact that some of these genetically male individuals did *not* later adopt male

gender identity serves as evidence that medical and social influences can indeed encourage and sustain transgender identification.

111. Importantly, the Meyer-Bahlburg study did *not* include any individuals who were assigned a gender identity congruent with their genetic sex who subsequently adopted a *trans*gender identity. Therefore, the study can provide no evidence of any kind that supports the hypothesis of a biological basis for *trans*gender identity. A second study in this area (Reiner & Gearhart 2004) likewise considered exclusively XY subjects, and similarly provides evidence only for a biological bias towards a gender identity congruent with one's genetic sex, even in the face of medical and social "transition" interventions. None of this provides any evidence at all of a biological basis for transgender identity.

V. GENDER IDENTITY IS EMPIRICALLY NOT FIXED FOR MANY INDIVIDUALS.

112. Dr. Safer states that gender identity is "durable and cannot be changed by medical intervention." (Safer at 5.) Dr. Adkins likewise states that gender identity "cannot be voluntarily changed." (Adkins at 4.) There is extensive evidence that this is not correct. Instead, gender identity changes over time for many individuals.[6] I summarize their two opinions as: they assert that a trans identity in a child or adolescent is immutable—unchangeable by medical, psychotherapeutic, or developmental processes.

A. Most children who experience gender dysphoria ultimately "desist" and resolve to cisgender identification.

113. A distinctive and critical characteristic of juvenile gender dysphoria is that multiple studies from separate groups and at different times have reported that in the large

[6] See n1 *supra*.

majority of patients, absent a substantial intervention such as social transition or puberty blocking hormone therapy, it does *not* persist through puberty.

114. A recent article reviewed all existing follow-up studies that the author could identify of children diagnosed with gender dysphoria (11 studies), and reported that "every follow-up study of GD children, without exception, found the same thing: By puberty, the majority of GD children ceased to want to transition." (Cantor 2019 at 1.) Another author reviewed the existing studies and reported that in "prepubertal boys with gender discordance . . . the cross gender wishes usually fade over time and do not persist into adulthood, with only 2.2% to 11.9% continuing to experience gender discordance." (Adelson et al. 2012 at 963; see also Cohen-Kettinis 2008 at 1895.) The Endocrine Society recognized this important baseline fact in its 2017 Guidelines. (Hembree 2017 at 3879.) It should be noted that the reason that the Dutch Protocol waited until age 14 to initiate puberty blockers was that it was well known that many children would desist if left free of hormonal intervention until that age.

115. Findings of high levels of desistance among children who experience gender dysphoria or incongruence have been reaffirmed in the face of critiques through thorough reanalysis of the underlying data. (Zucker 2018.)

116. As I explained in detail in Section IV above, it is not yet known how to distinguish those children who will desist from that small minority whose trans identity will persist.

117. It does appear that prevailing circumstances during particularly formative years can have a significant impact on the outcome of a juvenile's gender dysphoria. A 2016 study reviewing the follow-up literature noted that "the period between 10 and 13 years" was "crucial" in that "both persisters and desisters stated that the changes in their social environment, the

anticipated and actual feminization or masculinization of their bodies, and the first experiences of falling in love and sexual attraction in this period, contributed to an increase (in the persisters) or decrease (in the desisters) of their gender related interests, behaviors, and feelings of gender discomfort." (Ristori & Steensma 2016 at 16.) As I discuss in Section VI below, there is considerable evidence that early transition and affirmation causes far more children to persist in a transgender identity.

B. Desistance is increasingly observed among teens and young adults who first manifest GD during or after adolescence.

118. Desistance within a relatively short period may also be a common outcome for post-pubertal youths who exhibit recently described "rapid onset gender disorder." I have observed an increasingly vocal online community of young women who have reclaimed a female identity after claiming a male gender identity at some point during their teen years, and young "detransitioners" (individuals in the process of reidentifying with their birth sex after having undergone a gender transition) are now receiving increasing attention in both clinical literature and social media channels. (It is my understanding that March 12, 2022, is scheduled to be Detransition Awareness Day.)

119. Almost all scientific articles on this topic have appeared within the last few years. Perhaps this historic lack of coverage is not entirely surprising – one academic who undertook an extensive review of the available scientific literature in 2021 noted that the phenomenon was "socially controversial" in that it "poses significant professional and bioethical challenges for those clinicians working in the field of gender dysphoria." (Expósito Campos 2021 at 270.) This review reported on multifarious reasons for why individuals were motivated to detransition, which included coming to "understand[ ] how past trauma, internalized sexism, and other psychological difficulties influenced the experience of GD."

120. In 2021, Lisa Littman of Brown University conducted a ground-breaking study of 100 teenage and young adults who had transitioned and lived in a transgender identity for a number of years, and then "detransitioned" or changed back to a gender identity matching their sex. Littman noted that the "visibility of individuals who have detransitioned is new and may be rapidly growing." (Littman 2021 at 1.) Of the 100 detransitioners included in Littman's study, 60% reported that their decision to detransition was motivated (at least in part) by the fact that they had become more comfortable identifying as their natal sex, and 38% had concluded that their gender dysphoria was caused by something specific such as trauma, abuse, or a mental health condition. (Littman 2021 at 9.)

121. A significant majority (76%) did not inform their clinicians of their detransition. (Littman 2021 at 11.)

122. A similar study that recruited a sample of 237 detransitioners (the large majority of whom had initially transitioned in their teens or early twenties) similarly reported that a common reason for detransitioning was the subject's conclusion that his or her gender dysphoria was related to other issues (70% of the sample). (Vandenbussche 2021.)

123. The existence of increasing numbers of youth or young adult detransitioners has also been recently noted by Dr. Edwards-Leeper and Dr. Anderson. (Edwards-Leeper & Anderson 2021.) Edwards-Leeper and Anderson noted "the rising number of detransitioners that clinicians report seeing (they are forming support groups online)" which are "typically youth who experienced gender dysphoria and other complex mental health issues, rushed to medicalize their bodies and regretted it." Other clinicians working with detransitioners have also noted the recent phenomenon. (Marchiano 2020.)

124. A growing body of evidence suggests that for many teens and young adults, a post-pubertal onset of transgender identification can be a transient phase of identity exploration, rather than a permanent identity, as evidenced by a growing number of young detransitioners (Entwistle 2020; Littman 2021; Vandenbussche 2021). Previously, the rate of detransition and regret was reported to be very low, although these estimates suffered from significant limitations and were likely undercounting true regret (D'Angelo 2018). As gender-affirmative care has become popularized, the rate of detransition appears to be accelerating.

125. A recent study from a UK adult gender clinic observed that 6.9% of those treated with gender-affirmative interventions detransitioned within 16 months, and another 3.4% had a pattern of care suggestive of detransition, yielding a rate of probable detransition in excess of 10%. Another 21.7%, however, disengaged from the clinic without completing their treatment plan. While some of these individuals later re-engaged with the gender service, the authors concluded, "detransitioning might be more frequent than previously reported." (Hall et al. 2021).

126. Another study from a UK primary care practice found that 12.2% of those who had started hormonal treatments either detransitioned or documented regret, while the total of 20% stopped the treatments for a wider range of reasons. The mean age of their presentation with gender dysphoria was 20, and the patients had been taking gender-affirming hormones for an average 5 years (17 months-10 years) prior to discontinuing. Comparing these much higher rates of treatment discontinuation and detransition to the significantly lower rates reported by the older studies, the researchers noted: "Thus, the detransition rate found in this population is novel and questions may be raised about the phenomenon of overdiagnosis, overtreatment, or iatrogenic harm as found in other medical fields" (Boyd et al. 2022 at 15.) Indeed, given that regret may take up to 8-11 years to materialize (Dhejne et al., 2014; Wiepjes et al., 2018), many more

detransitioners are likely to emerge in the coming years. Detransitioner research is still in its infancy, but the Littman and Vandenbussche studies in 2021 both report that detransitioners from the recently transitioning cohorts feel they were rushed into medical gender-affirmative interventions with irreversible effects, often without the benefit of appropriate, or in some instances any, psychologic exploration.

VI. TRANSITION AND AFFIRMATION IS AN IMPORTANT PSYCHOLOGICAL AND MEDICAL INTERVENTION THAT CHANGES GENDER IDENTITY OUTCOMES.

A. If both a typical gender or a transgender long-term gender identity outcome are possible for a particular patient, the alternatives are not medically neutral.

127. Where a juvenile experiences gender dysphoria, the gender identity that is stabilized will have a significant impact on the course of their life. Living in a transgender identity for a time will make desistance, if it is ever considered, more difficult to accomplish.

128. If the juvenile desists from the gender dysphoria and becomes reasonably comfortable with a gender identity congruent with their sex—the most likely outcome from a statistical perspective absent affirming intervention—the child will not require ongoing pharmaceutical maintenance and will not have their fertility destroyed post-puberty.

129. However, if the juvenile persists in a transgender identity, under current practices, the child is most likely to require regular administration of hormones for the rest of their lives, exposing them to significant physical, mental health, and relational risks (which I detail in Section IX below), as well as being irreversibly sterilized chemically and/or surgically. The child is therefore rendered a "patient for life" with complex medical implications further to a scientifically unproven course of treatment.

B. Social transition of young children is a powerful psychotherapeutic intervention that radically changes outcomes, almost eliminating desistance.

130. Dr. Adkins asserts that social transition is a "a critical part" of the treatment of gender dysphoria. (Adkins at 6, 7). Rather, social transition has a critical *effect* on the persistence of gender dysphoria. It is evident from the scientific literature that engaging in therapy that encourages social transition before or during puberty—which would include participation on athletic teams designated for the opposite sex—is a psychotherapeutic intervention that dramatically changes outcomes. A prominent group of authors has written that "The gender identity affirmed during puberty appears to predict the gender identity that will persist into adulthood." (Guss et al. 2015 at 421.) Similarly, a comparison of recent and older studies suggests that when an "affirming" methodology is used with children, a substantial proportion of children who would otherwise have desisted by adolescence—that is, achieved comfort identifying with their natal sex—instead persist in a transgender identity. (Zucker 2018 at 7.)

131. Indeed, a review of multiple studies of children treated for gender dysphoria across the last three decades found that early social transition to living as the opposite sex severely reduces the likelihood that the child will revert to identifying with the child's natal sex, at least in the case of boys. That is, while, as I review above, studies conducted before the widespread use of social transition for young children reported desistance rates in the range of 80-98%, a more recent study reported that fewer than 20% of boys who engaged in a partial or complete social transition before puberty had desisted when surveyed at age 15 or older. (Zucker 2018 at 7[7]; Steensma et al. 2013.)[8] Another researcher observed that a partial or complete gender

[7] Zucker found social transition by the child to be strongly correlated with persistence for natal boys, but not for girls. (Zucker 2018 at 5.)

[8] Only 2 (3.6%) of 56 of the male desisters observed by Steensma et al. had made a complete or partial transition prior to puberty, and of the twelve males who made a complete or

social transition prior to puberty "proved to be a unique predictor of persistence." (Singh et al. 2021 at 14.)

132. Some vocal practitioners of prompt affirmation and social transition even proudly claim that essentially *no* children who come to their clinics exhibiting gender dysphoria or cross-gender identification desist in that identification and return to a gender identity consistent with their biological sex.[9] This is a very large change as compared to the desistance rates documented apart from social transition.

133. Even voices generally supportive of prompt affirmation and social transition are acknowledging a causal connection between social transition and this change in outcomes. As the Endocrine Society recognized in its 2017 Guidelines: "If children have completely socially transitioned, they may have great difficulty in returning to the original gender role upon entering puberty. . . [S]ocial transition (in addition to GD/gender incongruence) has been found to contribute to the likelihood of persistence." (Hembree et al. 2017 at 3879.) The fact is that these unproven interventions with the lives of kids and their families have systematically documented outcomes. Given this observed phenomenon, I agree with Dr. Ken Zucker who has written that social transition in children must be considered "a form of psychosocial treatment." (Zucker 2020 at 1.)

134. Moreover, as I review below, social transition cannot be considered or decided alone. Studies show that engaging in social transition starts a juvenile on a "conveyor belt" path

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partial transition prior to puberty, only two had desisted when surveyed at age 15 or older. Steensma 2013 at 584.

[9] *See, e.g.,* Ehrensaft 2015 at 34: "In my own clinical practice . . . of those children who are carefully assessed as transgender and who are allowed to transition to their affirmed gender, we have no documentation of a child who has 'desisted' and asked to return to his or her assigned gender."

that almost inevitably leads to the administration of puberty blockers, which in turn almost inevitably leads to the administration of cross-sex hormones. The emergence of this well-documented path means that the implications of taking puberty blockers *and* cross-sex hormones must be taken into account even where "only" social transition is being considered or requested by the child or family. As a result, there are a number of important "known risks" associated with social transition.

C. Administration of puberty blockers is a powerful medical and psychotherapeutic intervention that radically changes outcomes, almost eliminating desistance on the historically observed timeline.

135. Dr. Adkins speaks of the use of puberty blockers as though this major hormonal disruption of some of the most basic aspects of ordinary human development were entirely benign, acting as a "pause." (Adkins at 7.) This optimistic view is not based on science. In fact, it should be understood that puberty blockers are usually administered to early-stage adolescents as part of a path that includes social transition. Moreover, medicine does not know what the long-term health effects on bone, brain, and other organs are of a "pause" between ages 11-16. Medicine also does not know if the long-term effects of these compounds are different in boys than in girls. The mental health professional establishment likewise does not know the long-term effects on coping skills, interpersonal comfort, and intimate relationships of this "pause" while one's peers are undergoing their maturational gains in these vital arenas of future mental health. I address medical, social, and mental health risks associated with the use of puberty blockers in Section IX. Here, I note that the data strongly suggests that the administration of puberty blockers, too, must be considered to be a component of a "psychosocial treatment" with complex implications, rather than a "pause."

136. Multiple studies show that the large majority of children who begin puberty blockers go on to receive cross-sex hormones. (de Vries 2020 at 2.) A recent study by the

Tavistock and Portman NHS Gender Identity Development Service (UK)—the world's largest gender clinic—found that 98% of adolescents who underwent puberty suppression continued on to cross-sex hormones. (Carmichael et al 2021 at 12.)[10]

137. These studies demonstrate that going on puberty blockers virtually eliminates the possibility of desistance in juveniles. Rather than a "pause," puberty blockers appear to act as a psychosocial "switch," decisively shifting many children to a persistent transgender identity. Therefore, as a practical and ethical matter the decision to put a child on puberty blockers must be considered as the equivalent of a decision to put that child on cross-sex hormones, with all the considerations and informed consent obligations implicit in that decision.

VII. TRANSITION AND AFFIRMATION ARE EXPERIMENTAL THERAPIES THAT HAVE NOT BEEN SHOWN TO IMPROVE MENTAL OR PHYSICAL HEALTH OUTCOMES BY YOUNG ADULTHOOD.

138. It is undisputed that children and adolescents who present with gender dysphoria exhibit a very high level of mental health comorbidities. (Section II.C.) Whether the gender dysphoria is cause or effect of other diagnosed or undiagnosed mental health conditions, or whether these are merely coincident comorbidities, is hotly disputed, but the basic fact is not.

139. Dr. Adkins asserts that when the "transition, affirmation, and hormones" therapy that she advocates is followed, "gender dysphoria is easily managed" (Adkins at 5), implying that transition and hormone therapy have been proven to be effective in relieving gender dysphoria and the general mental health distress that broadly afflicts these children and adolescents. This is scientifically incorrect. It ignores both what is known and what is unknown.

[10] *See also* Brik 2020 where Dutch researchers found nearly 97% of adolescents who received puberty blockers proceeded to cross-sex hormones.

A. The knowledge base concerning therapies for gender dysphoria is "very low quality."

140. At the outset, it is important for all sides to admit that the knowledge base concerning the causes and treatment of gender dysphoria has low scientific quality.

141. In evaluating claims of scientific or medical knowledge, it is axiomatic in science that no knowledge is absolute, and to recognize the widely accepted hierarchy of reliability when it comes to "knowledge" about medical or psychiatric phenomena and treatments. Unfortunately, in this field opinion is too often confused with knowledge, rather than clearly locating what exactly is scientifically known. In order of increasing confidence, such "knowledge" may be based upon data comprising:

a. Expert opinion—it is perhaps surprising to educated laypersons that expert opinion standing alone is the lowest form of knowledge, the least likely to be proven correct in the future, and therefore does not garner as much respect from professionals as what follows;

b. A single case or series of cases (what could be called anecdotal evidence) (Levine 2016 at 239.);

c. A series of cases with a control group;

d. A cohort study;

e. A randomized double-blind clinical trial;

f. A review of multiple trials;

g. A meta-analysis of multiple trials that maximizes the number of patients treated despite their methodological differences to detect trends from larger data sets.

142. Prominent voices in the field have emphasized the severe lack of scientific knowledge in this field. The American Academy of Child and Adolescent Psychiatry has

recognized that "Different clinical approaches have been advocated for childhood gender discordance. . . . There have been no randomized controlled trials of any treatment. . . . [T]he proposed benefits of treatment to eliminate gender discordance … must be carefully weighed against … possible deleterious effects." (Adelson et al. at 968–69.) Similarly, the American Psychological Association has stated, "because no approach to working with [transgender and gender nonconforming] children has been adequately, empirically validated, consensus does not exist regarding best practice with pre-pubertal children." (APA 2015 at 842.)

143. Critically, "there are no randomized control trials with regard to treatment of children with gender dysphoria." (Zucker 2018 at 8.) On numerous critical questions relating to cause, developmental path if untreated, and the effect of alternative treatments, the knowledge base remains primarily at the level of the practitioner's exposure to individual cases, or multiple individual cases. As a result, claims to certainty are not justifiable. (Levine 2016 at 239.)

144. Within the last two years, at least three formal evidence reviews concerning hormonal interventions for gender dysphoria have been conducted. All three found all of the available clinical evidence to be very low quality.

145. The British National Health Service (NHS) commissioned formal "evidence reviews" of all clinical papers concerning the efficacy and safety of puberty blockers and cross-sex hormones as treatments for gender dysphoria. These evidence reviews were performed by the U.K. National Institute for Health and Care Excellence (NICE), applying the respected "GRADE" criteria for evaluating the strength of clinical evidence.

146. Both the review of evidence concerning puberty blockers and the review of evidence concerning cross-sex hormones were published in 2020, and both found that *all* available evidence as to both efficacy and safety was "very low quality" according to the

GRADE criteria. (NICE 2021a; NICE 2021b.) "Very low quality" according to GRADE means there is a high likelihood that the patient *will not experience* the hypothesized benefits of the treatment. (Balshem et al. 2011.)

147. Similarly, the highly respected Cochrane Library—the leading source of independent systematic evidence reviews in health care—commissioned an evidence review concerning the efficacy and safety of hormonal treatments now commonly administered to "transitioning transgender women" (i.e., testosterone suppression and estrogen administration to biological males). That review, also published in 2020, concluded that "We found insufficient evidence to determine the efficacy or safety of hormonal treatment approaches for transgender women in transition." (Haupt et al. 2020 at 2.) It must be understood that both the NICE and the Cochrane reviews considered *all* published scientific studies concerning these treatments.

148. As to social transition, as I have noted above, considerable evidence suggests that socially transitioning a pre-pubertal child puts him or her on a path from which very few children escape—a path which includes puberty blockers and cross-sex hormones before age 18. As a practical matter, then, a decision about social transition for a child must be made in light of what is known and what is unknown about the effects of those expected hormonal interventions.

149. I discuss safety considerations in Section IX below. Here, I detail what is known about the effectiveness of social and hormonal transition and affirmation to improve the mental health of individuals diagnosed with gender dysphoria.

B. Youth who adopt a transgender identity show no durable improvement in mental health after social, hormonal, or surgical transition and affirmation.

150. As I noted above, the evidence reviews for the efficacy and safety of hormonal interventions published in 2020 concluded that the supporting evidence is so poor that there is "a

high likelihood that the patient will not experience the hypothesized benefits of the treatment." There is now some concrete evidence that on average they do not experience those benefits.

151. An important paper published in 2021 by Tavistock clinic clinicians provided the results of the first longitudinal study that measured widely used metrics of general psychological function and suicidality before commencement of puberty blockers, and then at least annually after commencing puberty blockers. After up to three years, they "found no evidence of change in psychological function with GnRHa treatment as indicated by parent report (CBCL) or self-report (YSR) of overall problems, internalizing or externalizing problems or self-harm" as compared to the pre-puberty-blocker baseline evaluations. "Outcomes that were not formally tested also showed little change." (Carmichael at al. 2021 at 18-19.) Similarly, a study by Branström and Pachankis of the case histories of a set of individuals diagnosed with GD in Sweden found no positive effect on mental health from hormonal treatment. (Landen 2020.)

152. A cohort study by authors from Harvard and Boston Children's Hospital found that youth and young adults (ages 12-29) who self-identified as transgender had an elevated risk of depression (50.6% vs. 20.6%) and anxiety (26.7% vs. 10.0%); a higher risk of suicidal ideation (31.1% vs. 11.1%), suicide attempts (17.2% vs. 6.1%), and self-harm without lethal intent (16.7% vs. 4.4%) relative to the matched controls; and a significantly greater proportion of transgender youth accessed inpatient mental health care (22.8% vs. 11.1%) and outpatient mental health care (45.6% vs. 16.1%) services. (Reisner et al. 2015 at 6.) Similarly, a recent longitudinal study of transgender and gender diverse youth and young adults in Chicago found rates of alcohol and substance abuse "substantially higher than those reported by large population-based studies of youth and adults." (Newcomb et al. 2020 at 14.) Members of the clinical and research team at the prominent Dutch VU University gender dysphoria center recently compared mental

health metrics of two groups of subjects before (mean age 14.5) and after (mean age 16.8) puberty blockers. But they acknowledged that the structure of their study meant that it "can . . . not provide evidence about . . . long-term mental health outcomes," and that based on what continues to be extremely limited scientific data, "Conclusions about the long-term benefits of puberty suppression should . . . be made with extreme caution." In other words, we just don't know. (van der Miesen et al. 2020 at 703.)

153. Kiera Bell, who was diagnosed with gender dysphoria at the Tavistock Clinic, given cross-sex hormones, and subjected to a mastectomy, before desisting and reclaiming her female gender identity, and a Swedish teen girl who appeared in a recent documentary after walking that same path, have both stated that they feel that they were treated "like guinea pigs," experimental subjects. They are not wrong.

C. Long-term mental health outcomes for individuals who persist in a transgender identity are poor.

154. The responsible MHP cannot focus narrowly on the short-term happiness of the young patient, but must instead consider the happiness and health of the patient from a "life course" perspective. When we look at the available studies of individuals who continue to inhabit a transgender identity across adult years, the results are strongly negative.

155. In the United States, the death rates of trans veterans are comparable to those with schizophrenia and bipolar diagnoses—20 years earlier than expected. These crude death rates include significantly elevated rates of substance abuse as well as suicide. (Levine 2017 at 10.) Similarly, researchers in Sweden and Denmark have reported on almost all individuals who underwent sex-reassignment surgery over a 30-year period. (Dhejne et al. 2011; Simonsen et al. 2016.) The Swedish follow-up study similarly found a suicide rate in the post-SRS population

19.1 times greater than that of the controls; both studies demonstrated elevated mortality rates from medical and psychiatric conditions. (Levine 2017 at 10.)

156. A recent study in the American Journal of Psychiatry reported high mental health utilization patterns of adults for ten years after surgery for approximately 35% of patients. (Bränström & Panchankis, 2020.) Indeed, earlier Swedish researchers in a long-term study of all patients provided with SRS over a 30-year period (median time since SRS of > 10 years) concluded that individuals who have SRS exhibit such poor mental health that they should be provided very long-term psychiatric care as the "final" transition step of SRS. (Dhejne et al. 2011, at 6-7.) Unfortunately, across the succeeding decade, in Sweden and elsewhere their suggestion has been ignored.

157. I will note that these studies do not tell us whether the subjects first experienced gender dysphoria as children, adolescents, or adults, so we cannot be certain how their findings apply to each of these subpopulations which represent quite different pathways. But in the absence of knowledge, we should be cautious.

158. Meanwhile, no studies show that affirmation of pre-pubescent children or adolescents leads to more positive outcomes (mental, physical, social, or romantic) by, e.g., age 25 or older than does "watchful waiting" or ordinary therapy.

159. The many studies that I have cited here warn us that as we look ahead to the patient's life as a young adult and adult, the prognosis for the physical health, mental health, and social well-being of the child or adolescent who transitions to live in a transgender identity is not good. Gender dysphoria is not "easily managed" when one understands the marginalized, vulnerable physical, social, and psychological status of adult trans populations.

VIII. TRANSITION AND AFFIRMATION DO NOT DECREASE, AND MAY INCREASE, THE RISK OF SUICIDE.

A. The risk of suicide among transgender youth is confused and exaggerated in the public mind.

160. While suicide is closely linked to mental health, I comment on it separately because rhetoric relating to suicide figures so prominently in debates about responses to gender dysphoria.

161. At the outset, I will note that any discussion of suicide when considering younger children involves very long-range and very uncertain prediction. Suicide in pre-pubescent children is extremely rare, and the existing studies of gender identity issues in pre-pubescent children do not report significant incidents of suicide. Any suggestion otherwise is misinformed. Our focus for this topic, then, is on adolescents and adults.

162. Some authors have reported rates of suicidal thoughts and behaviors among trans-identifying teens or adults ranging from 25% to as high as 52%, generally through non-longitudinal self-reports obtained from non-representative survey samples. (Toomey et al. 2018.) Dr. Adkins asserted in her declaration submitted in support of Plaintiff's preliminary injunction motion that "Attempted suicide rates in the transgender community are over 40%," and that "[t]he only treatment to avoid this serious harm is to . . . affirm gender identity." (Adkins at 6.) Contrary to these assertions, no studies show that affirmation of children (or anyone else) reduces suicide, prevents suicidal ideation, or improves long-term outcomes, as compared to either a "watchful waiting" or a psychotherapeutic model of response, as I have described above. Rhetorical references to figures such as 40%—and some published studies—confuse suicidal thoughts and actions that represent a cry for help, manipulation, or expression of rage with serious attempts to end life. Such statements or studies ignore a crucial and long-recognized distinction.

163. I have included suicidality in my discussion of mental health above. Here, I focus on actual suicide. Too often, in public comment suicidal thoughts are blurred with suicide. Yet the available data tells us that suicide among children and youth suffering from gender dysphoria is extremely rare.

164. An important new analysis of data covering patients as well as those on the waiting list (and thus untreated) at the UK Tavistock gender clinic—the world's largest gender clinic—found a total of only four completed suicides across 11 years' worth of patient data, reflecting an estimated cumulative 30,000 patient-years spent by patients under the clinic's care or on its waiting list. This corresponded to an annual suicide rate of 0.013%. The proportion of individual patients who died by suicide was 0.03%, which is orders of magnitude smaller than trans adolescents who self-report suicidal behavior or thoughts on surveys. (Biggs 2022b.)

165. Thus, only a minute fraction of trans-identifying adolescents who report thoughts or conduct considered to represent "suicidality" actually commit suicide. I agree with the statement by Dr. Zucker that the assertion by, for example, Karasic and Ehrensaft (2015) that completed suicides among transgender youth are "alarmingly high" "has no formal and systematic empirical basis." (Zucker 2019 at 3.)

166. Professor Biggs of Oxford, author of the study of incidence of suicide among Tavistock clinic patients, rightly cautions that it is "irresponsible to exaggerate the prevalence of suicide." (Biggs 2022b at 4.) It is my opinion that telling parents—or even allowing them to believe from their internet reading—that they face a choice between "a live son or a dead daughter" is both factually wrong and unethical. Informed consent requires clinicians to tell the truth and ensure that their patients understand the truth. To be kind, the clinicians who believe

such figures represent high risk of ultimate suicide in adolescence simply do not know the truth; they are ill-informed.

B. Transition of any sort has not been shown to reduce levels of suicide.

167. Every suicide is a tragedy, and steps that reduce suicide should be adopted. I have noted above that suicidality (that is, suicidal thoughts or behaviors, rather than suicide) is common among transgender adolescents and young adults before, during, and after social and medical transition. If a medical or mental health professional believes that an individual he or she is diagnosing or treating for gender dysphoria presents a suicide risk, in my view it is unethical for that professional merely to proceed with treatment for gender dysphoria and hope that "solves the problem." Rather, that professional has an obligation to provide or refer the patient for evidence-based therapies for addressing depression and suicidal thoughts that are well-known to the profession. (Levine 2016 at 242.)

168. This is all the more true because there is in fact no evidence that social and/or medical transition reduces the risk or incidence of actual suicide. On the contrary, in his analysis of those who were patients of or on the waiting list of the Tavistock clinic, Professor Biggs found that the suicide rate was not higher among those on the clinic's waiting list (and thus as-yet untreated), than for those who were patients under care. (Biggs 2022b.) And as corrected, Bränström and Pachankis similarly acknowledge that their review of records of GD patients "demonstrated no advantage of surgery in relation to . . . hospitalizations following suicide attempts." (I assume for this purpose that attempts that result in hospitalization are judged to be so serious as to predict a high rate of future suicide if not successfully addressed.")[11]

[11] Turban et al. (2020) has been described in press reports as demonstrating that administration of puberty suppressing hormones to transgender adolescents reduces suicide or suicidal ideation. The paper itself does not make that claim, nor permit that conclusion.

C. Long-term life in a transgender identity correlates with very high rates of completed suicide.

169. As with mental health generally, the patient, parent, or clinician fearing the risk of suicide must consider not just the next month or year, but a life course perspective.

170. There are now four long-term studies that analyze completed suicide among those living in transgender identities into adulthood. The results vary significantly, but are uniformly highly negative.

171. Dhejne reported a long-term follow-up study of subjects after sex reassignment surgery. Across the multi-year study, subjects who had undergone SRS committed suicide at 19.1 times the expected rate compared to general population controls matched by age and both sexes. MtF subjects committed suicide at 13.9 times the expected rate, and FtM subjects committed suicide at 40.0 times the expected rate. (Dhejne et al. 2011 Supplemental Table S1.)

172. Asscheman, also writing in 2011, reported results of a long-term follow-up of all transsexual subjects of the Netherlands' leading gender medicine clinic who started cross-sex hormones before July 1, 1997, a total of 1331 patients. Due to the Dutch system of medical and death records, extensive follow-up was achieved. Median follow-up period was 18.5 years. The mortality rate among MtF patients was 51% higher than among the age-matched general population; the rate of completed suicide among MtF patients was six times that of the age-matched general population. (Asscheman et al. 2011.)

173. Importantly, Asscheman et al. found that "No suicides occurred within the first 2 years of hormone treatment, while there were six suicides after 2-5 years, seven after 5-10 years, and four after more than 10 years of CSH treatment at a mean age of 41.5 years." (Asscheman et al. 2011 at 637-638.) This suggests that studies that follow patients for only a year or two after treatment are insufficient. Asscheman et al.'s data suggest that such short-term follow-up is

engaging only with an initial period of optimism, and will simply miss the feelings of disillusion and the increase in completed suicide that follows in later years.

174. A retrospective, long-term study published in 2020 of a very large cohort (8263) of patients referred to the Amsterdam University gender clinic between 1972 and 2017 found that the annual rate of completed suicides among the transgender subjects was "three to four times higher than the general Dutch population." "[T]he incidence of observed suicide deaths was almost equally distributed over the different stages of treatment." The authors concluded that "vulnerability for suicide occurs similarly in the different stages of transition." (Wiepjes et al. 2020.) In other words, neither social nor medical transition reduced the rate of suicide.

175. As with Asscheman et al., Wiepjes et al. found that the median time between start of hormones and suicide (when suicide occurred) was 6.1 years for natal males, and 6.9 years for natal females. Again, short- or even medium-term studies will miss this suicide phenomenon.

176. A 2021 study analyzed the case histories of a cohort of 175 gender dysphoria patients treated at one of the seven UK adult gender clinics who were "discharged" (discontinued as patients) within a selected one-year period. The authors reported the rather shocking result that 7.7% (3/39) of natal males who were diagnosed and admitted for treatment, and who were between 17 and 24 years old, were "discharged" because they committed suicide *during* treatment. (Hall et al. 2021, Table 2.)

177. None of these studies demonstrates that the hormonal or surgical intervention *caused* suicide. That is possible, but as we have seen, the population that identifies as transgender suffers from a high incidence of comorbidities that correlate with suicide. What these studies demonstrate—at the least—is that this remains a troubled population in need of extensive and careful psychological care that they generally do not receive, and that neither

hormonal nor surgical transition and "affirmation" resolve their underlying problems and put them on the path to a stable and healthy life.

178. In sum, claims that affirmation will reduce the risk of suicide for children and adolescents are not based on science. Instead, transition of any sort must be justified, if at all, as a life-enhancing measure, not a lifesaving measure. (Levine 2016 at 242.) In my opinion, this is an important fact that patients, parents, and even many MHPs fail to understand.

IX. HORMONAL INTERVENTIONS ARE EXPERIMENTAL PROCEDURES THAT HAVE NOT BEEN PROVEN SAFE.

179. Dr. Adkins also appears to assert as a fact—but without citation to peer-reviewed literature—that social transition, puberty blockers, and cross-sex hormones are known to be "safe." (Adkins at 5-6, 8.) This is not true. And Dr. Adkins, along with a number of voices in the field, also asserts that puberty blockers act merely as a "pause" in the process of puberty-driven maturation, suggesting that this hormonal intervention has been proven to be fully reversible. This is also an unproven belief.

180. On the contrary, no studies have been done that meaningfully demonstrate that either puberty blockers or cross-sex hormones, as prescribed for gender dysphoria, are safe in other than the short run. No studies have attempted to determine whether the effects of puberty blockers, as currently being prescribed for gender dysphoria, are fully reversible. Neither Dr. Adkins nor Dr. Safer cites any such studies, and there are none. There are only pronouncements. In fact, there are substantial reasons for concern that these hormonal interventions are not safe. Multiple researchers have expressed concern that the full range of possible harms have not even been correctly conceptualized.

181. Because, as I have explained in Section VI, recent evidence demonstrates that pre-pubertal social transition almost always leads to progression on to puberty blockers which in turn

almost always leads to the use of cross-sex hormones, physicians bear the ethical responsibility for a thorough informed consent process for parents and patients that includes this fact and its full implications. Informed consent does not mean sharing with the parents and patients what the doctor believes: it means sharing what is known and what is not known about the intervention. So much of what doctors believe is based on mere trust in what they have been taught. Neither they themselves nor their teachers may be aware of the scientific foundation and scientific limitations of what they are recommending.

A. Use of puberty blockers has not been shown to be safe or reversible for gender dysphoria.

182. As I noted above, the recent very thorough literature review performed for the British NHS concluded that *all* available clinical evidence relating to "safety outcomes" from administration of puberty blockers for gender dysphoria is of "very low certainty." (NHS 2020a at 6.)

183. In its 2017 Guidelines, the Endocrine Society cautioned that "in the future we need more rigorous evaluations of the effectiveness and safety of endocrine and surgical protocols" including "careful assessment of . . . the effects of prolonged delay of puberty in adolescents on bone health, gonadal function, and the brain (including effects on cognitive, emotional, social, and sexual development)." (Hembree et al. 2017 at 3874.) No such "careful" or "rigorous" evaluation of these very serious safety questions has yet been done.

184. Some advocates appear to assume that puberty blockers are "safe" because they have been approved by the Food and Drug Administration (FDA) for use to treat precocious puberty—a rare condition in which the puberty process may start at eight or younger. No such conclusion can be drawn. As the "label" for Lupron (one of the most widely prescribed puberty blockers) explains, the FDA approved the drug only *until* the "age was appropriate for entry into

puberty." The study provides no information at all as to the safety or reversibility of instead *blocking* healthy, normally-timed puberty's beginning, and *throughout* the years that body-wide continuing changes normally occur. Given the physical, social, and psychological dangers to the child with precocious puberty, drugs like Lupron are effective in returning the child to a puerile state without a high incidence of significant side effects—that is, they are "safe" to reverse the condition. But use of drugs to suppress normal puberty has multiple organ system effects whose long-term consequences have not been investigated.

185. **Fertility**: The Endocrine Society Guidelines rightly say that research is needed into the effect of puberty blockade on "gonadal function" and "sexual development." The core purpose and function of puberty blockers is to prevent the maturation of the ovaries or testes, the sources of female hormones and male hormones when stimulated by the pituitary gland. From this predictable process fertility is accomplished within a few years. Despite widespread assertions that puberty blockers are "fully reversible," there has been no study published on the critical question of whether patients ever develop normal levels of fertility if puberty blockers are terminated after a "prolonged delay of puberty." The 2017 Endocrine Society Guidelines are correct that are no data on achievement of fertility "following prolonged gonadotropin suppression" (that is, puberty blockade). (Hembree et al. 2017 at 3880.)

186. **Bone strength**: Multiple studies have documented adverse effects from puberty blockers on bone density. (Klink et al. 2015; Vlot et al. 2016; Joseph et al. 2019.) The most recent found that after two years on puberty blockers, the bone density measurements for a significant minority of the children had declined to clinically concerning levels. Density in the spines of some subjects fell to a level found in only 0.13% of the population. (Biggs 2021.) Some

other studies have found less concerning effects on bone density. While the available evidence remains limited and conflicting, it is not possible to conclude that the treatment is "safe."

187. **Brain development:** Important neurological growth and development in the brain occurs across puberty. The anatomic and functional effect on brain development of blocking the natural puberty process has not been well studied. A prominent Australian clinical team recently expressed concern that "no data were (or are) available on whether delaying the exposure of the brain to a sex steroid affects psychosexual, cognitive, emotional, or other neuropsychological maturation." (Kozlowska et al. 2021 at 89.) In my opinion, given the observed correlation between puberty and brain development, the default hypothesis must be that there *would* be a negative impact. For the purpose of protecting patients all over the world, the burden of proof should be on advocates to first demonstrate to a reasonable degree of certainty that brain structure and its measurable cognitive and affect processing are not negatively affected. This recalls the ethical principle: Above All Do No Harm.

188. The Endocrine Society Guidelines acknowledge as much, stating that side effects of pubertal suppression "may include . . . unknown effects on brain development," that "we need more rigorous evaluations of . . . the effects of prolonged delay of puberty in adolescents on . . . the brain (including effects on cognitive, emotional, social, and sexual development)," and stating that "animal data suggests there may be an effect of GnRH analogs [puberty blockers] on cognitive function." (Hembree et al. 2017 at 3874, 3882, 3883.) Given this concern, one can only wonder why this relevant question has not been scientifically investigated in a large group of natal males and females.

189. There has been a longitudinal study of one natal male child, assessed before, and again 20 months after, puberty suppression was commenced. It reported a reduction in the

patient's "global IQ," measured an anomalous absence of certain structural brain development expected during normal male puberty, and hypothesized that "a plausible explanation for the G[lobal] IQ decrease should consider a disruption of the synchronic [i.e., appropriately timed] development of brain areas by pubertal suppression." (Schneider et al. 2017 at 7.) This should cause parents and practitioners serious concern.

190. Whether any impairment of brain development is "reversed" upon later termination of puberty blockade has, to my knowledge, not been studied at all. As a result, assertions by medical or mental health professionals that puberty blockade is "fully reversible" are unjustified and based on hope rather than science.

191. Without a number of additional case studies—or preferably statistically significant clinical studies—two questions remain unanswered: Are there brain anatomic or functional impairment from puberty blockers? And are the documented changes reversed over time when puberty blockers are stopped? With these questions unanswered, it is impossible to assert with certainty that the effects of this class of medications are "fully reversible." Such an assertion is another example of ideas based on beliefs rather than on documentation, on hope not science.

192. **Psycho-social harm**: Puberty is a time of stress, anxiety, bodily discomfort during physical development, and identity formation for *all* humans. No careful study has been done of the long-term impact on the young person's coping skills, interpersonal comfort, and intimate relationships from remaining puerile for, e.g., two to five years while one's peers are undergoing pubertal transformations, and of then undergoing an artificial puberty at an older age. However, pediatricians and mental health professionals hear of distress, concern, and social awkwardness in those who naturally have a delayed onset of puberty. In my opinion, individuals

in whom puberty is delayed multiple years are likely to suffer at least subtle negative psychosocial and self-confidence effects as they stand on the sidelines witnessing their peers developing the social relationships (and attendant painful social learning experiences) that come with adolescence. (Levine 2018 at 9.) Social anxiety and social avoidance are common findings in the evaluation of trans-identified children and teens. Are we expected to believe that creating years of being further different than their peers has no lasting internal consequences? Do we ignore Adolescent Psychiatry's knowledge of the importance of peer groups among adolescents?

193. We simply do not know what all the psychological impacts of NOT grappling with puberty at the ordinary time may be, because it has not been studied. And we have no information as to whether that impact is "fully reversible."

194. In addition, since the overwhelming proportion of children who begin puberty blockers continue on to cross-sex hormones, it appears that there is an important element of "psychological irreversibility" in play. The question of to what extent the physical and developmental impacts of puberty blockers might be reversible is an academic one, if psycho-social realities mean that very few patients well ever be able to make that choice once they have started down the road of social transition and puberty blockers.

B. Use of cross-sex hormones in adolescents for gender dysphoria has not been shown to be medically safe except in the short term.

195. As with puberty blockers, all evidence concerning the safety of extended use of cross-sex hormones is of "very low quality." The U.K. NICE evidence review cautioned that "the safety profiles" of cross-sex hormone treatments are "largely unknown," and that several of the limited studies that do exist reported high numbers of subjects "lost to follow-up," without explanation—a worrying indicator. (NICE 2020b.)

196. The 2020 Cochrane Review reported that: "We found insufficient evidence to determine the . . . safety of hormonal treatment approaches for transgender women in transition." (Haupt et al. 2020 at 4.) Even the Endocrine Society tagged all its recommendations for the administration of cross-sex hormones as based on "low quality evidence." (Hembree et al. 2017 at 3889.)

197. **Sterilization**: It is undisputed, however, that harm to the gonads is an expected effect, to the extent that it must be assumed that cross-sex hormones will sterilize the patient. Thus, the Endocrine Society 2017 Guidelines caution that "[p]rolonged exposure of the testes to estrogen has been associated with testicular damage," that "[r]estoration of spermatogenesis after prolonged estrogen treatment has not been studied," and that "[i]n biological females, the effect of prolonged treatment with exogenous testosterone upon ovarian function is uncertain." (Hembree et al. 2017 at 3880.) [12]

198. The Guidelines go on to recommend that the practitioner counsel the patient about the (problematic and uncertain) options available to collect and preserve fertile sperm or ova before beginning cross-sex hormones. The life-long negative emotional impact of infertility on both men and women has been well studied. While this impact has not been studied specifically within the transgender population, the opportunity to be a parent is likely a human, emotional need, and so should be considered an important risk factor when considering gender transition for any patient.

[12] *See also* Guss et al. 2015 at 4 ("a side effect [of cross-sex hormones] may be infertility") and at 5 ("cross-sex hormones . . . may have irreversible effects"); Tishelman et al. 2015 at 8 (Cross-sex hormones are "irreversible interventions" with "significant ramifications for fertility").

199. **Sexual response**: Puberty blockers prevent maturation of the sexual organs and response. Some, and perhaps many, transgender individuals who did not go through puberty consistent with their sex and are then put on cross-sex hormones face significantly diminished sexual response as they enter adulthood and are unable ever to experience orgasm. In the case of males, the cross-sex administration of estrogen limits penile genital growth and function. In the case of females, prolonged exposure to exogenous testosterone impairs vaginal function. Much has been written about the negative psychological and relational consequences of anorgasmia among non-transgender individuals that is ultimately applicable to the transgendered. (Levine 2018 at 6.) At the same time, prolonged exposure of females to exogenous testosterone often increases sexual drive to a distracting degree. It is likely that parents and physicians are uncomfortable discussing any aspects of genital sexual activity with patients.

200. **Cardiovascular harm**: Several researchers have reported that cross-sex hormones increase the occurrence of various types of cardiovascular disease, including strokes, blood clots, and other acute cardiovascular events. (Getahun et al. 2018; Guss et al. 2015; Asscheman et al. 2011.) With that said, I agree with the conclusion of the Endocrine Society committee (like that of the NICE Evidence Review) that: "A systematic review of the literature found that data were insufficient (due to very low–quality evidence) to allow a meaningful assessment of patient-important outcomes, such as death, stroke, myocardial infarction, or venous thromboembolism in transgender males. Future research is needed to ascertain the potential harm of hormonal therapies." (Hembree et al. 2017 at 3891.) Future research questions concerning long-term harms need to be far more precisely defined. The question of whether cross-sex hormones are safe for adolescents and young adults cannot be answered by analogies to hormone replacement therapy in menopausal women (which is not a cross-sex usage).

Medicine has answered safety questions for menopausal women in terms of cancer and cardiovascular safety: at what dose, for what duration, and at what age range. The science of endocrine treatment of gender dysphoric youth is being bypassed by short-term clinical impressions of safety even though physicians know that cardiovascular and cancer processes often develop over many years.

201. Further, in contrast to administration for menopausal women, hormones begun in adolescence are likely to be administered for four to six decades. The published evidence of adverse impact, coupled with the lack of data sufficient to reach a firm conclusion, make it irresponsible to assert that cross-sex hormones "are safe."

202. **Harm to family and friendship relationships:** As a psychiatrist, I recognize that mental health is a critical part of health generally, and that relationships cannot be separated from and profoundly impact mental health. Gender transition routinely leads to isolation from at least a significant portion of one's family in adulthood. In the case of a juvenile transition, this will be less dramatic while the child is young, but commonly increases over time as siblings who marry and have children of their own do not wish the transgender individual to be in contact with those children. By adulthood, the friendships of transgender individuals tend to be confined to other transgender individuals (often "virtual" friends known only online) and the generally limited set of others who are comfortable interacting with transgender individuals. (Levine 2017 at 5.) My concerns about this are based on decades of observations in my professional work with patients.

203. **Sexual-romantic harms associated with transition:** After adolescence, transgender individuals find the pool of individuals willing to develop a romantic and intimate relationship with them to be greatly diminished. When a trans person who passes well reveals his or her natal sex, many potential mates lose interest. When a trans person does not pass well,

options are likely further diminished. But regardless of a person's appearance, these adults soon learn that many of their dates are looking for exotic sexual experiences rather than genuinely loving relationships. (Levine 2017 at 5, 13; Levine 2013 at 40.)

C. The timing of harms.

204. The multi-year delay between start of hormones and the spike in completed suicide observed by Professor Biggs in the Tavistock data (as discussed in Section VIII above) warns us that the safety and beneficence of these treatments cannot be judged based on short-term studies, or studies that do not continue into adulthood. Similarly, several of the harms that I discuss above would not be expected to manifest until the patients reaches at least middle-age. For example, stroke or other serious cardiovascular event is a complication that is unlikely to manifest during teen years even if its likelihood over the patient's lifetime has been materially increased via obesity, lipid abnormalities, and smoking. Regret over sterilization or over an inability to form a stable romantic relationship may occur sooner. Psychological challenges of being a trans adult may become manifest after the medical profession is only doing routine follow up care—or, in many cases, has lost contact with the patient altogether. Because few, if any, clinics in this country are conducting systematic long-term follow-up with their child and adolescent patients, the doctors who counsel, prescribe, or perform hormonal and surgical therapies are unlikely ever to become aware of the later negative life impacts, however severe. These concerns are compounded by the findings in the recent "detransitioner" research that 76% did not inform their clinicians of their detransition. (Littman 2021.)

205. The possibility that steps along the transition and affirmation pathway, while lessening the pain of gender dysphoria in the short term, could lead to additional sources of crippling emotional and psychological pain, are too often not considered by advocates of social transition and not considered at all by the trans child. (Levine 2016 at 243.) Clinicians must

distinguish the apparent short-term safety of hormones from likely or possible long-term consequences, and help the patient or parents understand these implications as well. The young patient may feel, "I don't care if I die young, just as long I get to live as a woman." The mature adult may take a different view. Hopefully, so will the child's physician.

206. Individual patients often pin excessive hope in transition, believing that transition will solve what are in fact ordinary social stresses associated with maturation, or mental health co-morbidities. In this way, transition can prevent them from mastering personal challenges at the appropriate time or directly addressing conditions that require treatment. When the hoped-for "vanishing" of other mental health or social difficulties does not occur, disappointment, distress, and depression may ensue. It is noteworthy that half of the respondents to the larger "detransitioner" survey reported that their transition had not helped the gender dysphoria, and 70% had concluded that their gender dysphoria was related to other issues. (Vandenbussche 2021.) Without the clinical experience of monitoring the psychosocial outcomes of these young patients as they age into adulthood, many such professionals experience no challenge to their affirmative beliefs. But medical and mental health professionals who deliver trans affirmative care for those with previous and co-existing mental health problems have an ethical obligation to inform themselves, and to inform patients and parents, that these dramatic treatments are not a panacea.

207. In sum, whether we consider physical or mental health, science does not permit us to say that either puberty blockers or cross-sex hormones are "safe," and the data concerning the mental health of patients before, during, and after such treatments strongly contradict the assertion that gender dysphoria is "easily managed."

Bibliography

Adelson, S. & American Academy of Child & Adolescent Psychiatry (2012). *Practice Parameter on Gay, Lesbian, or Bisexual Sexual Orientation, Gender Nonconformity, and Gender Discordance in Children and Adolescents*. JOURNAL OF THE AMERICAN ACADEMY OF CHILD & ADOLESCENT PSYCHIATRY 51(9) 957.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). https://doi.org/10.1176/appi.books.9780890425596

American Psychological Association. *Guidelines for Psychological Practice with Transgender & Gender Nonconforming People* (2015). AMERICAN PSYCHOLOGIST 70(9) 832.

Anderson, E. (2022, January 3). *Opinion: When it comes to trans youth, we're in danger of losing our way*. THE SAN FRANCISCO EXAMINER. Accessed January 5, 2022 http://www.sfexaminer.com/opinion/are-we-seeing-a-phenomenon-of-trans-youth-social-contagion/

Anzani, A., Lindley, L., Tognasso, G., Galupo, M. & Prunas, A. (2021). *"Being Talked to Like I Was a Sex Toy, Like Being Transgender Was Simply for the Enjoyment of Someone Else": Fetishization and Sexualization of Transgender and Nonbinary Individuals.* ARCHIVES OF SEXUAL BEHAVIOR 50(3) 897-911..

Asscheman, H., Giltay, E. J., Megens, J. A. J., de Ronde, W. (Pim), van Trotsenburg, M. A. A., & Gooren, L. J. G. (2011). *A long-term follow-up study of mortality in transsexuals receiving treatment with cross-sex hormones*. EUROPEAN JOURNAL OF ENDOCRINOLOGY *164*(4) 635–642.

Balshem, H., Helfand, M., Schünemann, H. J., Oxman, A. D., Kunz, R., Brozek, J., Vist, G. E., Falck-Ytter, Y., Meerpohl, J., & Norris, S. (2011). *GRADE guidelines: 3. Rating the quality of evidence*. JOURNAL OF CLINICAL EPIDEMIOLOGY *64*(4), 401–406.

Becerra-Culqui, T. et. al. (2018). *Mental Health of Transgender and Gender Nonconforming Youth Compared with Their Peers*. PEDIATRICS 141(5).

Bhargava, A., et al. (2021). *Considering Sex as a Biological Variable in Basic and Clinical Studies: An Endocrine Society Scientific Statement*. ENDOCRINE REVIEWS 42(3) 219-158.

Biggs, M. (2021). *Revisiting the effect of GnRH analogue treatment on bone mineral density in young adolescents with gender dysphoria.* JOURNAL OF PEDIATRIC ENDOCRINOLOGY AND METABOLISM 34(7), 937-939.

Biggs, M. (2022a). *Estrogen is Associated with Greater Suicidality among Transgender Males, and Puberty Suppression is not Associated with Better Mental Health Outcomes for Either Sex*. Journals.plos.org/plosone/article/comment?id=10.1371/annotation/dcc6a58e-592a-49d4-9b65-ff65df2aa8f6.

Biggs, M. (2022b). *Suicide by Clinic-Referred Transgender Adolescents in the United Kingdom.* ARCHIVES OF SEXUAL BEHAVIOR. Doi.org/10.1007/s10508-022-02287-7.

Blakemore, S., Burnett, S., and Dahl, R. (2010). *The Role of Puberty in the Developing Adolescent Brain*. HUMAN BRAIN MAPPING 31:926.933.

Boyd, I., Hackett, T. &, Bewley, S. (2022).. *Care of Transgender Patients: A General Practice Quality Improvement Approach.* HEALTHCARE. 10(1):121.

Bränström, R., & Pachankis, J. E. (2020a). *Reduction in Mental Health Treatment Utilization Among Transgender Individuals After Gender-Affirming Surgeries: A Total Population Study*. AMERICAN JOURNAL OF PSYCHIATRY *177*(8) 727–734.

Bränström, R., & Pachankis, J. E. (2020b). *Correction to Bränström and Pachankis*. (2020). AMERICAN JOURNAL OF PSYCHIATRY, *177*(8), 734–734. https://doi.org/10.1176/appi.ajp.2020.1778correction

Brik, T. et al. (2020). *Trajectories of Adolescents Treated with Gonadotropin-Releasing Hormone Analogues for Gender Dysphoria*. ARCHIVES OF SEXUAL BEHAVIOR. https://doi.org/10.1007/s10508-020-01660-8.

Cantor, J. (2019). *Transgender and Gender Diverse Children and Adolescents: Fact-Checking of AAP Policy*. JOURNAL OF SEX & MARITAL THERAPY, *46*(4), 307–313.

Carmichael, P., Butler, G., Masic, U., Cole, T. J., De Stavola, B. L., Davidson, S., Skageberg, E. M., Khadr, S., & Viner, R. M. (2021). *Short-term outcomes of pubertal suppression in a selected cohort of 12- to 15-year-old young people with persistent gender dysphoria in the UK*. PLOS ONE, 16(2), e0243894.

Cohen-Kettenis, P. and Kuiper, B. (1984). *Transsexuality and Psychotherapy*. TIJDSCHRIFT VOOR PSYCHOTHERAPIE 10 (153-166).

Cohen-Kettenis, P. T., Delemarre-van de Waal, H. A., & Gooren, L. J. G. (2008). *The treatment of adolescent transsexuals: Changing insights.* THE JOURNAL OF SEXUAL MEDICINE, *5*(8), 1892–1897.

D'Angelo, R. (2018). *Psychiatry's ethical involvement in gender-affirming care*. AUSTRALASIAN PSYCHIATRY *26*(5), 460–463.

D'Angelo, R., Syrulnik, El, Ayad, S., Marchiano, L., Kenny, D.T., & Clarke, P. (2021). *One Size Does Not Fit All: In Support of Psychotherapy for Gender Dysphoria*. ARCHIVES OF SEXUAL BEHAVIOR 50(1) 7-16.

Davis, L. (2022). *A Trans Pioneer Explains Her Resignation from the US Professional Association for Transgender Health.* QUILETTE. Accessed February 1, 2022. https://quillette.com/2022/01/06/a-transgender-pioneer-explains-why-she-stepped-down-from-uspath-and-wpath/

de Vries, A. L. C. (2020). *Challenges in Timing Puberty Suppression for Gender-Nonconforming Adolescents*. PEDIATRICS 146(4), e2020010611.

Dhejne, C., Lichtenstein, P., Boman, M., Johansson, A. L. V., Långström, N., & Landén, M. (2011). *Long-Term Follow-Up of Transsexual Persons Undergoing Sex Reassignment Surgery: Cohort Study in Sweden*. PLoS ONE 6(2), e16885.

Dhejne, C., Öberg, K., Arver, S., & Landén, M. (2014). *An Analysis of All Applications for Sex Reassignment Surgery in Sweden, 1960–2010: Prevalence, Incidence, and Regrets*. ARCHIVES OF SEXUAL BEHAVIOR, 43(8), 1535–1545.

Dreger, A. (2015) *Galileo's Middle Finger: Heretics, Activists, and One Scholar's Search for Justice Paperback*. PENGUIN BOOKS.

Edwards-Leeper, L. and Anderson, E. (November 24, 2021). *The Mental Health Establishment is Failing Trans Kids*. THE WASHINGTON POST. Accessed February 1, 2022. https://www.washingtonpost.com/outlook/2021/11/24/trans-kids-therapy-psychologist/

Edwards-Leeper, L. et al. (2017). *Psychological Profile of the First Sample of Transgender Youth Presenting for Medical Intervention in a U.S. Pediatric Gender Center.* PSYCHOLOGY OF SEXUAL ORIENTATION AND GENDER DIVERSITY 4(3) 374.

Ehrensaft , B.(2015). *Listening and Learning from Gender-Nonconforming Children.* THE PSYCHOANALYTIC STUDY OF THE CHILD 68(1) 28.

Entwistle, K. (2020). *Debate: Reality check – Detransitioners' testimonies require us to rethink gender dysphoria*. CHILD AND ADOLESCENT MENTAL HEALTH camh.12380.

Evans, M. and Evans, S. (2021). *Psychotherapy of Gender Dysphoria of Children and Young Adults*. PHOENIX PUBLICATION, UK.

Expósito-Campos, P. (2021). *A Typology of Gender Detransition and Its Implications for Healthcare Providers*. JOURNAL OF SEX & MARITAL THERAPY. https://doi.org/10.1080/0092623X.2020.1869126.

Frigerio, A. et al. (2021). *Structural, Functional, and Metabolic Brain Differences as a Function of Gender Identity or Sexual Orientation: A Systematic Review of the Human Neuroimaging Literature.* ARCHIVES OF SEXUAL BEHAVIOR 50:3329-3352.

Getahun, D., Nash, R., Flanders, W. D., Baird, T. C., Becerra-Culqui, T. A., Cromwell, L., Hunkeler, E., Lash, T. L., Millman, A., Quinn, V. P., Robinson, B., Roblin, D., Silverberg, M. J., Safer, J., Slovis, J., Tangpricha, V., & Goodman, M. (2018). *Cross-sex Hormones and Acute Cardiovascular Events in Transgender Persons: A Cohort Study*. ANNALS OF INTERNAL MEDICINE, *169*(4), 205.

Gender Identity Development Service of the NHS (2019). *Referrals to the Gender Identity Development Service (GIDS) Level Off in 2018-19*. https://tavistockandportman.nhg.uk/about-us/news/stories/referrals-gender-identity-development-service-gids-level-2018-19.

Ghorayshi, A. (2022, January 13). *Doctors Debate Whether Trans Teens Need Therapy Before Hormones*. THE NEW YORK TIMES. Accessed February 1, 2022. https://www.nytimes.com/2022/01/13/health/transgender-teens-hormones.html.

Griffin, L., Clyde, K., Byng, R., & Bewley, S. (2021). *Sex, Gender and Gender Identity: A Re-evaluation of the Evidence*. BJPSYCH BULLETIN, 45(5), 291-299.

Guss, C. et al. (2015). *Transgender and Gender Nonconforming Adolescent Care: Psychosocial and Medical Considerations*. CURRENT OPINIONS IN PEDIATRICS 26(4) 421.

Hall, R., Mitchell, L., & Sachdeva, J. (2021). *Access to care and frequency of detransition among a cohort discharged by a UK national adult gender identity clinic: Retrospective case-note review*. BJPSYCH OPEN, *7*(6), e184.

Haupt, C. et al. (2020). *Antiandrogen or Estradiol Treatment or Both During Hormone Therapy in Transitioning Transgender Women (Review)*. COCHRANE DATABASE OF SYSTEMATIC REVIEWS 11. DOI: 10.1002/14651858.CD013138.pub2.

Hembree, W. C., Cohen-Kettenis, P. T., Gooren, L., Hannema, S. E., Meyer, W. J., Murad, M. H., Rosenthal, S. M., Safer, J. D., Tangpricha, V., & T'Sjoen, G. G. (2017). *Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society* Clinical Practice Guideline*. THE JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM *102*(11), 3869–3903.

Hruz, P. (2020). *Deficiencies in Scientific Evidence for Medical Management of Gender Dysphoria*. THE LINACRE QUARTERLY 87(1):34-42.

Johns, M. M., Lowry, R., Andrzejewski, J., Barrios, L. C., Demissie, Z., McManus, T., Rasberry, C. N., Robin, L., & Underwood, J. M. (2019). *Transgender Identity and Experiences of Violence Victimization, Substance Use, Suicide Risk, and Sexual Risk*

Behaviors Among High School Students—19 States and Large Urban School Districts, 2017. MORBIDITY AND MORTALITY WEEKLY REPORT *68*(3) 67–71.

Joseph, T., Ting, J., & Butler, G. (2019). *The effect of GnRH analogue treatment on bone mineral density in young adolescents with gender dysphoria: findings from a large national cohort.* JOURNAL OF PEDIATRIC ENDOCRINOLOGY METABOLISM 32(10):1077-1081.

Kaltiala-Heino, R., Bergman, H., Työläjärvi, M., & Frisen, L. (2018). *Gender dysphoria in adolescence: Current perspectives.* ADOLESCENT HEALTH, MEDICINE AND THERAPEUTICS *9* (31–41).

Kaltiala-Heino, R., Sumia, M., Työläjärvi, M., & Lindberg, N. (2015). *Two years of gender identity service for minors: Overrepresentation of natal girls with severe problems in adolescent development*. CHILD AND ADOLESCENT PSYCHIATRY AND MENTAL HEALTH, 9(1), 9.

Kendler K. S. (2019). *From Many to One to Many-the Search for Causes of Psychiatric Illness*. *JAMA PSYCHIATRY*, *76*(10) 1085–1091.

Kidd, K. M., Sequeira, G. M., Douglas, C., Paglisotti, T., Inwards-Breland, D. J., Miller, E., & Coulter, R. W. S. (2021). *Prevalence of Gender-Diverse Youth in an Urban School District*. PEDIATRICS, *147*(6) e2020049823.

Klink, D. et al. (2015). *Bone mass in young adulthood following gonadotropin-releasing hormone analog treatment and cross-sex hormone treatment in adolescents with gender dysphoria.* JOURNAL OF CLINICAL ENDOCRINOLOGY METABOLIAM 100(2):E270-5.

Kozlowska, K., Chudleigh, C., McClure, G., Maguire, A. M., & Ambler, G. R. (2021). *Attachment Patterns in Children and Adolescents with Gender Dysphoria*. FRONTIERS IN PSYCHOLOGY 11. https://doi.org/10.3389/fpsyg.2020.582688.

Laidlaw, M. K., Van Meter, Q. L., Hruz, P. W., Van Mol, A., & Malone, W. J. (2019). *Letter to the Editor: "Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline".* THE JOURNAL OF CLINICAL ENDOCRINOLOGY AND METABOLISM. 104(3), 686–687.

Landén, M. (2020). *The Effect of Gender-Affirming Treatment on Psychiatric Morbidity Is Still Undecided*. AMERICAN JOURNAL OF PSYCHIATRY. 177(8):767-768.

Levine, S. (2013). *Barriers to Loving: A Clinician's Perspective.* (Routledge, New York 2013).

Levine, S. (2016). *Reflections on the Legal Battles Over Prisoners with Gender Dysphoria*. JOURNAL OF THE AMERICAN ACADEMY OF PSYCHIATRY LAW 44, 236.

Levine, S. (2017). *Ethical Concerns About Emerging Treatment Paradigms for Gender Dysphoria*. JOURNAL OF SEX & MARITAL THERAPY at 7. DOI: 10.1080/0092623X.2017.1309482.

Levine, S. (2019). *Informed Consent for Transgender Patients,* JOURNAL OF SEX & MARITAL THERAPY 45(3):218-229.

Levine, S. (2021). *Reflections on the Clinician's Role with Individuals Who Self-identify as Transgender*. ARCHIVES OF SEXUAL BEHAVIOR. https://doi.org/10.1007/s10508-021-02142-1

Lichtenstein M, Stein L, Connolly E, Goldstein ZG, Martinson T, Tiersten L, Shin SJ, Pang JH, Safer JD (2020). *The Mount Sinai patient-centered preoperative criteria meant to optimize outcomes are less of a barrier to care than WPATH SOC 7 criteria before transgender-specific surgery*. TRANSGENDER HEALTH 5:3, 166–172.

Littman, L. (2018). *Parent reports of adolescents and young adults perceived to show signs of a rapid onset of gender dysphoria*. PLoS ONE 13(8): e0202330.

Littman, L. (2021). *Individuals Treated for Gender Dysphoria with Medical and/or Surgical Transition Who Subsequently Detransitioned: A Survey of 100 Detransitioners*. ARCHIVES OF SEXUAL BEHAVIOR. https://doi.org/10.1007/s10508-021-02163-w

Malone, W., Hruz, P., Mason, J., Beck, S., (2021). *Letter to the Editor from William J. Malone et al: "Proper Care of Transgender and Gender-diverse Persons in the Setting of Proposed Discrimination: A Policy Perspective"*. THE JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM Volume 106, Issue 8, August 2021, Pages e3287–e3288.

Marchiano, L. (2021). *Gender detransition: a case study*. JOURNAL OF ANALYTICAL PSYCHOLOGY. 66:813– 832.

Meyer-Bahlburg H. F. (2005). *Gender identity outcome in female-raised 46,XY persons with penile agenesis, cloacal exstrophy of the bladder, or penile ablation.* ARCHIVES OF SEXUAL BEHAVIOR, 34(4), 423–438.

National Institute for Health and Care Excellence (2021a). *Evidence review: Gonadotrophin releasing hormone analogues for children and adolescents with gender dysphoria.* https://arms.nice.org.uk/resources/hub/1070905/attachment

National Institute for Health and Care Excellence. (2021b). *Evidence review: Gender-affirming hormones for children and adolescents with gender dysphoria.* https://arms.nice.org.uk/resources/hub/1070871/attachment

National Institutes of Health. *NIH Policy and Guidelines on The Inclusion of Women and Minorities as Subjects in Clinical Research.* Notice Number NOT-OD-02-001 released 10-09-2001. https://grants.nih.gov/policy/inclusion/women-and-minorities/guidelines.htm

National Institutes of Health. *Consideration of Sex as a Biological Variable in NIH-Funded Research.* Notice Number NOT-OD-15-102 released 06-09-2015. https://grants.nih.gov/grants/guide/notice-files/NOT-OD-15-102.html

National Institutes of Health, Office of Research on Women's Health. *How Sex and Gender Influence Health and Disease*. Downloaded 2-11-2022 https://orwh.od.nih.gov/sites/orwh/files/docs/SexGenderInfographic_11x17_508.pdf.

Newcomb, M. et al. (2020). *High Burden of Mental Health Problems, Substance Use, Violence, and Related Psychosocial Factors in Transgender, Non-Binary, and Gender Diverse Youth and Young Adults*. ARCHIVES OF SEXUAL BEHAVIOR 49(2) 645-659.

Reiner, W. G., & Gearhart, J. P. (2004). *Discordant sexual identity in some genetic males with cloacal exstrophy assigned to female sex at birth.* THE NEW ENGLAND JOURNAL OF MEDICINE 350(4), 333–341.

Reisner, S. et al. (2015), *Mental Health of Transgender Youth in Care at an Adolescent Urban Community Health Center: A Matched Retrospective Cohort Study*, JOURNAL OF ADOLESCENT HEALTH 56(3) at 6.

Rider, G. et al. (2018), *Health and Care Utilization of Transgender/Gender Non-Conforming Youth: A Population Based Study*. PEDIATRICS at 4, DOI: 10.1542/peds.2017-1683.

Ristori, J., & Steensma, T. D. (2016). *Gender dysphoria in childhood.* INTERNATIONAL REVIEW OF PSYCHIATRY, 28(1), 13–20.

Royal Australian and New Zealand College of Psychiatrists. (2021) *Statement: Recognising and addressing the mental health needs of people experiencing Gender Dysphoria / Gender Incongruence.* https://www.ranzcp.org/news-policy/policy-and-advocacy/position-statements/gender-dysphoria

Saraswat, A. et al. (2015). *Evidence Supporting the Biologic Nature of Gender Identity*. ENDOCRINE PRACTICE 21(2) 199.

Schneider, M. et al. (2017). *Brain Maturation, Cognition and Voice Pattern in a Gender Dysphoria Case Under Pubertal Suppression.* FRONTIERS IN HUMAN NEUROSCIENCE 11:528.

Shumer, D. & Tishelman, A. (2015). *The Role of Assent in the Treatment of Transgender Adolescents*, INTERNATIONAL JOURNAL OF TRANSGENDERISM at 1. DOI: 10.1080/15532739.2015.1075929.

Shumer, D. et al. (2016), *Evaluation of Asperger Syndrome in Youth Presenting to a Gender Dysphoria Clinic*, LGBT HEALTH 3(5) 387.

Shumer, D. et al. (2017), *Overrepresentation of Adopted Adolescents at a Hospital-Based Gender Dysphoria Clinic*, TRANSGENDER HEALTH Vol. 2(1) 76.

Simonsen, R.K. et al. (2016), *Long-Term Follow-Up of Individuals Undergoing Sex Reassignment Surgery: Psychiatric Morbidity & Mortality*, NORDIC JOURNAL OF PSYCHIATRY 70(4).

Singh, D., Bradley, S. J., & Zucker, K. J. (2021). *A Follow-Up Study of Boys with Gender Identity Disorder*. FRONTIERS IN PSYCHIATRY, *12*. https://doi.org/10.3389/fpsyt.2021.632784

Steensma, T. D., McGuire, J. K., Kreukels, B. P. C., Beekman, A. J., & Cohen-Kettenis, P. T. (2013). *Factors Associated with Desistence and Persistence of Childhood Gender Dysphoria: A Quantitative Follow-Up Study*. JOURNAL OF THE AMERICAN ACADEMY OF CHILD & ADOLESCENT PSYCHIATRY, 52(6), 582–590.

Thoma, B. et al. (2021). *Disparities in Childhood Abuse Between Transgender and Cisgender Adolescents*. PEDIATRICS 148(2).

Tishelman, A. C., Kaufman, R., Edwards-Leeper, L., Mandel, F. H., Shumer, D. E., & Spack, N. P. (2015). *Serving Transgender Youth: Challenges, Dilemmas and Clinical Examples.* PROFESSIONAL PSYCHOLOGY, RESEARCH AND PRACTICE 46(1), 37–45.

Toomey R. B., Syvertsen A. K., Shramko M. (2018). *Transgender Adolescent Suicide Behavior*. PEDIATRICS.142(4):e20174218.

Turban, J. L., King, D., Carswell, J. M., & Keuroghlian, A. S. (2020). *Pubertal Suppression for Transgender Youth and Risk of Suicidal Ideation*. PEDIATRICS *145*(2), e20191725..

Vandenbussche, E. (2021). *Detransition-Related Needs and Support: A Cross-Sectional Online Survey*. JOURNAL OF HOMOSEXUALITY 20. https://doi.org/10.1080/00918369.2021.1919479.

van der Miesen, A. I. R., Cohen-Kettenis, P. T., & de Vries, A. L. C. (2018). *Is There a Link Between Gender Dysphoria and Autism Spectrum Disorder?* JOURNAL OF THE AMERICAN ACADEMY OF CHILD & ADOLESCENT PSYCHIATRY *57*(11), 884–885.

van der Miesen, A. I. R. et al. (2020). *Psychological Functioning in Transgender Adolescents Before and After Gender-Affirmative Care Compared With Cisgender General Population Peers*. JOURNAL OF ADOLESCENT HEALTH, Volume 66, Issue 6, 699-704.

Vlot, M. et al. (2016). *Effect of pubertal suppression and cross-sex hormone therapy on bone turnover markers and bone mineral apparent density (BMAD) in transgender adolescents*. BONE 95:11-19.

Wiepjes, C. M., Nota, N. M., de Blok, C. J. M., Klaver, M., de Vries, A. L. C., Wensing-Kruger, S. A., de Jongh, R. T., Bouman, M.-B., Steensma, T. D., Cohen-Kettenis, P., Gooren, L. J. G., Kreukels, B. P. C., & den Heijer, M. (2018). *The Amsterdam Cohort of Gender Dysphoria Study (1972–2015): Trends in Prevalence, Treatment, and Regrets*. THE JOURNAL OF SEXUAL MEDICINE, *15*(4), 582–590.

Wiepjes, C. M., den Heijer, M., Bremmer, M. A., Nota, N. M., Blok, C. J. M., Coumou, B. J. G., & Steensma, T. D. (2020). *Trends in suicide death risk in transgender people: Results from the Amsterdam Cohort of Gender Dysphoria study (1972–2017)*. ACTA PSYCHIATRICA SCANDINAVICA *141*(6) 486–491.

World Health Organization. Gender and Health. https://www.who.int/health-topics/gender#tab=tab_1. Downloaded 2-11-2022.

World Health Organization (2019). *International statistical classification of diseases and related health problems (11th ed.)*. https://icd.who.int/.

WPATH *De-Psychopathologisation Statement* (May 26, 2010), available at wpath.org/policies (last accessed January 21, 2020).

Zucker, K. (2018). *The myth of persistence: Response to "A critical commentary on follow-up studies and 'desistance' theories about transgender and gender non-conforming children" by Temple Newhook et al.* (2018). INTERNATIONAL JOURNAL OF TRANSGENDERISM *19*(2) 231–245.

Zucker, K. (2019). *Adolescents with Gender Dysphoria: Reflections on Some Contemporary Clinical and Research Issues*. ARCHIVES OF SEXUAL BEHAVIOR 48(7) 1983–1992.

Zucker, K. (2020). *Different strokes for different folks*. CHILD ADOLESC MENT HEALTH 25(1): 36–37. https://doi: 10.1111/camh.12330.

LEVINE EXPERT REPORT

EXHIBIT A

Stephen B. Levine, M.D.

Curriculum Vita
February, 2022

Brief Introduction

Dr. Levine is Clinical Professor of Psychiatry at Case Western Reserve University School of Medicine. He is the author or coauthor of numerous books on topics relating to human sexuality and related relationship and mental health issues. Dr. Levine has been teaching, providing clinical care, and writing since 1973, and has generated original research, invited papers, commentaries, chapters, and book reviews. He has served as a journal manuscript and book prospectus reviewer for many years. Dr. Levine has been co-director of the Center for Marital and Sexual Health/ Levine, Risen & Associates, Inc. in Beachwood, Ohio from 1992 to the present. He received a lifetime achievement Masters and Johnson's Award from the Society for Sex Therapy and Research in March 2005.

Personal Information

Date of birth 1/14/42

Medical license no. Ohio 35-03-0234-L

Board Certification 6/76 American Board of Neurology and Psychiatry

Education

1963 BA Washington and Jefferson College

1967 MD Case Western Reserve University School of Medicine

1967-68 internship in Internal Medicine University Hospitals of Cleveland

1968-70 Research associate, National Institute of Arthritis and Metabolic Diseases, Epidemiology Field Studies Unit, Phoenix, Arizona, United States Public Health Service

1970-73 Psychiatric Residency, University Hospitals of Cleveland

1974-77 Robert Wood Johnson Foundation Clinical Scholar

Appointments at Case Western Reserve University School of Medicine

1973- Assistant Professor of Psychiatry

1979- Associate Professor

1982- Awarded tenure

1985- Full Professor

1993- Clinical Professor

Honors

Summa Cum Laude, Washington & Jefferson

Teaching Excellence Award-1990 and 2010 (Residency program)

Visiting Professorships

- Stanford University-Pfizer Professorship program (3 days)–1995
- St. Elizabeth's Hospital, Washington, DC –1998
- St. Elizabeth's Hospital, Washington, DC--2002

Named to America's Top Doctors consecutively since 2001

Invitations to present various Grand Rounds at Departments of Psychiatry and Continuing Education Lectures and Workshops

Masters and Johnson Lifetime Achievement Award from the Society of Sex Therapy and Research, April 2005 along with Candace Risen and Stanley Althof

2006 SSTAR Book Award for The Handbook of Clinical Sexuality for Mental Health Professionals: Exceptional Merit

2018—Albert Marquis Lifetime Achievement Award from Marquis Who's Who. (Exceling in one's field for at least twenty years)

Professional Societies

1971- American Psychiatric Association; fellow; #19909

2005- American Psychiatric Association, Distinguished Life Fellow

1973- Cleveland Psychiatric Society

1973- Cleveland Medical Library Association

- 1985 - Life Fellow
- 2003 - Distinguished Life Fellow

1974-Society for Sex Therapy and Research

- 1987-89-President

1983- International Academy of Sex Research

1983- Harry Benjamin International Gender Dysphoria Association

- 1997-8 Chairman, Standards of Care Committee

1994- 1999 Society for Scientific Study of Sex

Community Boards

1999-2002 Case Western Reserve University Medical Alumni Association

1996-2001 Bellefaire Jewish Children's Bureau

1999-2001 Physicians' Advisory Committee, The Gathering Place (cancer rehabilitation)

Editorial Boards

1978-80 Book Review Editor Journal Sex and Marital Therapy

Manuscript Reviewer for:

a. Archives of Sexual Behavior
b. Annals of Internal Medicine
c. British Journal of Obstetrics and Gynecology
d. JAMA
e. Diabetes Care
f. American Journal of Psychiatry
g. Maturitas
h. Psychosomatic Medicine
i. Sexuality and Disability
j. Journal of Nervous and Mental Diseases
k. Journal of Neuropsychiatry and Clinical Neurosciences
l. Neurology
m. Journal Sex and Marital Therapy
n. Journal Sex Education and Therapy
o. Social Behavior and Personality: an international journal (New Zealand)
p. International Journal of Psychoanalysis
q. International Journal of Transgenderism
r. Journal of Urology
s. Journal of Sexual Medicine
t. Current Psychiatry
u. International Journal of Impotence Research
v. Postgraduate medical journal
w. Academic Psychiatry

Prospectus Reviewer

a. Guilford

b. Oxford University Press

c. Brunner/Routledge

d. Routledge

Administrative Responsibilities

Principal Investigator of approximately 70 separate studies involving pharmacological interventions for sexual dysfunction since 1989.

Co-leader of case conferences at DELRLLC.com

Expert testimony at trial or by deposition within the last 4 years

Provided expert testimony for Massachusetts Dept. of Corrections in its defense of a lawsuit brought by prisoner Katheena Soneeya, including by deposition in October 2018, and in-court testimony in 2019.

Provided expert testimony by deposition and at trial in *In the Interests of the Younger Children* (Dallas, TX), 2019.

Testified in an administrative hearing in *In the matter of Rhys & Lynn Crawford* (Washington State), March 2021.

Testified multiple times in juvenile court in *In the matter of Asha Kerwin* (Tucson, Arizona), 2021.

Provided expert testimony by deposition in *Kadel et al v. Folwell et al.* (North Carolina), 2021.

Consultancies

Massachusetts Department of Corrections—evaluation of 12 transsexual prisoners and the development of a Gender Identity Disorders Program for the state prison system. Monthly consultation with the GID treatment team since February 2009 and the GID policy committee since February 2010.

California Department of Corrections and Rehabilitation; 2012-2015; education, inmate evaluation, commentary on inmate circumstances, suggestions on future policies.

Virginia Department of Corrections –evaluation of an inmate.

New Jersey Department of Corrections—evaluation of an inmate.

Idaho Department of Corrections—workshop 2016.

Grant Support/Research Studies

TAP–studies of Apomorphine sublingual in treatment of erectile dysfunction.

Pfizer–Sertraline for premature ejaculation.

Pfizer–Viagra and depression; Viagra and female sexual dysfunction; Viagra as a treatment for SSRI-induced erectile dysfunction.

NIH- Systemic lupus erythematosis and sexuality in women.

Sihler Mental Health Foundation

a. Program for Professionals
b. Setting up of Center for Marital and Sexual Health
c. Clomipramine and Premature ejaculation
d. Follow-up study of clergy accused of sexual impropriety
e. Establishment of services for women with breast cancer

Alza–controlled study of a novel SSRI for rapid ejaculation.

Pfizer–Viagra and self-esteem.

Pfizer- double-blind placebo control studies of a compound for premature ejaculation.

Johnson & Johnson – controlled studies of Dapoxetine for rapid ejaculation.

Proctor and Gamble: multiple studies to test testosterone patch for post menopausal sexual dysfunction for women on and off estrogen replacement.

Lilly-Icos—study of Cialis for erectile dysfunction.

VIVUS – study for premenopausal women with FSAD.

Palatin Technologies- studies of bremelanotide in female sexual dysfunction—first intranasal then subcutaneous administration.

Medtap – interview validation questionnaire studies.

HRA- quantitative debriefing study for Female partners os men with premature ejaculation, Validation of a New Distress Measure for FSD.

Boehringer-Ingelheim- double blind and open label studies of a prosexual agent for hypoactive female sexual desire disorder.

Biosante- studies of testosterone gel administration for post menopausal women with HSDD.

J&J a single-blind, multi-center, in home use study to evaluate sexual enhancement effects of a product in females.

UBC-Content validity study of an electronic FSEP-R and FSDS-DAO and usability of study PRO measures in premenopausal women with FSAD, HSDD or Mixed FSAD/HSDD.

National registry trial for women with HSDD.

Endoceutics—two studies of DHEA for vaginal atrophy and dryness in post menopausal women.

Palatin—study of SQ Bremelanotide for HSDD and FSAD.

Trimel- a double-blind, placebo controlled study for women with acquired female orgasmic disorder.

S1 Biopharma- a phase 1-B non-blinded study of safety, tolerability and efficacy of Lorexys in premenopausal women with HSDD.

HRA – qualitative and cognitive interview study for men experiencing PE.

Publications

A) Books

1) Pariser SR, Levine SB, McDowell M (eds.), Clinical Sexuality, Marcel Dekker, New York, 1985

2) Sex Is Not Simple, Ohio Psychological Publishing Company, 1988; Reissued in paperback as: Solving Common Sexual Problems: Toward a Problem Free Sexual Life, Jason Aronson, Livingston, NJ. 1997

3) Sexual Life: A Clinician's Guide. Plenum Publishing Corporation. New York, 1992

4) Sexuality in Midlife. Plenum Publishing Corporation. New York, 1998

5) Editor, Clinical Sexuality. Psychiatric Clinics of North America, March, 1995.

6) Editor, (Candace Risen and Stanley Althof, associate editors) Handbook of Clinical Sexuality for Mental Health Professionals. Routledge, New York, 2003

1. 2006 SSTAR Book Award: Exceptional Merit

7) Demystifying Love: Plain Talk For The Mental Health Professional. Routledge, New York, 2006

8) Senior editor, (Candace B. Risen and Stanley E. Althof, Associate editors), Handbook of Clinical Sexuality for Mental Health Professionals, 2nd edition. Routledge, New York, 2010.

9) Barriers to Loving: A Clinician's Perspective. Routledge, New York, 2014.

10) Senior editor Candace B. Risen and Stanley E. Althof, Associate editors), Handbook of Clinical Sexuality for Mental Health Professionals. 3rd edition Routledge, New York, 2016

B) Research and Invited Papers

When his name is not listed in a citation, Dr. Levine is either the solo or the senior author.

1) Sampliner R. Parotid enlargement in Pima Indians. Annals of Internal Medicine 1970; 73:571-73

2) Confrontation and residency activism: A technique for assisting residency change: World Journal of Psychosynthesis 1974; 6: 23-26

3) Activism and confrontation: A technique to spur reform. Resident and Intern Consultant 173; 2

4) Medicine and Sexuality. Case Western Reserve Medical Alumni Bulletin 1974:37:9-11.

5) Some thoughts on the pathogenesis of premature ejaculation. J. Sex & Marital Therapy 1975; 1:326-334

6) Marital Sexual Dysfunction: Introductory Concepts. Annals of Internal Medicine 1976;84:448-453

7) Marital Sexual Dysfunction: Ejaculation Disturbances 1976; 84:575-579

8) Yost MA: Frequency of female sexual dysfunction in a gynecology clinic: An epidemiological approach. Archives of Sexual Behavior 1976;5:229-238

9) Engel IM, Resnick PJ, Levine SB: Use of programmed patients and videotape in teaching medical students to take a sexual history. Journal of Medical Education 1976;51:425-427

10) Marital Sexual Dysfunction: Erectile dysfunction. Annals of Internal Medicine 1976;85:342-350

11) Male Sexual Problems. Resident and Staff Physician 1981:2:90-5

12) Female Sexual Problems. Resident and Staff Physician 1981:3:79-92

13) How can I determine whether a recent depression in a 40 year old married man is due to organic loss of erectile function or whether the depression is the source of the dysfunction? Sexual Medicine Today 1977;1:13

14) Corradi RB, Resnick PJ Levine SB, Gold F. For chronic psychologic impotence: sex therapy or psychotherapy? I & II Roche Reports; 1977

15) Marital Sexual Dysfunction: Female dysfunctions 1977; 86:588-597

16) Current problems in the diagnosis and treatment of psychogenic impotence. Journal of Sex & Marital Therapy 1977;3:177-186

17) Resnick PJ, Engel IM. Sexuality curriculum for gynecology residents. Journal of Medical Education 1978; 53:510-15

18) Agle DP. Effectiveness of sex therapy for chronic secondary psychological impotence Journal of Sex & Marital Therapy 1978;4:235-258

19) DePalma RG, Levine SB, Feldman S. Preservation of erectile function after aortoiliac reconstruction. Archives of Surgery 1978;113-958-962

20) Conceptual suggestions for outcome research in sex therapy Journal of Sex & Marital Therapy 1981;6:102-108

21) Lothstein LM. Transsexualism or the gender dysphoria syndrome. Journal of Sex & Marital Therapy 1982; 7:85-113

22) Lothstein LM, Levine SB. Expressive psychotherapy with gender dysphoria patients Archives General Psychiatry 1981; 38:924-929

23) Stern RG Sexual function in cystic fibrosis. Chest 1982; 81:422-8

24) Shumaker R. Increasingly Ruth: Towards understanding sex reassignment surgery Archives of Sexual Behavior 1983;12:247-61

25) Psychiatric diagnosis of patients requesting sex reassignment surgery. Journal of Sex & Marital Therapy 1980; 6:164-173

26) Problem solving in sexual medicine I. British Journal of Sexual Medicine 1982;9:21-28

27) A modern perspective on nymphomania. Journal of Sex & Marital Therapy 1982;8:316-324

28) Nymphomania. Female Patient 1982;7:47-54

29) Commentary on Beverly Mead's article: When your patient fears impotence. Patient Care 1982;16:135-9

30) Relation of sexual problems to sexual enlightenment. Physician and Patient 1983 2:62

31) Clinical overview of impotence. Physician and Patient 1983; 8:52-55.

32) An analytical approach to problem-solving in sexual medicine: a clinical introduction to the psychological sexual dysfunctions. II. British Journal of Sexual Medicine

33) Coffman CB, Levine SB, Althof SE, Stern RG Sexual Adaptation among single young adults with cystic fibrosis. Chest 1984;86:412-418

34) Althof SE, Coffman CB, Levine SB. The effects of coronary bypass in female sexual, psychological, and vocational adaptation. Journal of Sex & Marital Therapy 1984;10:176-184

35) Letter to the editor: Follow-up on Increasingly Ruth. Archives of Sexual Behavior 1984;13:287-9

36) Essay on the nature of sexual desire Journal of Sex & Marital Therapy 1984; 10:83-96

37) Introduction to the sexual consequences of hemophilia. Scandanavian Journal of Haemology 1984; 33:(supplement 40).75-

38) Agle DP, Heine P. Hemophila and Acquired Immune Deficiency Syndrome: Intimacy and Sexual Behavior. National Hemophilia Foundation; July, 1985

39) Turner LA, Althof SE, Levine SB, Bodner DR, Kursh ED, Resnick MI.

External vacuum devices in the treatment of erectile dysfunction: a one-year study of sexual and psychosocial impact. Journal of Sex & Marital Therapy

40) Schein M, Zyzanski SJ, Levine SB, Medalie JH, Dickman RL, Alemagno SA. The frequency of sexual problems among family practice patients. Family Practice Research Journal 1988; 7:122-134

41) More on the nature of sexual desire. Journal of Sex & Marital Therapy 1987;13:35-44

42) Waltz G, Risen CB, Levine SB. Antiandrogen treatment of male sex offenders. Health Matrix 1987; V.51-55.

43) Lets talk about sex. National Hemophilia Foundation January, 1988

44) Sexuality, Intimacy, and Hemophilia: questions and answers . National Hemophilia Foundation January, 1988

45) Prevalence of sexual problems. Journal Clinical Practice in Sexuality 1988;4:14-16.

46) Kursh E, Bodner D, Resnick MI, Althof SE, Turner L, Risen CB, Levine SB. Injection Therapy for Impotence. Urologic Clinics of North America 1988; 15(4):625-630

47) Bradley SJ, Blanchard R, Coates S, Green R, Levine S, Meyer-Bahlburg H, Pauly I, Zucker KJ. Interim report of the DSM-IV Subcommittee for Gender Identity Disorders. Archives of Sexual Behavior 1991;;20(4):333-43.

48) Sexual passion in mid-life. Journal of Clinical Practice in Sexuality 1991 6(8):13-19

49) Althof SE, Turner LA, Levine SB, Risen CB, Bodner DR, Resnick MI. Intracavernosal injections in the treatment of impotence: A prospective study of sexual, psychological, and marital functioning. Journal of Sex & Marital Therapy 1987**;** 13:155-167

50) Althof SE, Turner LA, Risen CB, Bodner DR, Kursh ED, Resnick MI. Side effects of self-administration of intracavernosal injection of papaverine and phentolamine for treatment of impotence. Journal of Urology 1989;141:54-7

51) Turner LA, Froman SL, Althof SE, Levine SB, Tobias TR, Kursh ED, Bodner DR. Intracavernous injection in the management of diabetic impotence. Journal of Sexual Education and Therapy 16(2):126-36, 1989

52) Is it time for sexual mental health centers? Journal of Sex & Marital Therapy 1989

53) Althof SE, Turner LA, Levine SB, Risen CB, Bodner D, Kursh ED, Resnick MI. Sexual, psychological, and marital impact of self injection of papaverine and phentolamine: a long-term prospective study. Journal of Sex & Marital Therapy

54) Althof SE, Turner LA, Levine SB, Risen CB, Bodner D, Kursh ED, Resnick MI. Why do so many men drop out of intracavernosal treatment? Journal of Sex & Marital Therapy. 1989;15:121-9

55) Turner LA, Althof SE, Levine SB, Risen CB, Bodner D, Kursh ED, Resnick MI. Self injection of papaverine and phentolamine in the treatment of psychogenic impotence. Journal of Sex & Marital Therapy. 1989; 15(3):163-78

56) Turner LA, Althof SE, Levine SB, Risen CB, Bodner D, Kursh ED, Resnick MI. Treating erectile dysfunction with external vacuum devices: impact upon sexual, psychological, and marital functioning. Journal of Urology 1990;141(1):79-82

57) Risen CB, Althof SE. An essay on the diagnosis and nature of paraphilia Journal of Sex & Marital Therapy 1990; 16(2):89-102.

58) Althof SE, Turner LA, Levine SB, Risen CB, Bodner DB, Kursh ED, Resnick MI. Through the eyes of women: the sexual and psychological responses of women to their partners' treatment with self-injection or vacuum constriction therapy. International Journal of Impotence Research (supplement 2)1990;346-7.

59) Althof SE, Turner LA, Levine SB, Risen CB, Bodner DB, Kursh ED, Resnick MI. A comparison of the effectiveness of two treatments for erectile dysfunction: self injection vs. external vacuum devices. . International Journal of Impotence Research (supplement 2)1990;289-90

60) Kursh E, Turner L, Bodner D, Althof S, Levine S. A prospective study on the use of the vacuum pump for the treatment of impotence.International Journal of Impotence Research (supplement 2)1990;340-1.

61) Althof SE, Turner LA, Levine SB, Risen CB, Bodner DB, Kursh ED, Resnick MI. Long term use of intracavernous therapy in the treatment of erectile dysfunction in Journal of Sex & Marital Therapy 1991; 17(2):101-112

62) Althof SE, Turner LA, Levine SB, Risen CB, Bodner DB, Kursh ED, Resnick MI. Long term use of vacuum pump devices in the treatment of erectile dsyfunction in Journal of Sex & Marital Therapy 1991;17(2):81-93

63) Turner LA, Althof SE, Levine SB, Bodner DB, Kursh ED, Resnick MI. A 12-month comparison of the effectiveness of two treatments for erectile dysfunction: self injection vs. external vacuum devices. Urology 1992;39(2):139-44

64) Althof SE, The pathogenesis of psychogenic impotence. J. Sex Education and Therapy. 1991; 17(4):251-66

65) Mehta P, Bedell WH, Cumming W, Bussing R, Warner R, Levine SB. Letter to the editor. Reflections on hemophilia camp. Clinical Pediatrics 1991; 30(4):259-260

66) Successful Sexuality. Belonging/Hemophilia. (Caremark Therapeutic

Services), Autumn, 1991

67) Psychological intimacy. Journal of Sex & Marital Therapy 1991; 17(4):259-68

68) Male sexual problems and the general physician, Georgia State Medical Journal 1992; 81(5): 211-6

69) Althof SE, Turner LA, Levine SB, Bodner DB, Kursh E, Resnick MI. Through the eyes of women: The sexual and psychological responses of women to their partner's treatment with self-injection or vacuum constriction devices. Journal of Urology 1992; 147(4):1024-7

70) Curry SL, Levine SB, Jones PK, Kurit DM. Medical and Psychosocial predictors of sexual outcome among women with systemic lupus erythematosis. Arthritis Care and Research 1993; 6:23-30

71) Althof SE, Levine SB. Clinical approach to sexuality of patients with spinal cord injury. Urological Clinics of North America 1993; 20(3):527-34

72) Gender-disturbed males. Journal of Sex & Marital Therapy 19(2):131-141, 1993

73) Curry SL, Levine SB, Jones PK, Kurit DM. The impact of systemic lupus erythematosis on women's sexual functioning. Journal of Rheumatology 1994; 21(12):2254-60

74) Althof SE, Levine SB, Corty E, Risen CB, Stern EB, Kurit D. Clomipramine as a treatment for rapid ejaculation: a double-blind crossover trial of 15 couples. Journal of Clinical Psychiatry 1995;56(9):402-7

75) Risen CB, Althof SE. Professionals who sexually offend: evaluation procedures and preliminary findings. Journal of Sex & Marital Therapy 1994; 20(4):288-302

76) On Love, Journal of Sex & Marital Therapy 1995; 21(3):183-191

77) What is clinical sexuality? Psychiatric Clinics of North America 1995; 18(1):1-6

78) "Love" and the mental health professions: Towards an understanding of adult love. Journal of Sex & Marital Therapy 1996; 22(3)191-202

79) The role of Psychiatry in erectile dysfunction: a cautionary essay on the emerging treatments. Medscape Mental Health 2(8):1997 on the Internet. September, 1997.

80) Discussion of Dr. Derek Polonsky's SSTAR presentation on Countertransference. Journal of Sex Education and Therapy 1998; 22(3):13-17

81) Understanding the sexual consequences of the menopause. Women's Health in Primary Care, 1998

82) Fones CSL, Levine SB. Psychological aspects at the interface of diabetes and erectile dysfunction. Diabetes Reviews 1998; 6(1):1-8

83) Guay AT, Levine SB, Montague DK. New treatments for erectile dysfunction. Patient Care March 15, 1998

84) Extramarital Affairs. Journal of Sex & Marital Therapy 1998; 24(3):207-216

85) Levine SB (chairman), Brown G, Cohen-Kettenis P, Coleman E, Hage JJ, Petersen M, Pfäfflin F, Shaeffer L, van Masdam J, Standards of Care of the Harry Benjamin International Gender Dysphoria Association, 5th revision, 1998. International Journal of Transgenderism at http://www.symposion.com/ijt

- Reprinted by the Harry Benjamin International Gender Dysphoria Association, Minneapolis, Minnesota

86) Althof SE, Corty E, Levine SB, Levine F, Burnett A, McVary K, Stecher V, Seftel. The EDITS: the development of questionnaires for evaluating satisfaction with treatments for erectile dysfunction. Urology 1999;53:793-799

87) Fones CSL, Levine SB, Althof SE, Risen CB. The sexual struggles of 23 clergymen: a follow-up study. Journal of Sex & Marital Therapy 1999

88) The Newly Devised Standards of Care for Gender Identity Disorders. Journal of Sex Education and Therapy 24(3):1-11,1999

89) Levine, S. B. (1999). The newly revised standards of care for gender identity disorders. Journal of Sex Education & Therapy, 24, 117-127.

90) Melman A, Levine SB, Sachs B, Segraves RT, Van Driel MF. Psychological Issues in Diagnosis of Treatment (committee 11) in Erectile Dysfunction (A. Jarden, G. Wagner, S. Khoury, F. Guiliano, H. Padma-nathan, R. Rosen, eds.) Plymbridge Distributors Limited, London, 2000

91) Pallas J, Levine SB, Althof SE, Risen CB. A study using Viagra in a mental health practice. J Sex&Marital Therapy.26(1):41-50, 2000

92) Levine SB, Stagno S. Informed Consent for Case Reports: the ethical dilemma between right to privacy and pedagogical freedom. Journal of Psychotherapy: Practice and Research, 2001, 10 (3): 193-201.

93) Alloggiamento T., Zipp C., Raxwal VK, Ashley E, Dey S. Levine SB, Froelicher VF. Sex, the Heart, and Sildenafil. Current Problems in Cardiology 26 June 2001(6):381-416

94) Re-exploring The Nature of Sexual Desire. Journal of Sex and Marital Therapy 28(1):39-51, 2002.

95) Understanding Male Heterosexuality and Its Disorders in Psychiatric Times XIX(2):13-14, February, 2002

96) Erectile Dysfunction: Why drug therapy isn't always enough. (2003)

Cleveland Clinic Journal of Medicine, 70(3): 241-246.

97) The Nature of Sexual Desire: A Clinician's Perspective. Archives of Sexual Behavior 32(3):279-286, 2003 .

98) Laura Davis. What I Did For Love: Temporary Returns to the Male Gender Role. International Journal of Transgenderism, 6(4), 2002 and http://www.symposion.com/ijt

99) Risen C.B., The Crisis in the Church: Dealing with the Many Faces of Cultural Hysteria in The International Journal of Applied Psychoanalytic Studies, 1(4):364-370, 2004

100) Althof SE, Leiblum SR (chairpersons), Chevert-Measson M. Hartman U., Levine SB, McCabe M., Plaut M, Rodrigues O, Wylie K., Psychological and Interpersonal Dimensions of Sexual Function and Dysfunction in World Health Organization Conference Proceedings on Sexual Dysfunctions, Paris, 2003. Published in a book issued in 2004.

101) Commentary on Ejaculatory Restrictions as a Factor in the Treatment of Haredi (Ultra-Orthodox) Jewish Couples: How Does Therapy Work? Archives of Sexual Behavior, 33(3):June 2004

102) What is love anyway? J Sex & Marital Therapy 31(2):143-152,2005.

103) A Slightly Different Idea, Commentary on Y. M. Binik's Should Dyspareunia Be Retained as a Sexual Dysfunction in DSM-V? A Painful Classification Decision. Archives of Sexual Behavior 34(1):38-39, 2005. http://dx.doi.org/10.1007/s10508-005-7469-3

104) Commentary: Pharmacologic Treatment of Erectile Dysfunction: Not always a simple matter. BJM USA; Primary Care Medicine for the American Physician, 4(6):325-326, July 2004

105) Leading Comment: A Clinical Perspective on Infidelity. Journal of Sexual and Relationship Therapy, 20(2):143-153, May 2005.

106) Multiple authors. Efficacy and safety of sildenafil citrate (Viagra) in men with serotonergic antidepressant-associated erectile dysfunction: Results from a randomized, double-blind, placebo-controlled trial. Submitted to Journal of Clinical Psychiatry Feb 2005

107) Althof SE, Leiblum SR, Chevert-Measson M, Hartman U, Levine SB, McCabe M, Plaut M, Rodrigues O, Wylie K. Psychological and Interpersonal Dimensions of Sexual Function and Dysfunction. Journal of Sexual Medicine, 2(6): 793-800, November, 2005

108) Shifren JL, Davis SR, Moreau M, Waldbaum A, Bouchard C., DeRogatis L., Derzko C., Bearnson P., Kakos N., O'Neill S., Levine S., Wekselman K., Buch A., Rodenberg C., Kroll R. Testosterone Patch for the Treatment of Hypoactive Sexual

Desire Disorder in Naturally Menopausal Women: Results for the INTIMATE NM1 Study. Menopause: The Journal of the North American Menopause Society 13(5) 2006.

109) Reintroduction to Clinical Sexuality. Focus: A Journal of Lifelong Learning in Psychiatry Fall 2005. III (4):526-531

110) PDE-5 Inhibitors and Psychiatry in J Psychiatric Practice 12 (1): 46-49, 2006.

111) Sexual Dysfunction: What does love have to do with it? Current Psychiatry 5(7):59-68, 2006.

112) How to take a Sexual History (Without Blushing), Current Psychiatry 5(8): August, 2006.

113) Linking Depression and ED: Impact on sexual function and relationships in Sexual Function and Men's Health Through the Life Cycle under the auspices of the Consortium for Improvement of Erectile Function (CIEF),12-19, November, 2006.

114) The First Principle of Clinical Sexuality. Editorial. Journal of Sexual Medicine,4:853-854, 2007

115) Commentary on David Rowland's editorial, "Will Medical Solutions to Sexual Problems Make Sexological Care and Science Obsolete?" Journal of Sex and Marital Therapy, 33(5), 2007

116) Real-Life Test Experience: Recommendations for Revisions to the Standards of Care of the World Professional Association for Transgender Health International Journal of Transgenderism, Volume 11 Issue 3, 186-193, 2009

117) Sexual Disorders: Psychiatrists and Clinical Sexuality. Psychiatric Times XXIV (9), 42-43, August 2007

118) I am not a sex therapist! Commentary to I. Binik and M. Meana's article Sex Therapy: Is there a future in this outfit? Archives of Sexual Behavior, Volume 38, Issue 6 (2009), 1033-1034

119) Solomon A (2009) Meanings and Political Implications of "Psychopathology" in a Gender Identity Clinic: Report of 10 cases. Journal of Sex and Marital Therapy 35(1): 40-57.

120) Perelman, MA., Levine SB, Fischkoff SA. Randomized, Placebo-Controlled, Crossover Study to Evaluate the Effects of Intranasal Bremelanotide on Perceptions of Desire and Arousal in Postmenopausal Women with Sexual Arousal Disorder submitted to Journal of Sexual Medicine July 2009, rejected

121) What is Sexual Addiction? Journal of Sex and Marital Therapy.2010 May;36(3):261-75

122) David Scott (2010) Sexual Education of Psychiatric Residents. Academic Psychiatry, 34(5) 349-352.

123) Chris G. McMahon, Stanley E. Althof, Joel M. Kaufman, Jacques Buvat, Stephen B. Levine, Joseph W. Aquilina, Fisseha Tesfaye, Margaret Rothman, David A. Rivas, Hartmut Porst. Efficacy and Safety of Dapoxetine for the Treatment of Premature Ejaculation: Integrated Analysis of Results From 5 Phase 3 Trials Journal of Sexual Medicine 2011 Feb;8(2):524-39.

124) Commentary on Consideration of Diagnostic Criteria for Erectile Dysfunction in DSM V. Journal of Sexual Medicine July 2010

125) Hypoactive Sexual Desire Disorder in Men: Basic types, causes, and treatment. Psychiatric Times 27(6)4-34. 2010

126) Male Sexual Dysfunctions, an audio lecture, American Physician Institute 2013

127) Fashions in Genital Fashion: Where is the line for physicians? Commentary on David Veale and Joe Daniels' Cosmetic Clitoridectomy in a 33-year-old woman. Arch Sex Behav (2012) 41:735–736 DOI 10.1007/s10508-011-9849-7

128) Review: Problematic Sexual Excess. Neuropsychiatry 2(1):1-12, 2012

129) The Essence of Psychotherapy. Psychiatric Times 28 (2): August 2, 2012 t

130) Parran TV, Pisman, AR, Youngner SJ, Levine SB.Evolution of remedial CME course in professionalism: Addressing learner needs, developing content, and evaluating outcomes. *Journal of Continuing Education in the Health Professions,* 33(3): 174-179, 2013.

131) Love and Psychiatry. Psychiatric Times November 2013

132) Orgasmic Disorders, Sexual Pain Disorders, and Sexual Dysfunction Due to a Medical Condition. Board Review Psychiatry 2013-2014 Audio Digest CD 27. Audio recording of a one-hour lecture available October 2013.

133) Towards a Compendium of the Psychopathologies of Love. Archives of Sexual Behavior Online First December 25, 2013 DOI 10.1007/s10508-013-0242-6 43(1)213-220.

134) Flibanserin. (editorial) Archives of Sexual Behavior 44 (8), 2015 November 2015. DOI: 10.1007/s10508-015-0617-y

135) Martel C, Labrie F, Archer DF, Ke Y, Gonthier R, Simard JN, Lavoie L, Vaillancourt M, Montesino M, Balser J, Moyneur É; other participating members of the Prasterone Clinical Research Group. (2016) Serum steroid concentrations remain within normal postmenopausal values in women receiving daily 6.5mg intravaginal prasterone for 12 weeks.J Steroid Biochem Mol Biol. 2016 May;159:142-53. doi: 10.1016/j.jsbmb.2016.03.016

136) Reflections of an Expert on the Legal Battles Over Prisoners with Gender Dysphoria. J Am Acad Psychiatry Law 44:236–45, 2016

137) Cooper E, McBride J, Levine SB. Does Flibanserin have a future? Psychiatric Times accepted October 23, 2015.

138) Levine SB, Sheridan DL, Cooper EB. The Quest for a Prosexual Medication for Women, Current Sexual Health Reports (2016) 8: 129. doi:10.1007/s11930-016-0085-y

139) Why Sex Is Important: Background for Helping Patients with Their Sexual Lives., British Journal of Psychiatry Advances (2017), vol. 23(5) 300-306; DOI: 10.1192/apt.bp.116.016428

140) Commentary on "Asexuality: Orientation, paraphilia, dysfunction, or none of the above? Archives Sexual Behavior, Archives of Sexual Behavior April 2017, Volume 46, Issue 3, pp. 639–642 DOI: 10.1007/s10508-017-0947-z

141) Sexual Dysfunction in Clinical Psychiatry, Psychiatric Times, March 2017

142) Ethical Concerns About the Emerging Treatment of Gender Dysphoria, Journal of Sex and Marital Therapy, 44(1):29-44. 2017. DOI 10.1080/0092623X.2017.1309482

143) The Psychiatrist's Role in Managing Transgender Youth: Navigating Today's Politicized Terrain. CMEtoGO Audio Lecture Series, May 2017

144) Transitioning Back to Maleness, Archives of Sexual Behavior, 2017 Dec 20. doi: 10.1007/s10508-017-1136-9; 47(4), 1295-1300, May 2018

145) Informed Consent for Transgender Patients, Journal of Sex and Marital Therapy, 2018 Dec 22:1-12. doi: 10.1080/0092623X.2018.1518885.

146) Reflections On The Clinician's Role with Individuals Who Self-Identify as Transgender (2021) Archives Sexual Behavior, 50(8):3527-3536. doi: 10.1007/s10508-021-02142-1.

147) Levine SB, Abbruzzese E, Mason J. Reconsideration of Informed Consent for Trans-identified Children, Adolescents, and Young Adults. J. Sex and Marital Therapy, in press 2022.

C) Book Chapters

1) Overview of Sex Therapy. In Sholevar GP (ed) The Handbook of Marriage and Marital Therapy. New York. Spectrum Publications, 1981 pp. 417-41

2) Why study sexual functioning in diabetes? In Hamburg BA, Lipsett LF, Inoff GE, Drash A (eds) Behavioral & Psychosocial Issues in Diabetes: Proceedings of a National conference. Washington, DC. US Dept. of Health & Human Services. PHS NIH, Pub. #80-1933

3) Sexual Problems in the Diabetic in Bleicher SJ, Brodoff B (eds) Diabetes Mellitus and Obesity. Williams and Wilkins, 1992

4) Clinical Introduction to Human Sexual Dysfunction. In Pariser SF, Levine SB, McDowell M (eds) Clinical Sexuality. New York, Marcel Dekker Publisher, 1983.

5) Psychodynamically-oriented clinician's overview of psychogenic impotence. In RT Segraves (ed) Impotence. New York, Plenum, 1985

6) Origins of sexual preferences. In Shelp EE (ed) Sexuality and Medicine. D. Reidel Publishing co. 1987. pp. 39-54.

7) Hypoactive Sexual Desire and Other Problems of Sexual Desire. In H. Lief (ed). The Treatment of Psychosexual Dysfunctions/ III. American Psychiatric Press, chapter 207, pp. 2264-79, 1989

8) Psychological Sexual Dysfunction. In Sudak H (ed) Clinical Psychiatry. Warren H. Green. St. Louis, 1985

9) Male sexual dysfunction. In Sudak H (ed) Clinical Psychiatry. Warren H. Green. St. Louis, 1985

10) Sexuality and Aging. In Sudak H (ed) Clinical Psychiatry. Warren H. Green. St. Louis, 1985

11) Homosexuality. In Sudak H (ed) Clinical Psychiatry. Warren H. Green. St. Louis, 1985

12) Individual and intrapsychic factors in sexual desire. In Leiblum SR, Rosen RC (eds). Clinical Perspectives on Sexual Desire Disorders. Guilford Press, New York, 1988, pp. 21-44

13) Gender Identity Disorders. In Sadock B, Kaplan H(eds). Comprehensive Textbook of Psychiatry, Baltimore, William and Wilkins, 1989, pp. 1061-9

14) Intrapsychic and Interpersonal Aspects of Impotence: Psychogenic Erectile Dysfunction. In Leiblum SR, Rosen RC (eds). Erectile Disorders: Assessment and Treatment. Guilford Press, New York, 1992

15) Psychological Factors in Impotence. In Resnick MI, Kursh ED, (eds.) Current Therapy in Genitourinary Surgery, 2nd edition. BC Decker, 1991, pp. 549-51

16) The Vagaries of Sexual Desire. In Leiblum SR, Rosen RC (eds). In Case Studies in Sex Therapy. Guilford Press, New York, 1995

17) Rosenblatt EA. Sexual Disorders (chapter 62). In Tasman A, Kay J, Liberman JA (eds). Psychiatry Volume II, W.B.Saunders, Philadelphia. 1997, pp. 1173-2000.

18) Althof SE. Psychological Evaluation and Sex Therapy. In Mulcahy JJ (ed)

Diagnosis and Management of Male Sexual Dysfunction Igaku-Shoin, New York, 1996, pp. 74-88

19) Althof SE, Levine SB. Psychological Aspects of Erectile Dysfunction. In Hellstrum WJG (ed) Male Infertility and Dysfunction. Springer-Verlag, New York, 1997. pp. 468-73

20) Paraphilias. In Comprehensive Textbook of Psychiatry/VII. Sadock BJ, Sadock VA (eds.) Lippincott Williams & Wilkins, Baltimore, 1999, pp. 1631-1645.

21) Women's Sexual Capacities at Mid-Life in The Menopause: Comprehensive Management B. Eskind (ed). Parthenon Publishing, Carnforth, UK, 2000.

22) Male Heterosexuality in Masculinity and Sexuality:Selected Topics in the Psychology of Men, (Richard C. Friedman and Jennifer I. Downey, eds) Annual Review of Psychiatry, American Psychiatric Press, Washington, DC, W-18. pp. 29-54.

23) R.T.Segraves. Introduction to section on Sexuality: Treatment of Psychiatric Disorders-III (G.O.Gabbard, ed), American Psychiatric Press, Washington, DC, 2001

24) Sexual Disorders (2003) in Tasman A, Kay J, Liberman JA (eds). Psychiatry 2nd edition, Volume II, W.B.Saunders, Philadelphia. Chapter 74

25) What Patients Mean by Love, Psychological Intimacy, and Sexual Desire (2003) in SB Levine, CB Risen, SE Althof (eds) Handbook of Clinical Sexuality for Mental Health Professionals, Brunner-Routledge, New York, pp. .21-36.

26) Infidelity (2003) in SB Levine, CB Risen, SE Althof (eds) Handbook of Clinical Sexuality for Mental Health Professionals, Brunner-Routledge, New York, pp. 57-74

27) Preface (2003) in SB Levine, CB Risen, SE Althof (eds) Handbook of Clinical Sexuality for Mental Health Professionals, Brunner-Routledge, New York, pp. xiii-xviii

28) A Psychiatric Perspective on Psychogenic Erectile Dysfunction (2004) in T.F. Lue (ed) Atlas of Male Sexual Dysfunction, Current Medicine, Philadelphia Chapter 5

29) Levine, SB., Seagraves, RT. Introduction to Sexuality Section, Treatment of Psychiatric Disorders, 3rd edition (Gabbard GO, editor), American Psychiatric Press, 2007

30) Risen CB, (2009)Professionals Who Are Accused of Sexual Boundary Violations In Sex Offenders: Identification, Risk Assessment, Treatment, and Legal Issues edited by Fabian M. Saleh, Albert J. Grudzinskas, Jr., and John M. Bradford, Oxford University Press, 2009

31) What Patients Mean by Love, Intimacy, and Sexual Desire, in Handbook of

Clinical Sexuality for Mental Health Professionals edited by Levine SB, Risen, CB, and Althof, SE, Routledge, New York, 2010

32) Infidelity in Handbook of Clinical Sexuality for Mental Health Professionals edited by Levine SB, Risen, CB, and Althof, SE, Routledge, New York, 2010

33) Scott DL, Levine, SB. Understanding Gay and Lesbian Life in Handbook of Clinical Sexuality for Mental Health Professionals edited by Levine SB, Risen, CB, and Althof, SE, Routledge, New York, 2010

34) Levine, SB, Hasan, S., Boraz M. (2009) Male Hypoactive Sexual Desire Disorder (HSDD) in Clinical Manual of Sexual Disorders (R. Balon and RT Segraves, eds), American Psychiatric Press, Washington, DC.

35) Levine, SB. Sexual Disorders in Fundamentals of Psychiatry (by Allan Tasman and Wanda Mohr, eds.) <http://eu.wiley.com/WileyCDA/WileyTitle/productCd-0470665777.html>, .

36) Infidelity in Principles and Practices of Sex Therapy (I Binik, K. Hall, editors), 5th edition, Guilford Press, New York, 2014.

37) Why is Sex Important? In Handbook of Clinical Sexuality for Mental Health Professionals 3rd ed. [SB Levine, CB Risen, SE Althof, eds] New York. Routledge, 2016, Chapter 1

38) The Rich Ambiguity of Key Terms: Making Distinctions. In Handbook of Clinical Sexuality for Mental Health Professionals 3rd ed. [SB Levine, CB Risen, SE Althof, eds] New York. Routledge, 2016. Chapter 4

39) The Mental Health Professional's Treatment of Erection Problems . In Handbook of Clinical Sexuality for Mental Health Professionals 3rd ed. [SB Levine, CB Risen, SE Althof, eds] New York. Routledge, 2016 Chapter 11

40) Why is Sex Important? In Sexual Health in the Couple: Management of Sexual Dysfunction in Men and Women [L Lipshultz, A Pastuszak, M Perelman, A Giraldi, J Buster, eds.] New York, Springer, 2016.

41) Sommers, B., Levine, S.B., Physician's Attitude Towards Sexuality, in Psychiatry and Sexual Medicine: A Comprehensive Guide for Clinical Practitioners, 2020.

42) Boundaries And The Ethics Of Professional Misconduct in A. Steinberg, J. L. Alpert, C A. Courtois(Eds.) Sexual Boundary Violations In Psychotherapy: Therapist Indiscretions, & Transgressions, & Misconduct American Psychological Association, 2021.

D) Book Reviews

1) Homosexualities: A Study of Diversity Among Men and Women by Alan P. Bell and Martin S. Weinberg, Simon and Schuster, New York, 1978. In Journal of

Sex & Marital Therapy 1979; 5:

2) Marriage and Marital Therapies: Psychoanalytic, Behavioral & System Theory Perspectives by TJ Paolino and BS McCrady. Brunner/Mazel, New York, 1978. In Journal of Sex & Marital Therapy 1979; 5:

3) Management of Male Impotence. Volume 5 International Perspectives in Urology AH Bennett, (ed) Williams and Wilkins, Baltimore, 1992. In American Journal of Psychiatry, 1984

4) The Sexual Relationship by DE Scharff, Routledge & Kegan Paul, 1982 in Family Process 1983;22:556-8

5) Phenomenology and Treatment of Psychosexual Disorders, by WE Fann, I Karacan, AD Pokorny, RL Williams (eds). Spectrum Publications, New York, 1983. In American Journal of Psychiatry 1985;142:512-6

6) The Treatment of Sexual Disorders: Concepts and Techniques of Couple Therapy, G Arentewicz and G Schmidt. Basic Books, New York, 1983. In American Journal of Psychiatry 1985;142:983-5

7) Gender Dysphoria: Development, Research, Management. BN Steiner (ed). Plenum Press, 1985 in Journal of Clinical Psychiatry, 1986

8) Gender Dysphoria: Development, Research, Management. BN Steiner (ed). Plenum Press, 1985 in Contemporary Psychology 1986:31:421-2 [titled, The Limitations of Science, the Limitations of Understanding]

9) Psychopharmacology of Sexual Disorders by M Segal (ed) John Libbey & Co Ltd, London, 1987 in American Journal of Psychiatry 1987;144:1093

10) “The Sissy Boy Syndrome” and the Development of Homosexuality by R Green. Yale University Press, New Haven, 1987. In American Journal of Psychiatry 1988;145:1028

11) Male Homosexuality: A contemporary psychoanalytic perspective by RC Friedman, Yale University Press, New Haven, 1988 in Journal of Clinical Psychiatry 1989;50:4, 149

12) Sexual Landscapes: Why we are what we are, why we love whom we love. By JD Weinrich, Charles Schribner’s Sons, New York, 1987 in Archives of Sexual Behavior 21 (3):323-26, 1991

13) How to Overcome Premature Ejaculation by HS Kaplan, Brunner/Mazel, New York, 1989 in Journal of Clinical Psychiatry 51(3):130, 1990

14) Clinical Management of Gender Identity Disorders in Children and Adults R. Blanchard, BN Steiner (eds) American Psychiatry Press, Washington, DC, 1990. In Journal of Clinical Psychiatry 52(6):283, 1991

15) Psychiatric Aspects of Modern Reproductive Technologies. NL Stotland

(ed) American Psychiatric Press, Washington DC, 1990. In Journal of Clinical Psychiatry 1991;52(9):390

16) Homosexualities: Reality, Fantasy, and the Arts. CW Socarides, VD Volkan (eds). International Universities Press, Madison, Connecticut, 1990. In Journal of Clinical Psychiatry 1992;(10)

17) Reparative Therapy of Male Homosexuality: A New Clinical Approach. J Nicolosi, Jason Aronson, Northvale NJ, 1992. In Contemporary Psychology 38(2):165-6, 1993 [entitled Is Evidence Required?]

18) Male Victims of Sexual Assault, GC Mezey, MB King (eds) Oxford University Press, New York, 1992. In Journal of Clinical Psychiatry 1993;54(9):358,

19) AIDS and Sex: An Integrated Biomedical and Biobehavioral Approach. B Voeller, JM Reinisch, M Gottlieb, Oxford University Press, New York, 1990. In American Journal of Psychiatry

20) Porn: Myths for the Twentieth Century by RJ Stoller, Yale University Press, New Haven, 1991. In Archives of Sexual Behavior 1995;24(6):663-668

21) Sexual Dysfunction: Neurologic, Urologic, and Gynecologic Aspects. R Lechtenberg, DA Ohl (eds) Lea & Febiger, Philiadelphia, 1994. In Neurology

22) The Sexual Desire Disorders: Dysfunctional Regulation of Sexual Motivation. HS Kaplan Brunner/Mazel, New York, 1995. In Neurology 1996; 47:316

23) Femininities, Masculinities, Sexualities: Freud and Beyond. N. Chodorow. The University Press of Kentucky, Lexington, 1994. Archives of Sexual Behavior 28(5):397-400,1999

24) Sexual Function in People with Disability and Chronic Illness: A Health Professional's Guide by ML Sipski, CJ Alexander. Aspen Publishers, Gaitersburg, Md, 1997. In Journal of Sex Education and Therapy, 1998;23(2):171-2

25) Sexual Aggression by J Shaw (ed). American Psychiatric Press, Washington, DC, 1998. In American Journal of Psychiatry, May, 1999

26) The *Wounded* Healer: Addiction-Sensitive Approach to the Sexually Exploitative Professional by Richard Irons and Jennifer P. Schneider. Jason Aronson, Northvale, N.J., 1999 in American Journal of Psychiatry 157(5):8-9,2000.

27) Culture of the Internet by Sara Kiesler (editor), Lawrence Erlbaum Associates, Mahway, New Jersey, 1997. 463pp in Journal of Sex Research, 2001

28) Psychological Perspectives on Human Sexuality. Lenore T. Szuchman and Frank Muscarella (editors), Wiley and Sons, New York, American Journal of Psychiatry, April, 2002

29) "How Sexual Science Operates" a review of Sex, Love, and Health in America: Private Choices and Public Policies. EO Laumann and RT Michael, editors. Chicago, University of Chicago, 2001 in Second Opinion, The Park Ridge Center for the Study of Health, Faith, and Ethics, 11:82-3, April, 2004.

30) Sexual Orientation and Psychoanalysis: Sexual Science and Clinical Practice. R.C. Friedman and J.I. Downey (eds). New York. Columbia University Press. in Archives of Sexual Behavior (2003) 31(5):473-474

31) Prozac on the Couch: Prescribing Gender in the Era of Wonder Drugs, Jonathon Michel Metzl. Duke University Press, Durham, 2003 in American Journal of Psychiatry, November, 2004.

32) Sex and Gender by M. Diamond and A. Yates Child Psychiatric Clinics of North America W. B. Saunders, Philadelphia, Pennsylvania, 2004, 268 pp. in Archives of Sexual Behavior April 2007 online publication in Dec.2006 at http://dx.doi.org/10.1007/s10508-006-9114-7

33) Getting Past the Affair: A program to help you cope, heal, and move on—together or apart by Douglas K. Snyder, Ph.D, Donald H. Baucom, Ph.D, and Kristina Coop Gordon, Ph.D, New York, Guilford Press, 2007 in Journal of Sex and Marital Therapy,34:*1-3*, 2007

34) Dancing with Science, Ideology and Technique. A review of Sexual Desire Disorders: A casebook Sandra R. Leiblum editor, Guilford Press, New York, 2010. In Journal of Sex Research 2011.

35) What is more bizarre: the transsexual or transsexual politics? A review of Men Trapped in Men's Bodies: Narratives of Autogynephilic Transsexualism by Anne A. Lawrence, New York, Springer, 2014. In Sex Roles: a Journal of Research, **70, Issue 3 (2014), Page 158-160**, 2014. DOI: 10.1007/s11199-013-0341-9

36) There Are Different Ways of Knowing. A review of: How Sexual Desire Works: The Enigmatic Urge by Frederick Toates, Cambridge, UK, Cambridge University Press, in Sexuality and Cu1ture (2015) 19:407–409 DOI 10.1007/s12119-015-9279-0

37) The Dynamics of Infidelity: Applying Relationship Science to Clinical Practice by Lawrence Josephs, American Psychological Association, Washington, DC, 2018, pp. . 287, $69.95 in Journal of Sex and Marital Therapy10.1080/0092623X.2018.1466954, 2018. For free access: https://www.tandfonline.com/eprint/UgiIHbWbpdedbsXWXpNf/full

38) Transgender Mental Health by Eric Yarbrough, American Psychiatric Association Publications, 2018, Journal and Marital & Sexual Therapy, https://doi.org/10.1080/0092623X.2018.1563345 .

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA
CHARLESTON DIVISION

B.P.J., by her next friend and mother, HEATHER JACKSON,

Plaintiff,

v.

WEST VIRGINIA STATE BOARD OF EDUCATION, **HARRISON COUNTY BOARD OF EDUCATION**, *et al.*,

Defendants,

and

LAINEY ARMISTEAD,

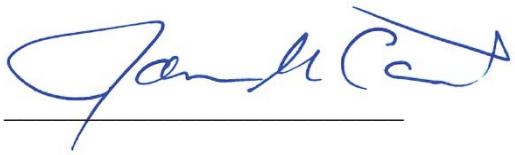
Defendant-Intervenor.

Civil Action No: 2:21-cv-00316

THE HONORABLE
JOSEPH R. GOODWIN

DECLARATION OF JAMES M. CANTOR, PHD.

I, Dr. James Cantor, pursuant to 28 U.S. Code § 1746, declare under penalty of perjury under the laws of the United States of America that the facts contained in my Expert Report of James M. Cantor, Ph.D., in the Case of *B.P.J. v. West Virginia State Board of Education*, dated February 23, 2022, attached hereto, are true and correct to the best of my knowledge and belief, and that the opinions expressed therein represent my own expert opinions.



Executed February 23, 2022

Dr. James M. Cantor, PhD.

Expert Report of

James M. Cantor, PhD.

In the case of *B.P.J. vs. West Virginia State Board of Education.*

February 23, 2022

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I. Background & Credentials

1. I am a clinical psychologist and Director of the Toronto Sexuality Centre in Canada. For my education and training, I received my Bachelor of Science degree from Rensselaer Polytechnic Institute, where I studied mathematics, physics, and computer science. I received my Master of Arts degree in psychology from Boston University, where I studied neuropsychology. I earned my Doctoral degree in psychology from McGill University, which included successfully defending my doctoral dissertation studying the effects of psychiatric medication and neurochemical changes on sexual behavior, and included a clinical internship assessing and treating people with a wide range of sexual and gender identity issues.

2. Over my academic career, my posts have included Psychologist and Senior Scientist at the Centre for Addiction and Mental Health (CAMH) and Head of Research for CAMH's Sexual Behaviour Clinic, Associate Professor of Psychiatry on the University of Toronto Faculty of Medicine, and Editor-in-Chief of the peer reviewed journal, *Sexual Abuse*. That journal is one of the top-impact, peer-reviewed journals in sexual behavior science and is the official journal of the Association for the Treatment of Sexual Abusers. In that appointment, I was charged to be the final arbiter for impartially deciding which contributions from other scientists in my field merited publication. I believe that appointment indicates not only my extensive experience evaluating scientific claims and methods, but also the faith put in me by the other scientists in my field. I have also served on the Editorial Boards of the *Journal of Sex Research*, the *Archives of Sexual Behavior*, and *Journal of Sexual Aggression*. Thus, although I cannot speak for other scientists, I regularly interact with and am routinely exposed to the views and opinions of most of the scientists active in our field today, within the United States and throughout the world.

3. My scientific expertise spans the biological and non-biological development of human sexuality, the classification of sexual interest patterns, the assessment and

treatment of atypical sexualities, and the application of statistics and research methodology in sex research. I am the author of over 50 peer-reviewed articles in my field, spanning the development of sexual orientation, gender identity, hypersexuality, and atypical sexualities collectively referred to as *paraphilias*. I am the author of the past three editions of the gender identity and atypical sexualities chapter of the *Oxford Textbook of Psychopathology*. These works are now routinely cited in the field and are included in numerous other textbooks of sex research.

4. I began providing clinical services to people with gender dysphoria in 1998. I trained under Dr. Ray Blanchard of CAMH and have participated in the assessment of treatment of over one hundred individuals at various stages of considering and enacting both transition and detransition, including its legal, social, and medical (both cross-hormonal and surgical) aspects. My clinical experience includes the assessment and treatment of several thousand individuals experiencing other atypical sexuality issues. I am regularly called upon to provide objective assessment of the science of human sexuality by the courts (prosecution and defense), professional media, and mental health care providers.

5. I have served as an expert witness in a total of 14 cases, which are listed in my *curriculum vitae*, attached here as Appendix 1, which includes a list of cases in which I have recently testified.

6. A substantial proportion of the existing research on gender dysphoria comes from two clinics, one in Canada and one in the Netherlands. The CAMH gender clinic (previously, Clarke Institute of Psychiatry) was in operation for several decades, and its research was directed by Dr. Kenneth Zucker. I was employed by CAMH between 1998 and 2018. I was a member of the hospital's adult forensic program. However, I was in regular contact with members of the CAMH child psychiatry program (of which Dr. Zucker was a member), and we collaborated on multiple projects.

7. For my work in this case, I am being compensated at the hourly rate of $400 per hour. My compensation does not change based on the conclusions and opinions that I provide here or later in this case or on the outcome of this lawsuit.

II. Introduction

8. The principal opinions that I offer and explain in detail in this report are:

a. Biological sex is a clear, scientifically valid, and well-defined category. The existence of disorders of sexual development in an extremely small proportion of individuals does not change this.

b. Neither early-onset (childhood) gender dysphoria nor adolescent-onset gender dysphoria can be assumed to reflect a fixed aspect of a person's psychological make-up or self-perception.

c. No study has demonstrated that "affirming" the transgender identity of a child or adolescent produces better mental health outcomes or reduced suicidality relative to psychotherapy and mental health support.

d. On the contrary, the contemporary studies have failed to find improved mental health in teens and young adults after administration of puberty blockers and/or cross-sex hormones.

e. e) Affirmation of a transgender identity in minors who suffer from early-onset or adolescent-onset gender dysphoria is not an accepted "standard of care."

In addition, I have been asked to provide an expert opinion on how relevant professional organizations have addressed these questions and whether any of them have taken any meritorious position that would undermine West Virginia's Protect Women's Sports Act (H.B. 3292) ("Act"). As I explain in detail in this report, it is my opinion that Plaintiffs' expert reports display a wide variety of flaws that call their conclusions into question and that no professional organization has articulated a meritorious position that calls into question the basis for the Act.

9. To prepare the present report, I reviewed the following resources related to this litigation:

a. West Virginia's Protect Women's Sports Act, H.B. 3293.

b. The Amended Complaint in this litigation.

c. Ms. Armistead's Declaration, Doc. 95-1.

d. Declaration and Expert Report of Deanna Adkins, MD.

e. Expert Report and Declaration of Joshua D. Safer, MD, FACP, FACE.

III. Clarifying Terms

10. Most scientific discussions begin with the relevant vocabulary and definitions of terms. In the highly polarized and politicized debates surrounding transgender issues, that is less feasible: Different authors have used terms in differing, overlapping ways. Activists and the public (especially on social media) will use the same terms, but to mean different things, and some have actively misapplied terms so that original documents appear to assert something they do not.

11. "Gender expression" is one such term. For another example, the word "child" is used in some contexts to refer specifically to children before puberty; in some contexts, to refer to children before adolescence (thus including ages of puberty); in still other contexts, to refer to people under the legal age of consent, which is age sixteen in the Netherlands (where much of the research was conducted) or age eighteen in much of North America. Thus, care should be taken in both using and interpreting the word "child" in this field.

12. Because the present document is meant to compare the claims made by others, it is the definitions used by those specific authors in those specific contexts which are relevant. Thus, definitions to my own uses of terms are provided where appropriate, but primarily explicate how terms were defined and used in their original contexts.

IV. Evidence Cited by Plaintiffs' Expert Reports

13. Dr. Adkins claimed a person's gender identity cannot be voluntarily changed. In actual clinical practice, that is rarely the relevant issue. The far more typical situation is youth who are *mistaken* about their gender identity. These youth are misinterpreting their experiences to indicate they are transgender, or they are exaggerating their descriptions of their experiences in service of attention-seeking or other psychological needs. Dr. Adkins' claim is not merely lacking any science to support it; the claim itself defies scientific thinking. In science, it is not possible to know that gender identity cannot be changed: We can know only that we lack evidence of such a procedure. In the scientific method, it remains eternally possible for evidence of such a treatment to emerge, and unlike sexual orientation's long history with conversion therapy, there have not been systematic attempts to change gender identity.

14. Dr. Adkins claimed that untreated gender dysphoria can result in several mental health issues, including suicidality. The relevant research on suicidality is summarized in its own section to follow. Nonetheless, Dr. Adkins' claim is a misleading half-truth: Missing is that people with gender dysphoria continue to experience those mental health symptoms even after they do transition, including a 19 times greater risk of death from suicide.[1] This is why clinical guidelines repeatedly indicate that mental health issues should be resolved *before* any transition, as indicated in multiple sets of clinical guidelines, summarized in their own section to follow. As emphasized even by authorities Dr. Adkins cites herself: Transition should not be relied upon itself to improve mental health status.

15. Adkins' support for the claim that untreated gender dysphoria lessens mental health consisted of two articles: Olson, *et al.* (2016) and Spack (2012). Such is a terrible misrepresentation of the state of the scientific literature. Although Olson,

[1] Dhejne, *et al.*, 2011.

et al., did indeed report that gender dysphoric children showed no mental health differences from the non-transgender control groups, Olson's report turned out to be incorrect. The Olson data were reanalyzed, and after correcting for statistical errors in the original analysis, the data instead showed that the gender dysphoric children under Olson's care *did,* in fact, exhibit significantly lower mental health.[2]

16. I conducted an electronic search of the research literature to identify any responses from the Olson team regarding the Schumm and Crawford re-analysis of the Olson data and was not able to locate any. I contacted Professor Schumm by email on August 22, 2021 to verify that conclusion, to which he wrote there has been: "No response [from Olson]."[3]

17. Adkins also misrepresented the views of Dr. Norman Spack. The article Adkins cited—Spack, 2012—repeatedly emphasized that children with gender dysphoria exhibit very many symptoms of mental illnesses. Spack asserted unambiguously that "Gender dysphoric children who do not receive *counseling* have a high risk of behavioural and emotional problems and psychiatric diagnoses."[4] The wording of Dr. Adkins' report ("gender dysphoria . . . if left untreated") misrepresents Spack so as to suggest Spack was advocating for medical transition to treat the gender dysphoria rather than counseling to treat suicidality and any other mental health issues. Moreover still, missing from Adkins' report was Spack's conclusion that "[m]ental health intervention should persist for the long term, even after surgery, *as patients continue to be at mental health risk, including for suicide.* While the causes of suicide are multifactorial, the possibility cannot be ruled out that some patients unrealistically believe that surgery(ies) solves their psychological distress."[5] Whereas

2 Schumm & Crawford, 2020; Schumm, *et al.*, 2019.
3 Schumm, email communication, Aug. 22, 2021 (on file with author).
4 Spack, *et al.,* 2012, at 422, italics added.
5 Spack, *et al.,* 2013, at 484, italics added

Adkins (selectively) cited Spack to support her insinuation that transition relieves distress, Spack instead explicitly warned against drawing exactly that conclusion.

18. Next, Adkins claimed to have achieved levels of success in her professional clinical practice unlike those reported by anyone anywhere else in the world: "All of my patients have suffered from persistent gender dysphoria, which has been alleviated through clinical appropriate treatment."[6] It is difficult to evaluate such a bold self-assessment of success. No clinic has published success rates even approximating this. By contrast, the peer-reviewed research literature repeatedly indicates that clients misrepresent themselves to their care-providers, engaging in "image management" so as to appear as having better mental health than they actually do.[7] In the absence of objective evidence, it is not possible to differentiate Adkins' claims of success from the simpler explanation that she and her patients are telling each other what they want and expect to hear.

19. Adkins referred to the clinical practice guidelines (CPG's) of three professional societies: the American Association of Pediatrics (AAP), the World Professional Association for Transgender Health (WPATH), and the Endocrine Society. This provides only an incomplete and inaccurate portrayal of the field. I am aware of six rather than three professional societies providing clinical guidelines for the care of gender dysphoric children. They are detailed more fully in their own section of this report. Nonetheless, with the broad exception of the AAP, their statements repeatedly noted:

- Desistance of gender dysphoria occurs in the majority of prepubescent children.
- Mental health issues need to be assessed as potentially contributing factors and need to be addressed before transition.
- Puberty-blocking medication is an experimental, not a routine, treatment.

[6] Adkins Report at 5.
[7] Anzani, *et al.*, 2020; Lehmann, *et al.*, 2021.

- Social transition is not generally recommended until after puberty.

Although some other associations have published broad statements of moral support for sexual minorities and against discrimination, they did not include any specific standards or guidelines regarding medical- or transition-related care.

20. Although Adkins referred to them as "widely accepted," the WPATH and the Endocrine Society guidelines have both been subjected to standardized evaluation, the Appraisal of Guidelines for Research and Evaluation ("AGREE II") method, as part of an appraisal of all published CPGs regarding sex and gender minority healthcare.[8] Utilizing community stakeholders to set domain priorities for the evaluation, the assessment concluded that the guidelines regarding HIV and its prevention were of high quality, but that "[t]ransition-related CPGs tended to lack methodological rigour and rely on patchier, lower-quality primary research."[9] Neither the Endocrine Society's or WPATH's guidelines were recommended for use. Indeed, the WPATH guidelines received unanimous ratings of "Do not recommend."[10]

21. Immediately following the publication of the AAP policy, I conducted a point-by-point fact-check of the claims it asserted and the references it cited in support. I submitted that to the *Journal of Sex & Marital Therapy*, a well-known research journal of my field, where it underwent blind peer review and was published. I append that article as part of this report. *See* Appendix 2. A great deal of published attention ensued; however, the AAP has yet to respond to the errors I demonstrated its policy contained. Writing for *The Economist* about the use of puberty blockers, Helen Joyce asked AAP directly, "Has the AAP responded to Dr Cantor? If not, have you any response now?" The AAP Media Relations Manager, Lisa Black, responded: "We do not have anyone available for comment."

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[8] Dahlen, *et al.*, 2021.
[9] Dahlen, *et al.*, 2021, at 6.
[10] Dahlen, *et al.*, 2021, at 7.

22. Finally, the clinical guidelines from all these associations have become largely outdated. As detailed in the *Studies of Transition Outcomes* section of this report, there was some reason, circa 2010, to expect positive outcomes among children who transition, owing to optimistic findings reported from the Netherlands.[11] Early positive findings, however, have been retracted after statistical errors were identified,[12] or shown to be more attributable to mental health counseling rather than to medical transition.[13] The professional societies' statements were produced during that earlier phase.

23. In contrast with these U.S.-based associations, public healthcare systems throughout the world have instead been withdrawing their earlier support for childhood transition, responding to the increasingly recognized risks associated with hormonal interventions and the now clear lack of evidence that medical transition was benefitting most children, as opposed to the mental health counseling accompanying transition. These have included Sweden[14, 15], Finland[16, 17], and the United Kingdom[18], and the Royal Australian and New Zealand College of Psychiatrists.[19]

24. Adkins repeatedly claimed success on the basis of what her patients tell her. In the absence of any systematic method, however, it is not possible to evaluate to what extent such a conclusion reflects human recall bias, cases of negative outcomes dropping out of treatment thus becoming invisible to Adkins, the aforementioned impression management efforts of clients, psychotherapy that they were receiving at the same time, or simple maturation during which the patients

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11 de Vries, et al., 2011.
12 Kalin, 2020.
13 c.f., Carmichael, *et al.,* 2021; Biggs, 2019; Biggs, 2020.
14 Swedish Agency of Health Technology Assessment and Assessment of Social Services, 2019.
15 Nainggolan, 2021.
16 Finland Ministry of Social Affairs and Health, Council for Choices in Health Care, 2020, June 11.
17 Finland Ministry of Social Affairs and Health, Council for Choices in Health Care, 2020, June 16.
18 United Kingdom National Health Service (NHS), 2021, March 11.
19 McCall, 2021.

would have experienced improved mental health regardless of transition. Indeed, the very purpose of engaging in systematic, peer-reviewed research instead of relating anecdotal recollections is to rule out exactly these biases.

25. Adkins referred to disorders of sexual development (DSDs) and intersex variations to claim that the very notion of there being two sexes is inherently flawed (*i.e.*, challenging "singular biological sex"). Although they both potentially involve medical alteration of genitalia, these are not comparable issues. DSDs and intersex conditions develop before birth, and objective medical testing is capable of confirming diagnoses. Her claims not only misrepresent the research literature on DSDs, but also failed to engage the relevant scientific concept, "construct validity." Adkins claimed DSD prevalences of 1 in 1000 live births and 1 in 300 people in the world (Adkins Report at 11), leaving unclear how there could be a larger proportion of such people living in the world than are born in the first place. The scientific literature, however, shows that DSDs are much rarer than this[20] and that the very large majority of DSDs are the hypospadias—mislocations of the urethra on the penis.[21] Because of the biological processes involved in causing them, hypospadias are classified as disorders of sexual development. That some boys are born with mislocated urethra is falsely taken by Adkins to demonstrate that 'there are more than just boys and girls'.

26. Overall, Adkins' argument was that, because there exist exceptions among features which distinguish male from female, the distinction itself is entirely moot. Although she did not use the term, Adkins is claiming that the existence of these exceptions demonstrates that sex lacks "construct validity." Her argument does not, however, follow from how construct validity is determined in science—very many scientific classification systems include exceptions. Scientific constructs are not

[20] Sax, 2002.
[21] Bancroft, 2009.

determined by any one of the components it reflects, in this case being each of the sex chromosomes, sex hormones, sexually dimorphic genitalia, etc. Rather, such constructs are represented by the generalizable interrelationships among its multiple components. Notwithstanding exceptions in an individual component in an individual case, the interrelationships among the network of components remains intact. The existence of people born with a clubfoot or undeveloped leg does not challenge the classification of humans as a bipedal species.

27. Similarly to Dr. Adkins, Dr. Safer claimed that "gender identity is durable and cannot be changed by medical intervention," providing no evidence or reference to the research literature. It is not at all apparent upon what basis such a statement about durability can be made, however. It has been the unanimous conclusion of every follow-up study of gender dysphoric children ever conducted, not only that gender identity does change, but also that it changes in the large majority of cases, as documented below. This is, of course, very different from what is reported by transgender adults—they are the very people for whom gender dysphoria did endure. Regarding responses to clinical intervention, I am not aware of, and Safer did not cite any research reports of medical interventions attempting to change gender identity, regardless of outcome. It is not clear whether Safer intended this comment to apply also to psychological/non-medical interventions.

V. Evidence Missing from Plaintiffs' Expert Reports

28. One of the most widespread public misunderstandings about transsexualism and people with gender dysphoria is that all cases of gender dysphoria represent the same phenomenon; however, the clinical science has long and consistently demonstrated that gender dysphoric children (cases of *early-onset* gender dysphoria) do not represent the same phenomenon as adult gender dysphoria

(cases of *late-onset* gender dysphoria),[22] merely attending clinics at younger ages. That is, gender dysphoric children are not simply younger versions of gender dysphoric adults. They differ in every known regard, from sexual interest patterns, to responses to treatments. A third presentation has recently become increasingly observed among people presenting to gender clinics: These cases appear to have an onset in adolescence in the absence of any childhood history of gender dysphoria. Such cases have been called adolescent-onset or "rapid-onset" gender dysphoria (ROGD).

29. In the context of school athletics, the adult-onset phenomenon would not seem relevant; however, very many public misunderstandings and expert misstatements come from misattributing evidence or personal experience from one of these types to the other. For example, there exist only very few cases of transition regret among adult transitioners, whereas the research has unanimously shown that the majority of children with gender dysphoria desist—that is, cease to experience such dysphoria by or during puberty. A brief summary of the adult-onset phenomenon is included, to facilitate distinguishing features which are unique to childhood gender dysphoria.

A. Adult-Onset Gender Dysphoria

30. People with adult-onset gender dysphoria typically attend clinics requesting transition services in mid-adulthood, usually in their 30s or 40s. Such individuals are nearly exclusively male.[23] They typically report being sexually attracted to women and sometimes to both men and women. Some cases profess asexuality, but very few indicate any sexual interest in or behavior involving men.[24] Cases of adult-onset gender dysphoria are typically associated with a sexual interest pattern (medically, a *paraphilia*) involving themselves in female form.[25]

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22 Blanchard, 1985.
23 Blanchard, 1990, 1991.
24 Blanchard, 1988.
25 Blanchard 1989a, 1989b, 1991.

1. Outcome Studies of Transition in Adult-Onset Gender Dysphoria

31. Clinical research facilities studying gender dysphoria have repeatedly reported low rates of regret (less than 3%) among adult-onset patients who underwent complete transition (*i.e.*, social, plus hormonal, plus surgical transition). This has been widely reported by clinics in Canada,[26] Sweden,[27] and the Netherlands.[28]

32. Importantly, each of the Canadian, Swedish, and Dutch clinics for adults with gender dysphoria all performed "gate-keeping" procedures, disqualifying from medical services people with mental health or other contraindications. One would not expect the same results to emerge in the absence of such gate-keeping or when gate-keepers apply only minimal standards or cursory assessment.

2. Mental Health Issues in Adult-Onset Gender Dysphoria

33. The research evidence on mental health issues in gender dysphoria indicates it to be different between adult-onset versus adolescent-onset versus prepubescent-onset types. The co-occurrence of mental illness with gender dysphoria in adults is widely recognized and widely documented.[29] A research team in 2016 published a comprehensive and systematic review of all studies examining rates of mental health issues in transgender adults.[30] There were 38 studies in total. The review indicated that many studies were methodologically weak, but nonetheless concluded (1) that rates of mental health issues among people are highly elevated both before and after transition, (2) but that rates were less elevated among those who completed transition. Analyses were not conducted in a way so as to compare the elevation in mental health issues observed among people newly attending clinics to improvement after transition. Also, several studies showed more than 40% of patients

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26 Blanchard, *et al.*, 1989.
27 Dhejneberg, *et al.*, 2014.
28 Wiepjes, *et al.*, 2018.
29 *See, e.g.*, Hepp, *et al.*, 2005.
30 Dhejne, *et al.*, 2016.

becoming "lost to follow-up." With attrition rates that high, it is unclear to what extent the information from the available participants genuinely reflects the whole sample. The very high "lost to follow-up" rate leaves open the possibility of considerably more negative results overall.

34. An important caution applies to interpreting these results: These very high proportions of mental health issues come from people who are attending a clinic for the first time and are undergoing assessment. Clinics serving a "gate-keeper" role divert candidates with mental health issues away from medical intervention. The side-effect of removing these people from the samples of transitioners is that if a researcher compared the average mental health of individuals coming into the clinic with the average mental health of individuals going through medical transition, then the post-transition group would appear to show a substantial improvement, even though transition had *no effect at all*: The removal of people with poorer mental health created the statistical illusion of improvement among the remaining people.

35. The long-standing and consistent finding that gender dysphoric adults have high rates of mental health issues both before and after transition and the finding that those mental health issues cause the gender dysphoria (the epiphenomenon) rather than the other way around indicate a critical point: To the extent that gender dysphoric children resemble adults, we should not expect mental health to improve as a result of transition. Mental health issues should be resolved before any transition.

B. Childhood Onset (Pre-Puberty) Gender Dysphoria

1. Prospective Studies of Childhood-Onset Gender Dysphoria Show that Most Children Desist in the "Natural Course" by Puberty

36. The large majority of childhood onset cases of gender dysphoria occur in biological males, with clinics reporting 2–6 biological male children to each female.[31]

37. Prepubescent children (and their parents) have been approaching mental health professionals for help with their unhappiness with their sex and belief they would be happier living as the other for many decades. Projects following-up and reporting on such cases began being published in the 1970s, with subsequent generations of research employing increasingly sophisticated methods studying the outcomes of increasingly large samples. In total, there have now been a total of 11 such outcomes studies. *See* the appendix to Appendix 2 (listing these studies).

38. In sum, despite coming from a variety of countries, conducted by a variety of labs, using a variety of methods, all spanning four decades, every study without exception has come to the identical conclusion: Among prepubescent children who feel gender dysphoric, the majority cease to want to be the other gender over the course of puberty—ranging from 61–88% desistance across the large, prospective studies. Such cases are often referred to as "desisters," whereas children who continue to feel gender dysphoria are often called "persisters."

39. Notably, in most cases, these children were receiving professional psychosocial support across the study period aimed not at affirming cross-gender identification, but at resolving stressors and issues potentially interfering with desistance. While beneficial to these children and their families, the inclusion of therapy in the study protocol represents a complication for the interpretation of the results: That is, it is not possible to know to what extent the observed outcomes (predominant desistance, with a small but consistent occurrence of persistence) were

[31] Cohen-Kettenis, *et al.*, 2003; Steensma, *et al.,* 2018; Wood, *et al.*, 2013.

influenced by the psychosocial support, or would have emerged regardless. It can be concluded only that prepubescent children who suffer gender dysphoria and receive psychosocial support focused on issues other than "affirmation" of cross-gender identification do in fact desist in suffering from gender dysphoria, at high rates, over the course of puberty.

40. While the absolute number of those who present as prepubescent children with gender dysphoria and "persist" through adolescence is very small in relation to the total population, persistence in some subjects was observed in each of these studies. Thus, the clinician cannot take either outcome for granted.

41. It is because of this long-established and invariably consistent research finding that desistance is probable, but not inevitable, that the "watchful waiting" method became the standard approach for assisting gender dysphoric children. The balance of potential risks to potential benefits is very different for groups likely to desist versus groups unlikely to desist: If a child is very likely to persist, then taking on the risks of medical transition might be more worthwhile than if that child is very likely to desist in transgender feelings.

42. The consistent observation of high rates of desistance among pre-pubertal children who present with gender dysphoria demonstrates a pivotally important—yet often overlooked—feature: because gender dysphoria so often desists on its own, clinical researchers cannot assume that therapeutic intervention cannot facilitate or speed desistance for at least some patients. Such is an empirical question, and there has not yet been any such study.

43. It is also important to note that research has not yet identified any reliable procedure for discerning which children who present with gender dysphoria will persist, as against the majority who will desist, absent transition and "affirmation." Such a method would be valuable, as the more accurately that potential persisters can be distinguished from desisters, the better the risks and benefits of options can

be weighted. Such "risk prediction" and behavioral "test construction" are standard components of applied statistics in the behavioral sciences. Multiple research teams have reported that, on average, groups of persisters are somewhat more gender non-conforming than desisters, but not so different as to usefully predict the course of a particular child.[32]

44. In contrast, a single research team, led by Dr. Kristina Olson, claimed the opposite, asserting to have developed a method of distinguishing persisters from desisters, using a single composite score representing a combination of children's "peer preference, toy preference, clothing preference, gender similarity, and gender identity."[33] That team reported a statistical association (mathematically equivalent to a correlation) between that composite score and the probability of persistence. As they described their result, "Our model predicted that a child with a gender-nonconformity score of .50 would have roughly a .30 probability . . . of socially transitioning. By contrast, a child with gender-nonconformity score of .75 would have roughly a .48 probability."[34] Although the authors declared that "social transitions may be predictable from gender identification and preferences,"[35] their actual results suggest the opposite: The gender-nonconforming group who went on to transition (socially) had a mean composite score of .73 (which is less than .75), and the gender-nonconforming group who did not transition had a mean composite score of .61, also less than .75.[36] Both of those are lower than the value of .75, so both of those would be more likely than not to desist, rather than to proceed to transition. Thus, Olson's model does not distinguish likely from unlikely to transition; rather, it distinguishes unlikely from even less likely to transition.

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[32] Singh, *et al.* (2021); Steensma *et al.*, 2013.
[33] Rae, *et al.*, 2019, at 671.
[34] Rae, *et al.*, 2019, at 673.
[35] Rae, *et al.*, 2019, at 669.
[36] Rae, *et al.*, 2019, Supplemental Material at 6, Table S1, bottom line.

45. Although it remains possible for some future finding to yield a method to identify with sufficient accuracy which gender dysphoric children will persist, there does not exist such a method at the present time. Moreover, in the absence of long-term follow-up, it cannot be known what proportions come to regret having transitioned and then *de*transition. Because only a minority of gender dysphoric children persist in feeling gender dysphoric in the first place, "transition-on-demand" increases the probably of unnecessary transition and unnecessary medical risks.

2. "Watchful Waiting" and "The Dutch Approach"

46. It was this state of the science—that the majority of prepubescent children will desist in their feelings of gender dysphoria and that we lack an accurate method of identifying which children will persist—that led to the development of a clinical approach, often called "The Dutch Approach" (referring to The Netherlands clinic where it was developed) including "Watchful Waiting" periods. Internationally, the Dutch Approach is currently the most widely respected and utilized method for treatment of children who present with gender dysphoria.

47. The purpose of these methods was to compromise the conflicting needs among: clients' desires upon assessment, the long-established and repeated observation that those preferences will change in the majority of (but not all) childhood cases, and that cosmetic aspects of medical transition are perceived to be better when they occur earlier rather than later.

48. The Dutch Approach (also called the "Dutch Protocol") was developed over many years by the Netherlands' child gender identity clinic, incorporating the accumulating findings from their own research as well as those reported by other clinics working with gender dysphoric children. They summarized and explicated the approach in their peer-reviewed report, *Clinical management of gender dysphoria in children and adolescents: The Dutch Approach* (de Vries & Cohen-Kettenis, 2012).

The components of the Dutch Approach are:

- no social transition at all considered before age 12 (watchful waiting period),
- no puberty blockers considered before age 12,
- cross-sex hormones considered only after age 16, and
- resolution of mental health issues before any transition.

49. For youth under age 12, "the general recommendation is watchful waiting and carefully observing how gender dysphoria develops in the first stages of puberty."[37]

50. The age cut-offs of the Dutch Approach authors were not based on any research demonstrating their superiority over other potential age cut-off's. Rather, they were chosen to correspond to ages of consent to medical procedures under Dutch law. But whatever their original rationale, the data from this clinic simply contains no information about safety or efficacy of these measures at younger ages.

51. The authors of the Dutch Approach repeatedly and consistently emphasize the need for extensive mental health assessment, including clinical interviews, formal psychological testing with validated psychometric instruments, and multiple sessions with the child and the child's parents.

52. Within the Dutch approach, there is no social transition before age twelve. That is, social affirmation of the new gender may not begin until age 12—as desistance is less likely to occur past that age. "Watchful Waiting" refers to a child's developmental period up to that age. Watchful waiting does not mean do nothing but passively observe the child. Such children and families typically present with substantial distress involving both gender and non-gender issues. It is during the watchful waiting period that a child (and other family members as appropriate) would undergo therapy, resolving other issues which may be exacerbating psychological stress or dysphoria. As noted by the Dutch clinic, "[T]he adolescents in this study received extensive family or other social support . . . [and they] were all regularly

[37] de Vries & Cohen-Kettenis, 2012, at 301.

seen by one of the clinic's psychologists or psychiatrists."[38] One is actively treating the person, while carefully "watching" the dysphoria.

53. The inclusion of psychotherapy and support during the watchful waiting period is, clinically, a great benefit to the gender dysphoric children and their parents. The inclusion of psychotherapy and support poses a scientific complication, however: It becomes difficult to know to what extent the outcomes of these cases might be related to receiving psychotherapy received versus being "spontaneous" desistance, which would have occurred on its own anyway. This situation is referred to in science as a "confound."

3. Studies of Transition Outcomes: Overview

54. Very many strong claims have appeared in the media and on social media asserting that transition results in improved mental health or, contradictorily, in decreased mental health. In the highly politicized context of gender and transgender research, many authors have cited only the findings which appear to support one side, cherry-picking from the complete set of research reports. Seemingly contradictory findings are common in science with on-going research projects. When considered together, however, the full set of relevant reports show that a coherent pattern and conclusion has emerged over time, as detailed in the following sections. Initial optimism was suggested by reports of improvements in mental health.[39] Upon continued analysis, these seeming successes turned out to be illusory, however: The Bränström and Pachankis (2019) finding has been retracted.[40] The greater mental health among transitioners reported by Costa, *et al.* (2015) was noted to be because the control group consisted of cases excluded from hormone eligibility exactly because they showed poor mental health to begin with.[41] The improvements reported by the

[38] de Vries, *et al.*, 2011, at 2280-81.
[39] Bränström & Pachankis 2019; Costa, *et al.*, 2015; de Vries, *et al.*, 2011; de Vries, *et al.*, 2014.
[40] Kalin, 2020.
[41] Biggs, 2019.

de Vries studies from the Dutch Clinic themselves appear genuine; however, because that clinic also provides psychotherapy to all cases receiving puberty-blockers, it remains entirely plausible that the psychotherapy and not the puberty blockers caused the improvements.[42] New studies continued to appear an accelerating rate, repeatedly reporting deteriorations or lacks of improvement in mental health[43] or lack of improvement beyond psychotherapy alone,[44] and other studies continue to report on only the combined effect of both psychotherapy and hormone treatment together.[45]

a. Outcomes of The Dutch Approach (studies from before 2017): Mix of positive, negative, and neutral outcomes

55. The research confirms that some, but not all, adolescents improve on some, but not all, indicators of mental health and that those indicators are inconsistent across studies. Thus, the balance of potential benefits to potential risks differs across cases, and thus suggests different courses of treatment across cases.

56. The Dutch clinical research team followed up 70 youth undergoing puberty suppression at their clinic.[46] The youth improved on several variables upon follow-up as compared to pre-suppression measurement, including depressive symptoms and general functioning. No changes were detected in feelings of anxiety or anger or in gender dysphoria as a result of puberty suppression; however, natal females using puberty suppression suffered *increased* body dissatisfaction both with their secondary sex characteristics and with nonsexual characteristics.[47]

57. As the report authors noted, while it is possible that the improvement on some variables was due to the puberty-blockers, it is also possible that the improvement was due to the mental health support, and it is possible that the

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42 Biggs, 2020.
43 Carmichael, *et al.*, 2021; Hisle-Gorman, *et al.*, 2021; Kaltiala, *et al.*, 2020.
44 Achille, *et al.*, 2020.
45 Kuper, *et al.*, 2020; van der Miesen, *et al.*, 2020, at 703.
46 de Vries, *et al.* 2011.
47 Biggs, 2020.

improvement occurred only on its own with natural maturation. So any conclusion that puberty blockers improved the mental health of the treated children is not justified by the data. Because this study did not include a control group (another group of adolescents matching the first group, but *not* receiving medical or social support), these possibilities cannot be distinguished from each other, representing a confound. The authors of the study were explicit in noting this themselves: "All these factors may have contributed to the psychological well-being of these gender dysphoric adolescents."[48]

58. The authors were careful not to overstate the implications of their results, "We *cautiously* conclude that puberty suppression *may be* a valuable *element* in clinical management of adolescent gender dysphoria."[49]

59. Costa, *et al.* (2015) reported on preliminary outcomes from the Tavistock and Portman NHS Foundation Trust clinic in the UK. They compared the psychological functioning of one group of youth receiving psychological support with a second group receiving both psychological support as well as puberty blocking medication. Both groups improved in psychological functioning over the course of the study, but no statistically significant differences between the groups was detected at any point.[50] As those authors concluded, "Psychological support and puberty suppression were both associated with an improved global psychosocial functioning in GD adolescence. Both these interventions may be considered effective in the clinical management of psychosocial functioning difficulties in GD adolescence."[51] Because psychological support does not pose the physical health risks that hormonal interventions or surgery does (such as loss of reproductive function), one cannot justify taking on the greater risks of social transition, puberty blockers or surgery

[48] de Vries, *et al.* 2011, at 2281.
[49] de Vries, *et al.* 2011, at 2282, italics added.
[50] Costa, *et al.*, at 2212 Table 2.
[51] Costa, *et al.*, at 2206.

without evidence of such treatment producing superior results. Such evidence does not exist.

b. Clinicians and advocates have invoked the Dutch Approach while departing from its protocols in important ways.

60. The reports of partial success contained in de Vries, *et al.* 2011 called for additional research, both to confirm those results and to search for ways to maximize beneficial results and minimize negative outcomes. Instead, many other clinics and clinicians proceeded on the basis of the positives only, broadened the range of people beyond those represented in the research findings, and removed the protections applied in the procedures that led to those outcomes. Many clinics and individual clinicians have reduced the minimum age for transition to 10 instead of 12. While the Dutch Protocol involves interdisciplinary teams of clinicians, many clinics now rely on a single assessor, in some cases one without adequate professional training in childhood and adolescent mental health. Comprehensive, longitudinal assessments (*e.g.*, one and a half *years*[52]) became approvals after one or two assessment sessions. Validated, objective measures of youths' psychological functioning were replaced with clinicians' subjective (and first) opinions, often reflecting only the clients' own self-report. Systematic recordings of outcomes, so as to allow for detection and correction of clinical deficiencies, were eliminated.

61. Notably, Dr. Thomas Steensma, central researcher of the Dutch clinic, has decried other clinics for "blindly adopting our research" despite the indications that those results may not actually apply: "We don't know whether studies we have done in the past are still applicable to today. Many more children are registering, and also a different type."[53] Steensma opined that "every doctor or psychologist who is involved in transgender care should feel the obligation to do a good pre- and post-test." But few if any are doing so.

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[52] de Vries, *et al.*, 2011.
[53] Tetelepta, 2021.

c. Studies by other clinicians in other countries have failed to reliably replicate the positive components of the results reported by the Dutch clinicians in de Vries et al. 2011.

62. The indications of potential benefit from puberty suppression in at least some cases has led some clinicians to attempt to replicate the positive aspects of those findings. These efforts have not succeeded.

63. The Tavistock and Portman clinic in the U.K. recently released its findings, attempting to replicate the outcomes reported by the Dutch clinic.[54] Study participants were ages 12–15 (Tanner stages 3 for natal males, Tanner 2 for natal females) and were repeatedly tested before beginning puberty-blocking medications and then every six months thereafter. Cases exhibiting serious mental illnesses (*e.g.*, psychosis, bipolar disorder, anorexia nervosa, severe body-dysmorphic disorder unrelated to gender dysphoria) were excluded. Relative to the time point before beginning puberty suppression, there were *no* significant changes in any psychological measure, from either the patients' or their parents' perspective.

64. A multidisciplinary team from Dallas published a prospective follow-up study which included 25 youths as they began puberty suppression.[55] (The other 123 study participants were undergoing cross-sex hormone treatment.) Interventions were administered according to "Endocrine Society Clinical Practice Guidelines."[56] Their analyses found *no statistically significant changes* in the group undergoing puberty suppression on any of the nine measures of wellbeing measured, spanning tests of body satisfaction, depressive symptoms, or anxiety symptoms.[57] (Although the authors reported detecting some improvements, these were only found when the large group undergoing cross-sex hormone treatment were added in.) Although the Dutch

[54] Carmichael, *et al.*, 2021.
[55] Kuper, *et al.*, 2020, at 5.
[56] Kuper, *et al.*, 2020, at 3, referring to Hembree, *et al.*, 2017.
[57] Kuper, *et al.*, 2020, at Table 2.

Approach includes age 12 as a minimum for puberty suppression treatment, this team provided such treatment beginning at age 9.8 years (full range: 9.8–14.9 years).[58]

65. Achille, *et al.* (2020) at Stony Brook Children's Hospital in New York treated a sample of 95 youth with gender dysphoria, providing follow-up data on 50 of them. (The report did not indicate how these 50 were selected from the 95.) As well as receiving puberty blocking medications, "Most subjects were followed by mental health professionals. Those that were not were encouraged to see a mental health professional."[59] The puberty blockers themselves "were introduced in accordance with the Endocrine Society and the WPATH guidelines."[60] Upon follow-up, some incremental improvements were noted; however, after statistically adjusting for psychiatric medication and engagement in counselling, "*most predictors did not reach statistical significance*."[61] That is, puberty blockers did not improve mental health any more than did mental health care on its own.

66. In a recent update, the Dutch clinic reported continuing to find improvement in transgender adolescents' psychological functioning, reaching age-typical levels, "after the start of specialized transgender care involving puberty suppression."[62] Unfortunately, because the transgender care method of that clinic involves both psychosocial support and puberty suppression, it cannot be known which of those (or their combination) is driving the improvement. Also, the authors indicate that the changing demographic and other features among gender dysphoric youth might have caused the treated group to differ from the control group in unknown ways. As the study authors themselves noted, "The present study can, therefore, not provide

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58 Kuper, *et al.*, 2020, at 4.
59 Achille, *et al.*, 2020, at 2.
60 Achille, *et al.*, 2020, at 2.
61 Achille, *et al.*, 2020, at 3 (italics added).
62 van der Miesen, *et al.*, 2020, at 699.

evidence about the direct benefits of puberty suppression over time and long-term mental health outcomes."[63]

67. It has not yet been determined why the successful outcomes reported by the Dutch child gender clinic a decade ago failed to emerge when applied by others more recently. It is possible that:

(1) The Dutch Approach itself does *not* work and that their originally successful results were a fluke;

(2) The Dutch Approach *does* work, but only in the Netherlands, with local cultural, genetic, or other unrecognized factors that do not generalize to other countries;

(3) The Dutch Approach itself *does* work, but other clinics and individual clinicians are removing safeguards and adding short-cuts to the approach, and those changes are hampering success.

(4) The Dutch Approach *does* work, but the cause of the improvement is the psychosocial support, rather than any medical intervention, which other clinics are *not* providing.

68. The failure of other clinics to repeat the already very qualified success of the Dutch clinic demonstrates the need for still greater caution before endorsing transition and the greater need to resolve potential mental health obstacles before doing so.

4. Mental Health Issues in Childhood-Onset Gender Dysphoria

69. As shown by the outcomes studies, there is no statistically significant evidence that transition reduces the presence of mental illness among transitioners. As shown repeatedly by clinical guidelines from multiple professional associations, mental health issues are expected or required to be resolved *before* undergoing transition. The reasoning behind these conclusions is that children may be expressing gender dysphoria, not because they are experiencing what gender dysphoric adults report, but because they mistake what their experiences indicate or to what they might lead. For example, a child experiencing depression from social

[63] van der Miesen, *et al.*, 2020, at 703.

isolation might develop hope—and the unrealistic expectation—that transition will help them fit in, this time as and with the other sex.

70. If a child undergoes transition, discovering only then that their mental health or social situations will not in fact change, the medical risks and side-effects (such as sterilization) will have been borne for no reason. If, however, a child resolves the mental health issues first with the gender dysphoria resolving with it (which the research literature shows to be the case in the large majority), then the child need not undergo transition at all, but yet still retains the opportunity to do so later.

71. Elevated rates of multiple mental health issues among gender dysphoric children are reported throughout the research literature. A formal analysis of children (ages 4–11) undergoing assessment at the Dutch child gender clinic showed 52% fulfilled criteria for a DSM axis-I disorder.[64] A comparison of the children attending the Canadian versus Dutch child gender dysphoria clinic showed only few differences between them, but a large proportion in both groups were diagnosable with clinically significant mental health issues. Results of standard assessment instruments (Child Behavior Check List, or CBCL) demonstrated that the average score was in the clinical rather than healthy range, among children in both clinics.[65] When expressed as percentages, among 6–11-year-olds, 61.7% of the Canadian and 62.1% of the Dutch sample were in the clinical range.

72. A systematic, comprehensive review of all studies of Autism Spectrum Disorders (ASDs) and Attention-Deficit Hyperactivity Disorder (ADHD) among children diagnosed with gender dysphoria was recently conducted. It was able to identify a total of 22 studies examining the prevalence of ASD or ADHD I youth with gender dysphoria. Studies reviewing medical records of children and adolescents referred to gender clinics showed 5–26% to have been diagnosed with ASD.[66]

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64 Wallien, *et al.*, 2007.
65 Cohen-Kettenis, *et al.*, 2003, at 46.
66 Thrower, *et al.*, 2020.

Moreover, those authors gave specific caution on the "considerable overlap between symptoms of ASD and symptoms of gender variance, exemplified by the subthreshold group which may display symptoms which could be interpreted as either ASD or gender variance. Overlap between symptoms of ASD and symptoms of GD may well confound results."[67] When two or more issues are present at the same time (in this case, gender dysphoria present at the same time as ADHD or ASD), researchers cannot distinguish when a result is associated with or caused by the issue of interest (gender dysphoria itself) or one of the side issues, called *confounds* (ADHD or ASD, in the present case).[68] The rate of ADHD among children with GD was 8.3–11%. Conversely, in data from children (ages 6–18) with Autism Spectrum Disorders (ASDs) show they are more than seven times more likely to have parent-reported "gender variance."[69]

C. Adolescent-Onset Gender Dysphoria

1. Features of Adolescent-Onset Gender Dysphoria

73. A third profile has begun to present to clinicians or socially, characteristically distinct from the previously identified ones.[70] Unlike adult-onset gender dysphoria (and also unlike childhood-onset, *see supra* Part IV.B.2), this group is predominately biologically female. This group first presents in adolescence, but lacks the history of cross-gender behavior in childhood like the childhood-onset cases have. It is this feature which led to the term Rapid Onset Gender Dysphoria (ROGD).[71] The majority of cases appear to occur within clusters of peers and in association with increased social media use[72] and especially among people with autism or other neurodevelopmental or mental health issues.[73]

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67 Thrower, *et al.*, 2020, at 703.
68 Cohen-Kettenis *et al.,* 2003, at 51; Skelly *et al.,* 2012.
69 Janssen, *et al.*, 2016.
70 Kaltiala-Heino, *et al.*, 2015; Littman, 2018.
71 Littman, 2018.
72 Littman, 2018.
73 Kaltiala-Heino, *et al.*, 2015; Littman, 2018; Warrier, *et al.*, 2020.

74. It cannot be easily determined whether the self-reported gender dysphoria is a result of other underlying issues or if those mental health issues are the result of the stresses of being a stigmatized minority, as some writers are quick to assume.[74] *See infra* Part VI.E (discussing the minority stress hypothesis). Importantly, and unlike other presentations of gender dysphoria, people with rapid-onset gender dysphoria often (47.2%) experienced *declines* rather than improvements in mental health when they publicly acknowledged their gender status.[75] Although long-term outcomes have not yet been reported, these distinctions argue against generalizing findings from the other types of gender dysphoria to this one. That is, in the absence of evidence, researchers cannot assume that the pattern found in childhood-onset or adult-onset gender dysphoria also applies to rapid-onset (aka adolescent-onset) gender dysphoria. That is, the group differences already observed argue against the conclusion that any given feature would be present, in general, throughout all types of gender dysphoria.

2. Prospective Studies of Social Transition and Puberty Blockers in Adolescence

75. There do not yet exist prospective outcomes studies either for social transition or for medical interventions for people whose gender dysphoria began in adolescence. That is, instead of taking a sample of individuals and following them forward over time (thus permitting researchers to account for people dropping out of the study, people misremembering the order of events, etc.), all studies have thus far been *retrospective*. It is not possible for such studies to identify what factors caused what outcomes. No study has yet been organized in such a way as to allow for an analysis of the adolescent-onset group, as distinct from childhood-onset or adult-onset cases. Many of the newer clinics (not the original clinics systematically tracking and reporting on their case results) fail to distinguish between people who had childhood-

[74] Boivin, *et al.*, 2020.
[75] Biggs, 2020; Littman, 2018.

onset gender dysphoria and have aged into adolescence and people whose onset was not until adolescence. Similarly, there are clinics failing to distinguish people who had adolescent-onset gender dysphoria and aged into adulthood from adult-onset gender dysphoria. Studies selecting groups according to their current age instead of their ages of onset can produce only confounded results, representing unclear mixes according to how many of each type of case wound up in the final sample.

3. Mental Illness in Adolescent-Onset Gender Dysphoria

76. In 2019, a Special Section of the *Archives of Sexual Behavior* was published: "Clinical Approaches to Adolescents with Gender Dysphoria." It included this brief yet thorough summary of rates of mental health issues among adolescents expressing gender dysphoria by Dr. Aron Janssen of the Department of Child and Adolescent Psychiatry of New York University:[76] The literature varies in the range of percentages of adolescents with co-occurring disorders. The range for depressive symptoms ranges was 6–42%,[77] with suicide attempts ranging 10 to 45%.[78] Self-injurious thoughts and behaviors range 14–39%.[79] Anxiety disorders and disruptive behavior difficulties including Attention Deficit/Hyperactivity Disorder are also prevalent.[80] Gender dysphoria also overlaps with Autism Spectrum Disorder.[81]

77. Of particular concern in the context of adolescent onset gender dysphoria is *Borderline Personality Disorder* (BPD). The DSM criteria for BPD are:

> A pervasive pattern of instability of interpersonal relationships, self-image, and affects, and marked impulsivity beginning by early adulthood and present in a variety of contexts, as indicated by five (or more) of the following:
>
> 1. Frantic efforts to avoid real or imagined abandonment. (Note: Do not include suicidal or self-mutilating behaviour covered in Criterion 5.)

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76 Janssen, *et al.*, 2019.
77 Holt, *et al.*, 2016; Skagerberg, *et al.*, 2013; Wallien, *et al.*, 2007.
78 Reisner, *et al.*, 2015.
79 Holt, *et al.*, 2016; Skagerberg, *et al.*, 2013.
80 de Vries, *et al.*, 2011; Mustanski, *et al.*, 2010; Wallien, *et al.*, 2007.
81 de Vries, *et al.*, 2010; Jacobs, *et al.*, 2014; Janssen, *et al.*, 2016; May, *et al.*, 2016; Strang, *et al.*, 2014, 2016.

2. A pattern of unstable and intense interpersonal relationship characterized by alternating between extremes of idealization and devaluation.
3. *Identity disturbance: markedly and persistently unstable self-image or sense of self.*
4. Impulsivity in at least two areas that are potentially self-damaging (e.g., spending, sex, substance abuse, reckless driving, binge eating). (Note: Do not include suicidal or self-mutilating behavior covered in Criterion 5.)
5. *Recurrent suicidal behaviour, gestures, or threats, or self-mutilating behavior.*
6. Affective instability due to a marked reactivity of mood (e.g., intense episodic dysphoria, irritability, or anxiety usually lasting a few hours and only rarely more than a few days).
7. Chronic feelings of emptiness.
8. Inappropriate, intense anger or difficulty controlling anger (e.g., frequent displays of temper, constant anger, recurrent physical fights).
9. Transient, stress-related paranoid ideation or severe dissociative symptoms.

(Italics added.)

78. It is increasingly hypothesized that very many cases appearing to be adolescent-onset gender dysphoria are actually cases of BPD.[82] That is, some people may be misinterpreting their experiences to represent a gender identity issue, when it instead represents the "identity disturbance" noted in symptom Criterion 3. Like adolescent-onset gender dysphoria, BPD begins to manifest in adolescence, is substantially more common among biological females than males, and occurs in 2–3% of the population, rather than 1-in-5,000 people (*i.e.*, 0.02%). Thus, if even only a portion of people with BPD had an 'identity disturbance' that focused on gender identity and were mistaken for transgender, they could easily overwhelm the number of genuine cases of gender dysphoria.

79. A primary cause for concern is symptom Criterion 5: recurrent suicidality. Regarding the provision of mental health care, this is a crucial distinction: A person with BPD going undiagnosed will not receive the appropriate treatments (the

[82] *E.g.*, Zucker, 2019.

currently most effective of which is Dialectical Behavior Therapy). A person with a cross-gender identity would be expected to feel relief from medical transition, but someone with BPD would not: The problem was not about *gender* identity, but about having an *unstable* identity. Moreover, after a failure of medical transition to provide relief, one would predict for these people increased levels of hopelessness and increased risk of suicidality. One would predict also that misdiagnoses would occur more often if one reflexively dismissed or discounted symptoms of BPD as responses to "minority stress." *See infra* Part VI.D (discussing minority stress).

80. Regarding research, there have now been several attempts to document rates of suicidality among gender dysphoric adolescents. *See infra* Part VI.C. The scientific concern presented by BPD is that it poses a potential confound: samples of gender dysphoric adolescents could appear to have elevated rates of suicidality, not because of the gender dysphoria (or transphobia in society), but because of the number of people with BPD in the sample.

VI. Alleged Scientific Claims Assessed

A. Conversion Therapy

81. Activists and social media increasingly, but erroneously, apply the term "conversion therapy" moving farther and farther from what the research has reported. "Conversion therapy" (or "reparative therapy" and other names) was the attempt to change a person's sexual orientation; however, with the public more frequently accustomed to "LGB" being expanded to "LGBTQ+", the claims relevant only to sexual orientation are being misapplied to gender identity. The research has repeatedly demonstrated that once one explicitly acknowledges being gay or lesbian, this is only rarely mistaken. That is entirely unlike gender identity, wherein the great majority of children who declare cross-gender identity cease to do so by puberty, as shown unanimously by every follow-up study ever published. As the field grows increasingly polarized, any therapy failing to provide affirmation-on-demand is

mislabeled "conversion therapy."[83] Indeed, even actions of non-therapists, unrelated to any therapy have been labelled conversion therapy, including the very prohibition of biological males competing on female teams.[84]

B. Claims that All Childhood Outcome Studies Are Wrong

82. As already indicated, the follow-up studies of gender dysphoric children are unanimous in their conclusion that gender dysphoria desists in the large majority of cases. Nonetheless, some authors assert that the entire set of prospective outcomes studies on prepubescent children is wrong; that desistance is not, in fact, the usual outcome for gender dysphoric children; and that results from various retrospective studies are the more accurate picture.[85] As indicated in the responses published from authors of several prospective outcomes studies (and as summarized below), the detractors' arguments are invalid.[86]

83. There have been accusations that some of the prospective outcome studies are old. This criticism would be valid only if newer studies showed different results from the older studies; however, the findings of desistance are the same, indicating that age of the studies is not, in fact, a factor.

84. There have been accusations that some studies failed to use a DSM diagnosis, and should therefore be rejected. That would be a valid criticism only if studies using the DSM showed different results from studies not using the DSM. Because both kinds of studies showed the same results, one may conclude that DSM status was not a factor, even if using a DSM diagnosis would have been a preferred method.

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[83] D'Angelo, R., Syrulnik, E., Ayad, S., Marchiano, L., Kenny, D. T., & Clarke, P. (2021). One size does not fit all: In support of psychotherapy for gender dysphoria. *Archives of Sexual Behavior, 50,* 7–16.

[84] Turban, J. (2021, March 16). Trans girls belong on girls' sports teams. *Scientific American.* www.scientificamerican.com/article/trans-girls-belong-on-girls-sports-teams/

[85] Temple Newhook, *et al*., 2018; Winters, *et al*., 2018.

[86] Steensma, *et al*., 2018a; Zucker, *et al*. 2018.

85. There have been criticisms that some studies are too small to provide a reliable result. It is indeed true that if larger studies showed different results from the smaller studies, we would tend to favor the results of the larger studies. Because the smaller studies came to the same conclusion as the larger studies, however, the criticism is, once again, entirely moot.

86. There have been accusations that studies did not use the current DSM-5 as their method of diagnosing gender dysphoric children. This criticism would be valid only if there existed any studies using the DSM-5 against which to compare the existing studies. The DSM-5 is still too recent for there yet to have been long-term follow-up studies. It can be seen, however, that the outcome studies are the same across the DSM-III, DSM-III-R, DSM-IV, and DSM-IV-TR.

87. In science, there cannot be any such thing as a perfect study. Especially in medical research, where we cannot manipulate people in ways that would clear up difficult questions, all studies will have a fault. In science, we do not, however, reject every study with any identifiable short-coming—rather, we gather a diversity of observations, made with their diversity of compromises to safety and ethics (and time and cost, etc.), and tentatively accept the most parsimonious (simplest) explanation of the full set, weighting each study according to their individual strengths and weaknesses.

C. Assessing Claims of Suicidality

88. In the absence of scientific evidence associating improvement with transition among youth, demands for transition are increasingly accompanied by hyperbolic warnings of suicide should there be delay or obstacle to affirmation-on-demand. Social media circulate claims of extreme suicidality accompanied by declarations that "I'd rather have a trans daughter than a dead son." Such claims convey only grossly misleading misrepresentations of the research literature, however.

89. Despite that the media treat them as near synonyms, suicide and suicidality are distinct phenomena. They represent different behaviors with different motivations, with different mental health issues, and with differing clinical needs. *Suicide* refers to completed suicides and the sincere intent to die. It is substantially associated with impulsivity, using more lethal means, and being a biological male.[87] *Suicidality* refers to parasuicidal behaviors, including suicidal ideation, threats, and gestures. These typically represent cries for help rather than an intent to die and are more common among biological females. Suicidal threats can indicate any of many problems or represent emotional blackmail, as typified in "If you leave me, I will kill myself." Professing suicidality is also used for attention- seeking or for the support or sympathy it evokes from others, indicating distress much more frequently than an intent to die.

90. The scientific study of suicide is inextricably linked to that of mental illness. For example, as noted in the preceding, suicidality is a well-documented symptom of Borderline Personality Disorder (as are chronic identity issues), and personality disorders are highly elevated among transgender populations, especially adolescent-onset. Thus, the elevations of suicidality among gender dysphoric adolescents may not be a result of anything related to transition (or lack of transition), but to the overlap with mental illness of which suicidality is a substantial part. Conversely, improvements in suicidality reported in some studies may not be the result of anything related to transition, but rather to the concurrent general mental health support which is reported by the clinical reported prospective outcomes. Studies that include more than one factor at the same time without accounting for each other represent a "confound," and it cannot be known which factor (or both) is the one causing the effects observed. That is, when a study provides both mental health

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87 Freeman, *et al.,* 2017.

services and medical transition services at the same time, it cannot be known which (or both) is what caused any changes.

91. A primary criterion for readiness for transition used by the clinics demonstrating successful transition is the absence or resolution of other mental health concerns, such as suicidality. In the popular media, however, indications of mental health concerns are instead often dismissed as an expectable result caused by Sexual Minority Stress (SMS). It is generally implied that such symptoms will resolve upon transition and integration into an affirming environment. Dr. Adkins makes it explicit in her report that the purpose of "the medical treatment for gender dysphoria is to eliminate the clinically significant distress." (Adkins, p. 5.)

92. Despite that relevant professional association statements repeatedly call for mental health issues, including suicidality, to be resolved before transition (see *infra* Section VI), threats of suicide are instead oftentimes used as the very justification for labelling transition a 'medical necessity'. However plausible it might seem that failing to affirm transition causes suicidality, the epidemiological evidence indicates that hypothesis to be incorrect: Suicide rates remains elevated even after complete transition, as shown by a comprehensive review of 19 studies of suicidality in gender dysphoria.[88]

93. Of particular relevance in the present context is suicidality as a well-documented symptom of Borderline Personality Disorder (BPD) and that very many cases appearing to be adolescent-onset gender dysphoria actually represent cases of BPD. [See full DSM-5 criteria already listed herein.] That is, some people may be misinterpreting their experiencing of the broader "identity disturbance" of symptom Criterion 3 to represent a gender identity issue specifically. Like adolescent-onset gender dysphoria, BPD begins to manifest in adolescence and occurs in 2–3% of the

[88] McNeil, et al., 2017.

population, rather than 1-in-5,000 people. (Thus, if even only a portion of people with BPD experienced an identity disturbance that focused on gender identity and were mistaken for transgender, they could easily overwhelm the number of genuine cases of gender dysphoria.)

94. Rates of completed suicide are elevated among post-transition transsexuals, but are nonetheless rare,[89] and BPD is repeatedly documented to be greatly elevated among sexual minorities[90]. Overall, rates of suicidal ideation and suicidal attempts appear to be related—not to transition status—but to the social support received: The research evidence shows that support decreases suicidality, but that transition itself does not. Indeed, in some situations, social support was associated with increased suicide attempts, suggesting the reported suicidality may represent attempts to evoke more support.[91]

D. Assessing Demands for Social Transition and Affirmation-Only or Affirmation-on-Demand Treatment in Pre-Pubertal Children.

95. Colloquially, affirmation refers broadly to any actions that treat the person as belonging to a new gender. In different contexts, that could apply to social actions (use of a new name and pronouns), legal actions (changes to birth certificates), or medical actions (hormonal and surgical interventions). That is, social transition, legal transition, and medical transition (and subparts thereof) need not, and rarely do, occur at the same time. In practice, there are cases in which a child has socially only partially transitioned, such as presenting as one gender at home and another at school or presenting as one gender with one custodial parent and another gender with the other parent.

96. Referring to "affirmation" as a treatment approach is ambiguous: Although often used in public discourse to take advantage of the positive connotations of the

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89 Wiepjes, *et al.,* 2020.
90 Reuter, *et al.,* 2016; Rodriguez-Seiljas, *et al.,* 2021; Zanarni, *et al.,* 2021.
91 Bauer, *et al.*, 2015; Canetto, et al., 2021.

term, it obfuscates what exactly is being affirmed. This often leads to confusion, such as quoting a study of the benefits and risks of social affirmation in a discussion of medical affirmation, where the appearance of the isolated word "affirmation" refers to entirely different actions.

97. It is also an error to divide treatment approaches into affirmative versus non-affirmative. As noted already, the widely adopted Dutch Approach (and the guidelines of the multiple professional associations based on it) cannot be said to be either: It is a staged set of interventions, wherein social transition (and puberty blocking) may not begin until age 12 and cross-sex hormonal and other medical interventions, later.

98. Formal clinical approaches to helping children expressing gender dysphoria employ a gate-keeper model, with decision trees to help clinicians decide when and if the potential benefits of affirmation of the new gender would outweigh the potential risks of doing so. Because the gate-keepers and decision-trees generally include the possibility of affirmation in at least some cases, it is misleading to refer to any one approach as "the affirmation approach." The most extreme decision-tree would be accurately called affirmation-*on-demand,* involving little or no opportunity for children to explore at all whether the distress they feel is due to some other, less obvious, factor, whereas more moderate gate-keeping would endorse transition only in select situations, when the likelihood of regretting transition is minimized.

99. Many outcomes studies have been published examining the results of gate-keeper models, but no such studies have been published regarding affirmation-on-demand with children. Although there have been claims that affirmation-on-demand causes mental health or other improvement, these have been the result only of "retrospective" rather than "prospective" studies. That is, such studies did not take a sample of children and follow them up over time, to see how many dropped out altogether, how many transitioned successfully, and how many transitioned and

regretted it or detransitioned. Rather, such studies took a sample of successfully transitioned adults and asked them retrospective questions about their past. In such studies, it is not possible to know how many other people dropped out or regretted transition, and it is not possible to infer causality from any of the correlations detected, despite authors implying and inferring causality.

100. Olson and colleagues employed exactly such a retrospective study. They offered their survey to children in the TransYouth Project—people who have socially transitioned, their families, and any contacts they had, by word of mouth. This method is referred to as "convenience sampling," and differs from genuinely representative samples in applying to means of ensuring study participants accurately represent the population being studied. There were three groups of children for comparison: (i) children who had already socially transitioned, (ii) their siblings, and (iii) children in a university database of families interested in participating in child development research. As noted by the study authors, "For the first time, this article reports on socially transitioned gender children's mental health as reported by the children."[92] Reports from parents were also recorded.[93] In contrast, no reports or ratings were provided by any mental health care professional or researcher at all. That is, although adding self-assessments to the professional assessments might indeed provide novel insights, this project did not add self-assessment to professional assessment. Rather, it replaced professional assessment with self-assessment. Moreover, as already noted, Olson's data did not show what the Olson team claimed.[94] The dataset was subsequently re-analyzed, and "[T]o the contrary, the transgender children, even when supported by their parents, had significantly lower average scores on anxiety and self-worth. "[95]

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92 Durwood, *et al.*, 2017, at 121 (italics added).
93 *See* Olson, *et al.*, 2016.
94 Schumm, *et al.,* 2019.
95 Schumm & Crawford, 2020, p. 9

101. It is well established in the field of psychology that participant self-assessment can be severely unreliable for multiple reasons. For example, one well-known phenomenon in psychological research is known as "socially desirable responding"—the tendency of subjects to give answers that they believe will make themselves look good, rather than accurate answers. Specifically, subjects' reports that they are enjoying good mental health and functioning well could reflect the subjects' desire to be *perceived* as healthy and as having made good choices, rather than reflecting their actual mental health.

102. In their analyses, the study reported finding no significant differences between the transgender children, their non-transgender siblings, or the community controls. As the authors noted, "[t]hese findings are in striking contrast to previous work with gender-nonconforming children who had not socially transitioned, which found very high rates of depression and anxiety."[96] The authors are correct to note that their result contrasts with the previous research, but they do not discuss that this could reflect a problem with the novel research design they used: The subjective self-reports of the children and their parents' reports may not be reflecting reality objectively, as careful professional researchers would. Because the study did not employ any method to detect and control for participants indulging in "socially desirable responding" or acting under other biasing motivations, this possibility cannot be assessed or ruled out.

103. Because this was a single-time study relying on self-reporting, rather than a before-and-after transition study relying on professional evaluation, it is not possible to know if the children reported as well-functioning are in fact well-functioning, nor if so whether they are well-functioning because they were permitted to transition, or whether instead the fact is that they were already well-functioning

[96] Durwood, *et al.*, 2017, at 116.

and therefore permitted to transition. Finally, because the TransYouth project lacks a prospective design, it cannot be known how many cases attempted transition, reacted poorly, and then detransitioned, thus never having entered into the study in the first place.

E. Assessing the "Minority Stress Hypothesis"

104. The elevated levels of mental health problems among lesbian, gay, and bisexual populations is a well-documented phenomenon, and the idea that it is caused by living within a socially hostile environment is called the *Minority Stress Hypothesis*.[97] The association is not entirely straight-forward, however. For example, although lesbian, gay, and bisexual populations are more vulnerable to suicide ideation overall, the evidence specifically on adult lesbian and bisexual women is unclear. Meyer did not include transgender populations in originating the hypothesis, and it remains a legitimate question to what extent and in what ways it might apply to gender identity.

105. Minority stress is associated, in large part, with being a visible minority. There is little evidence that transgender populations show the patterns suggested by the hypothesis. For example, the minority stress hypothesis would predict differences according to how visibly a person is discernable as a member of the minority, which often changes greatly upon transition. Biological males who are very effeminate stand out throughout childhood, but in some cases can successfully blend in as adult females; whereas the adult-onset transitioners blend in very much as heterosexual cis-gendered males during their youth and begin visibly to stand out in adulthood, only for the first time.

106. Also suggesting minority stress cannot be the full story is that the mental health symptoms associated with minority stress do not entirely correspond with

[97] Meyer, 2003.

those associated with gender dysphoria. The primary symptoms associated with minority stress are depressive symptoms, substance use, and suicidal ideation.[98] The symptoms associated with gender dysphoria indeed include depressive symptoms and suicidal ideation, but also include anxiety symptoms, Autism Spectrum Disorders, and personality disorders.

VII. Assessing Statements from Professional Associations

A. Understanding the Value of Statements from Professional Associations

107. The value of position statements from professional associations should be neither over- nor under-estimated. In the ideal, an organization of licensed health care professionals would convene a panel of experts who would systematically collect all the available evidence about an issue, synthesizing it into recommendations or enforceable standards for clinical care, according to the quality of the evidence for each alternative. For politically neutral issues, with relevant expertise contained among association members, this ideal can be readily achievable. For controversial issues with no clear consensus, the optimal statement would summarize each perspective and explicate the strengths and weaknesses of each, providing relatively reserved recommendations and suggestions for future research that might resolve the continuing questions. Several obstacles can hinder that goal, however. Committees within professional organizations are typically volunteer activities, subject to the same internal politics of all human social structures. That is, committee members are not necessarily committees of experts on a topic—they are often committees of generalists handling a wide variety of issues or members of an interest group who feel strongly about political implications of an issue, instead of scientists engaged in the objective study of the topic.

[98] Meyer, 2003.

108. Thus, documents from professional associations may represent required standards, the violation of which may merit sanctions, or may represent only recommendations or guidelines. A document may represent the views of an association's full membership or only of the committee's members (or majorities thereof). Documents may be based on systematic, comprehensive reviews of the available research or selected portions of the research. In sum, the weight best placed on any association's statement is the amount by which that association employed evidence versus other considerations in its process.

B. Misrepresentations of statements of professional associations.

109. In the presently highly politicized context, official statements of professional associations have been widely misrepresented. In preparing the present report, I searched the professional research literature for documentation of statements from these bodies and from my own files, for which I have been collecting such information for many years. I was able to identify statements from six such organizations. Although not strictly a medical association, the World Professional Association for Transgender Health (WPATH) also distributed a set of guidelines in wide use and on which other organizations' guidelines are based.

110. Notably, despite that all these medical associations reiterate the need for mental health issues to be resolved before engaging in medical transition, only the AACAP members have medical training in mental health. The other medical specialties include clinical participation with this population, but their assistance in transition generally assumes the mental health aspects have already been assessed and treated beforehand.

1. World Professional Association for Transgender Health (WPATH)

111. The WPATH standards as they relate to prepubescent children begin with the acknowledgement of the known rates of desistance among gender dysphoric children:

> [I]n follow-up studies of prepubertal children (mainly boys) who were referred to clinics for assessment of gender dysphoria, the dysphoria persisted into adulthood for only 6–23% of children (Cohen-Kettenis, 2001; Zucker & Bradley, 1995). Boys in these studies were more likely to identify as gay in adulthood than as transgender (Green, 1987; Money & Russo, 1979; Zucker & Bradley, 1995; Zuger, 1984). Newer studies, also including girls, showed a 12–27% persistence rate of gender dysphoria into adulthood (Drummond, Bradley, Peterson-Badali, & Zucker, 2008; Wallien & Cohen-Kettenis, 2008).[99]

112. That is, "In most children, gender dysphoria will disappear before, or early in, puberty."[100]

113. Although WPATH does not refer to puberty blocking medications as "experimental," the document indicates the non-routine, or at least inconsistent availability of the treatment:

> Among adolescents who are referred to gender identity clinics, the number considered eligible for early medical treatment—starting with GnRH analogues to suppress puberty in the first Tanner stages—differs among countries and centers. Not all clinics offer puberty suppression. If such treatment is offered, the pubertal stage at which adolescents are allowed to start varies from Tanner stage 2 to stage 4 (Delemarre, van de Waal & Cohen-Kettenis, 2006; Zucker et al., [2012]).[101]

114. WPATH neither endorses nor proscribes social transitions before puberty, instead recognizing the diversity among families' decisions:

> Social transitions in early childhood do occur within some families with early success. This is a controversial issue, and divergent views are held by health professionals. The current evidence base is insufficient to predict the long-term outcomes of completing a gender role transition during early childhood.[102]

115. It does caution, however, "Relevant in this respect are the previously described relatively low persistence rates of childhood gender dysphoria."[103]

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99 Coleman, *et al.*, 2012, at 172.
100 Coleman, *et al.*, 2012, at 173.
101 Coleman, *et al.*, 2012, at 173.
102 Coleman, *et al.*, 2012, at 176.
103 Coleman, *et al.*, 2012, at 176 (quoting Drummond, *et al.*, 2008; Wallien & Cohen-Kettenis, 2008).

2. Endocrine Society (ES)

116. The 150,000-member Endocrine Society appointed a nine-member task force, plus a methodologist and a medical writer, who commissioned two systematic reviews of the research literature and, in 2017, published an update of their 2009 recommendations, based on the best available evidence identified. The guideline was co-sponsored by the American Association of Clinical Endocrinologists, American Society of Andrology, European Society for Paediatric Endocrinology, European Society of Endocrinology, Pediatric Endocrine Society (PES), and the World Professional Association for Transgender Health (WPATH).

117. The document acknowledged the frequency of desistance among gender dysphoric children:

> Prospective follow-up studies show that childhood GD/gender incongruence does not invariably persist into adolescence and adulthood (so-called "desisters"). Combining all outcome studies to date, the GD/gender incongruence of a minority of prepubertal children appears to persist in adolescence. . . . In adolescence, a significant number of these desisters identify as homosexual or bisexual.[104]

118. The statement similarly acknowledges inability to predict desistance or persistence, "With current knowledge, we cannot predict the psychosexual outcome for any specific child."[105]

119. Although outside their area of professional expertise, mental health issues were also addressed by the Endocrine Society, repeating the need to handle such issues before engaging in transition, "In cases in which severe psychopathology, circumstances, or both seriously interfere with the diagnostic work or make satisfactory treatment unlikely, clinicians should assist the adolescent in managing these other issues."[106] This ordering—to address mental health issues before embarking on transition—avoids relying on the unproven belief that transition will solve such issues.

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[104] Hembree, *et al.*, 2017, at 3876.
[105] Hembree, *et al.*, 2017, at 3876.
[106] Hembree, *et al.*, 2017, at 3877.

120. The Endocrine Society did not endorse any affirmation-only approach. The guidelines were neutral with regard to social transitions before puberty, instead advising that such decisions be made only under clinical supervision: "We advise that decisions regarding the social transition of prepubertal youth are made with the assistance of a mental health professional or similarly experienced professional."[107]

121. The Endocrine Society guidelines make explicit that, after gathering information from adolescent clients seeking medical interventions and their parents, the clinician "provides correct information to prevent unrealistically high expectations [and] assesses whether medical interventions may result in unfavorable psychological and social outcomes."[108]

3. Pediatric Endocrine Society and Endocrine Society (ES/PES)

122. In 2020, the 1500-member Pediatric Endocrine Society partnered with the Endocrine Society to create and endorse a brief, two-page position statement.[109] Although strongly worded, the document provided no specific guidelines, instead deferring to the Endocrine Society guidelines.[110]

123. It is not clear to what extent this endorsement is meaningful, however. According to the PES, the Endocrine Society "recommendations include evidence that treatment of gender dysphoria/gender incongruence is medically necessary and should be covered by insurance."[111] However, the Endocrine Society makes neither statement. Although the two-page PES document mentioned insurance coverage four times, the only mention of health insurance by the Endocrine Society was: "If GnRH analog treatment is not available (insurance denial, prohibitive cost, or other reasons), postpubertal, transgender female adolescents may be treated with an

[107] Hembree, *et al.*, 2017, at 3872.
[108] Hembree, *et al.*, 2017, at 3877.
[109] PES, online; Pediatric Endocrine Society & Endocrine Society, Dec. 2020.
[110] Pediatric Endocrine Society & Endocrine Society, Dec. 2020, at 1; Hembree, *et al.*, 2017.
[111] Pediatric Endocrine Society & Endocrine Society, Dec. 2020, at 1.

antiandrogen that directly suppresses androgen synthesis or action."[112] Despite the PES asserting it as "medically necessary," the Endocrine Society stopped short of that. Its only use of that phrase was instead limiting: "We recommend that a patient pursue genital gender-affirming surgery only after the MHP and the clinician responsible for endocrine transition therapy both agree that surgery is medically necessary and would benefit the patient's overall health and/or well-being."[113]

4. American Academy of Child & Adolescent Psychiatry (AACAP)

124. The 2012 statement of the American Academy of Child & Adolescent Psychiatry (AACAP) is not an affirmation-only policy. It notes:

> Just as family rejection is associated with problems such as depression, suicidality, and substance abuse in gay youth, the proposed benefits of treatment to eliminate gender discordance in youth must be carefully weighed against such possible deleterious effects. . . . In general, it is desirable to help adolescents who may be experiencing gender distress and dysphoria to defer sex reassignment until adulthood, or at least until the wish to change sex is unequivocal, consistent, and made with appropriate consent.[114]

125. The AACAP's language repeats the description of the use of puberty blockers only as an exception: "For situations in which deferral of sex reassignment decisions until adulthood is *not clinically feasible*, one approach that has been described in case series is sex hormone suppression under endocrinological management with psychiatric consultation using gonadotropin-releasing hormone analogues."[115]

126. The AACAP statement acknowledges the long-term outcomes literature for gender dysphoric children: "In follow-up studies of prepubertal boys with gender discordance—including many without any mental health treatment—the cross gender wishes usually fade over time and do not persist into adulthood,"[116] adding that "[c]linicians should be aware of current evidence on the natural course of gender

[112] Hembree, *et al.* 2017, at 3883.
[113] Hembree, *et al.*, 2017 at 3872, 3894.
[114] Adelson & AACAP, 2012, at 969.
[115] Adelson & AACAP, 2012, at 969 (italics added).
[116] Adelson & AACAP, 2012, at 963.

discordance and associated psychopathology in children and adolescents in choosing the treatment goals and modality."[117]

127. The policy similarly includes a provision for resolving mental health issues: "Gender reassignment services are available in conjunction with mental health services focusing on exploration of gender identity, cross-sex treatment wishes, counseling during such treatment if any, and *treatment of associated mental health problems*."[118] The document also includes minority stress issues and the need to deal with mental health aspects of minority status (*e.g.*, bullying).[119]

128. Rather than endorse social transition for prepubertal children, the AACAP indicates: "There is similarly no data at present from controlled studies to guide clinical decisions regarding the risks and benefits of sending gender discordant children to school in their desired gender. Such decisions must be made based on clinical judgment, bearing in mind the potential risks and benefits of doing so."[120]

5. American College of Obstetricians & Gynecologists (ACOG)

129. The American College of Obstetricians & Gynecologists (ACOG) published a "Committee Opinion" expressing recommendations in 2017. The statement indicates it was developed by the ACOG's Committee on Adolescent Health Care, but does not indicate participation based on professional expertise or a systematic method of objectively assessing the existing research. It includes the disclaimer: "This document reflects emerging clinical and scientific advances as of the date issued and is subject to change. The information should not be construed as dictating an exclusive course of treatment or procedure to be followed."[121]

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117 Adelson & AACAP, 2012, at 968.
118 Adelson & AACAP, 2012, at 970 (italics added).
119 Adelson & AACAP, 2012, at 969.
120 Adelson & AACAP, 2012, at 969.
121 ACOG, 2017, at 1.

130. Prepubertal children do not typically have clinical contact with gynecologists, and the ACOG recommendations include that the client additionally have a primary health care provider.[122]

131. The ACOG statement cites the statements made by other medical associations—European Society for Pediatric Endocrinology (ESPE),, PES, and the Endocrine Society—and by WPATH.[123] It does not cite any professional association of *mental* health care providers, however. The ACOG recommendations repeat the previously mentioned eligibility/readiness criteria of having no mental illness that would hamper diagnosis and no medical contraindications to treatment. It notes: "*Before* any treatment is undertaken, the patient must display eligibility and readiness (Table 1), meaning that the adolescent has been evaluated by a mental health professional, has no contraindications to therapy, and displays an understanding of the risks involved."[124]

132. The "Eligibility and Readiness Criteria" also include, "Diagnosis established for gender dysphoria, transgender, transsexualism."[125] This standard, requiring a formal diagnosis, forestalls affirmation-on-demand because self-declared self-identification is not sufficient for DSM diagnosis.

133. ACOG's remaining recommendations pertain only to post-transition, medically oriented concerns. Pre-pubertal social transition is not mentioned in the document, and the outcomes studies of gender dysphoric (prepubescent) children are not cited.

6. American College of Physicians (ACP)

134. The American College of Physicians published a position paper broadly expressing support for the treatment of LGBT patients and their families, including

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[122] ACOG, 2017, at 1.
[123] ACOG, 2017, at 1, 3.
[124] ACOG, 2017, at 1, 3 (citing the Endocrine Society guidelines) (italics added).
[125] ACOG, 2017, at 3 Table 1.

nondiscrimination, antiharassment, and defining "family" by emotional rather than biological or legal relationships in visitation policies, and the inclusion of transgender health care services in public and private health benefit plans.[126]

135. ACP did not provide guidelines or standards for child or adult gender transitions. The policy paper opposed attempting "reparative therapy;" however, the paper confabulated sexual orientation with gender identity in doing so. That is, on the one hand, ACP explicitly recognized that "[s]exual orientation and gender identity are inherently different."[127] It based this statement on the fact that "the American Psychological Association conducted a literature review of 83 studies on the efficacy of efforts to change *sexual orientation*."[128] The APA's document, entitled "Report of the American Psychological Task Force on appropriate therapeutic responses to *sexual orientation*" does not include or reference research on gender identity.[129] Despite citing no research about transgenderism, the ACP nonetheless included in its statement: "Available research does not support the use of reparative therapy as an effective method in the treatment of LGB*T* persons."[130] That is, the inclusion of "T" with "LGB" is based on something other than the existing evidence.

136. There is another statement,[131] which was funded by ACP and published in the Annals of Internal Medicine under its "*In the Clinic*" feature, noting that "'In the Clinic' does not necessarily represent official ACP clinical policy."[132] The document discusses medical transition procedures for adults rather than for children, except to note that "[n]o medical intervention is indicated for prepubescent youth,"[133] that a "mental health provider can assist the child and family with identifying an

126 Daniel & Butkus, 2015a, 2015b.
127 Daniel & Butkus, 2015b, at 2.
128 Daniel & Butkus, 2015b, at 8 (italics added).
129 APA, 2009 (italics added).
130 Daniel & Butkus, 2015b, at 8 (italics added).
131 Safer & Tangpricha, 2019.
132 Safer & Tangpricha, 2019, at ITC1.
133 Safer & Tangpricha, 2019, at ITC9.

appropriate time for a social transition,"[134] and that the "child should be assessed and managed for coexisting mood disorders during this period because risk for suicide is higher than in their cisgender peers."[135]

7. American Academy of Pediatrics (AAP)

137. The policy of the American Academy of Pediatrics (AAP) is unique among the major medical associations in being the only one to endorse an affirmation-on-demand policy, including social transition before puberty without any watchful waiting period. Although changes in recommendations can obviously be appropriate in response to new research evidence, the AAP provided none. Rather, the research studies AAP cited in support of its policy simply did not say what AAP claimed they did. In fact, the references that AAP cited as the basis of their policy instead outright contradicted that policy, repeatedly endorsing watchful waiting.[136] Moreover, of all the outcomes research published, the AAP policy cited *one*, and that without mentioning the outcome data it contained.[137].

8. The ESPE-LWPES GnRH Analogs Consensus Conference Group

138. Included in the interest of completeness, there was also a collaborative report in 2009, between the European Society for Pediatric Endocrinology (ESPE) and the Lawson Wilkins Pediatric Endocrine Society (LWPES).[138] Thirty experts were convened, evenly divided between North American and European labs and evenly divided male/female, who comprehensively rated the research literature on gonadotropin-release hormone analogs in children.

139. The effort concluded that "[u]se of gonadotropin-releasing hormone analogs for conditions other than central precocious puberty requires additional investigation

134 Safer & Tangpricha, 2019, at ITC9.
135 Safer & Tangpricha, 2019, at ITC9.
136 Cantor, 2020.
137 Cantor, 2020, at 1.
138 Carel et al., 2009.

and cannot be suggested routinely."[139] However, gender dysphoria was not explicitly mentioned as one of those other conditions.

[139] Carel et al. 2009, at 752.

References

Achille, C., Taggart, T., Eaton, N. R., Osipoff, J., Tafuri, K., Lane, A., & Wilson, T. A. (2020). Longitudinal impact of gender-affirming endocrine intervention on the mental health and well-being of transgender youths: Preliminary results. *International Journal of Pediatric Endocrinology*. doi: 10.1186/s13633-020-00078-2

Adelson, S. L., & American Academy of Child and Adolescent Psychiatry (AACAP) Committee on Quality Issues. (2012). Practice parameter on gay, lesbian, or bisexual sexual orientation, gender nonconformity, and gender discordance in children and adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry, 51*, 957–974.

American College of Obstetricians and Gynecologists. (2017). Care for transgender Adolescents. Committee Opinion No. 685. Retrieved from www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2017/01/care-for-transgender-adolescents

American Psychological Association, Task Force on Appropriate Therapeutic Responses to Sexual Orientation. (2009). Report of the American Psychological Association Task Force on Appropriate Therapeutic Responses to Sexual Orientation. Retrieved from http://www. apa.org/pi/lgbc/publications/therapeutic-resp.html

Anzani, A., De Panfilis, C., Scandurra, C., & Prunas, A. (2020). Personality Disorders and Personality Profiles in a Sample of Transgender Individuals Requesting Gender-Affirming Treatments. *International Journal of Environmental Research and Public Health, 27, 17,* 1521. www.ncbi.nlm.nih.gov/pmc/articles/PMC7084367/

Bancroft, J. (2009). *Human sexuality and its problems (3rd ed.).* New York: Elsevier.

Bauer, G. R., Scheim, A. I., Pyne, J., Travers, R., & Hammond, R. (2015). Intervenable factors associated with suicide risk in transgender persons: A respondent driven sampling study in Ontario, Canada. *BMC Public Health*, 15, 525.

Biggs, M. (2019). A letter to the editor regarding the original article by Costa et al: Psychological support, puberty suppression, and psychosocial functioning in adolescents with gender dysphoria. *Journal of Sexual Medicine, 16,* 2043.

Biggs, M. (2020). Gender dysphoria and psychological functioning in adolescents treated with GnRHa: Comparing Dutch and English prospective studies. *Archives of Sexual Behavior*, 49, 2231–2236.

Blanchard, R. (1985). Typology of male-to-female transsexualism. *Archives of Sexual Behavior*, 14, 247–261.

Blanchard, R. (1988). Nonhomosexual gender dysphoria. *The Journal of Sex Research*, 24, 188–193.

Blanchard, R. (1989a). The classification and labeling of nonhomosexual gender dysphorias. *Archives of Sexual Behavior*, 18, 315–334.

Blanchard, R. (1989b). The concept of autogynephilia and the typology of male gender dysphoria. *Journal of Nervous and Mental Disease*, 177, 616–623.

Blanchard, R. (1990). Gender identity disorders in adult women. In R. Blanchard & B. W. Steiner (Eds.), *Clinical management of gender identity disorders in children and adults* (pp. 77–91). Washington, DC: American Psychiatric Press.

Blanchard, R. (1991). Clinical observations and systematic studies of autogynephilia. *Journal of Sex and Marital Therapy*, 17, 235–251.

Blanchard, R., Steiner, B. W., Clemmensen, L. H., & Dickey, R. (1989). Prediction of regrets in postoperative transsexuals. *Canadian Journal of Psychiatry*, 34, 43–45.

Bränström, R., & Pachankis, J. E. (2019). Reduction in mental health treatment utilization among transgender individuals after gender-affirming surgeries: A total population study. *American Journal of Psychiatry, 177,* 727–734.

Boivin, L., Notredame, C.-E., Jardri, R., & Medjkane, F. (2020). Supporting parents of transgender adolescents: Yes, but how? *Archives of Sexual Behavior*, 49, 81–83.

Cantor, J. M. (2020). Transgender and gender diverse children and adolescents: Fact-checking of AAP policy. *Journal of Sex & Marital Therapy*, 46, 307–313.

Canetto, S. S., Antonelli, P., Ciccotti, A., Dettore, D., & Lamis, D. A. (2021). Suicidal as normal: A lesbian, gay, and bisexual youth script? *Crisis, 42,* 292–300.

Carel, J. C., Eugster, E. A., Rogol, A., Ghizzoni, L., Palmert, M. R.; ESPE-LWPES GnRH Analogs Consensus Conference Group, Antoniazzi, F., Berenbaum, S., Bourguignon, J. P., Chrousos, G. P., Coste, J., Deal, S., de Vries, L., Foster, C., Heger, S., Holland, J., Jahnukainen, K., Juul, A., Kaplowitz, P., Lahlou, N., Lee, M. M., Lee, P., Merke, D. P., Neely, E. K., Oostdijk, W., Phillip, M., Rosenfield, R. L., Shulman, D., Styne, D., Tauber, M., Wit, J. M. (2009). Consensus statement on the use of gonadotropin-releasing hormone analogs in children. *Pediatrics*, 123(4), e752–e762.

Cohen, J., Cohen, P., West, S. G. Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences (3rd ed.).* Mahwah, NJ: Lawrence Erlbaum Associates.

Carmichael, P., Butler, G., Masic, U., Cole, T. J., De Stavola, B. L., Davidson, S., Skageberg, E. M., Khadr, S., Viner, R. M. (2021). Short-term outcomes of pubertal suppression in a selected cohort of 12 to 15 year old young people with persistent gender dysphoria in the UK. *PLosONE*, 16(2): e0243894.

Cohen-Kettenis, P. T. (2001). Gender identity disorder in DSM? *Journal of the American Academy of Child & Adolescent Psychiatry*, 40, 391–391.

Cohen-Kettenis, P. T., Owen, A., Kaijser, V. G., Bradley, S. J., & Zucker, K. J. (2003). Demographic characteristics, social competence, and behavior problems in children with gender identity disorder: A cross-national, cross-clinic comparative analysis. *Journal of Abnormal Child Psychology*, 31, 41–53.

Coleman, E., Bockting, W., Botzer, M., Cohen-Kettenis, P., DeCuypere, G., Feldman, J., Fraser, L., Green, J., Knudson, G., Meyer, W. J., Monstrey, S., Adler, R. K.,

Brown, G. R., Devor, A. H., Ehrbar, R., Ettner, R., Eyler, E., Garofalo, R., Karasic, D. H., Lev, A. I., Mayer, G., Meyer-Bahlburg, H., Hall, B. P., Pfaefflin, F., Rachlin, K., Robinson, B., Schechter, L. S., Tangpricha, V., van Trotsenburg, M., Vitale, A., Winter, S., Whittle, S., Wylie, K. R., & Zucker, K. (2012). Standards of care for the health of transsexual, transgender, and gender-nonconforming people, version 7. *International Journal of Transgenderism*, 13, 165–232.

Costa, R., Dunsford, M., Skagerberg, E., Holt V., Carmichael, P., & Colizzi, M. (2015). Psychological support, puberty suppression, and psychosocial functioning in adolescents with gender dysphoria. *Journal of Sexual Medicine*, 12, 2206–2214.

Dahlen, S., Connolly, D., Arif, I., Hyder Junejo, M., Bewley, S., & Meads, C. (2021). *International clinical practice guidelines for gender minority/trans people: Systematic review and quality assessment. BMJ Open, 11,* e048943.

Daniel, H., & Butkus, R. (2015a). Lesbian, gay, bisexual, and transgender health disparities: Executive summary of a policy position paper from the American College of Physicians. *Annals of Internal Medicine*, 163, 135–137.

Daniel, H., & Butkus, R. (2015b). Appendix: Lesbian, gay, bisexual, and transgender health disparities: A policy position paper from the American College of Physicians. *Annals of Internal Medicine*, 163(2), [unpaginated].

de Vries, A. L. C. & Cohen-Kettenis, P. T. (2012). Clinical management of gender dysphoria in children and adolescents: The Dutch Approach. *Journal of Homosexuality*, 59, 301–320.

de Vries, A. L. C., McGuire, J. K., Steensma, T. D., Wagenaar, E. C. F., Doreleijers, T. A. H., & Cohen-Kettenis, P. T. (2014). Young adult psychological outcome after puberty suppression and gender reassignment. *Pediatrics*, 134, 1–9.

de Vries, A. L. C., Steensma, T. D., Doreleijers, T. A. H., & Cohen-Kettenis, P. T. (2011). Puberty suppression in adolescents with gender identity disorder: A prospective follow-up study. *Journal of Sexual Medicine*, 8, 2276–2283.

de Vries, A. L., Doreleijers, T. A., Steensma, T. D., & Cohen-Kettenis, P. T. (2011). Psychiatric comorbidity in gender dysphoric adolescents. *Journal of Child Psychology and Psychiatry*, 52, 1195–1202.

de Vries, A. L., Noens, I. L., Cohen-Kettenis, P. T., van Berckelaer- Onnes, I. A., & Doreleijers, T. A. (2010). Autism spectrum disorders in gender dysphoric children and adolescents. *Journal of Autism and Developmental Disorders*, 40, 930–936.

Delemarre-van de Waal, H. A., & Cohen- Kettenis, P. T. (2006). Clinical management of gender identity disorder in adolescents: A protocol on psychological and paediatric endocrinology aspects. *European Journal of Endocrinology*, 155 (suppl 1), S131–S137.

Dhejne, C., Van Vlerken, R., Geylens, G., & Arcelus, J. (2016). Mental health and gender dysphoria: A review of the literature. *International Review of Psychiatry*, 28, 44–57.

Dhejne, C., Lichtenstein, P., Boman, M., Johansson, A. L. V., Langström, N., & Landén, M. (2011). Long-term follow-up of transsexual persons undergoing sex

reassignment surgery: Cohort study in Sweden. *PLoS ONE 6*(2), e16885.

Dhejneberg, C., Öberg, K., Arver, S., & Landén, M. (2014). An analysis of all applications for sex reassignment surgery in Sweden, 1960–2010: Prevalence, incidence, and regrets. *Archives of Sexual Behavior*, 43, 1535–1545.

Drummond, K. D., Bradley, S. J., Peterson-Badali, M., & Zucker, K. J. (2008). A follow up study of girls with gender identity disorder. *Developmental Psychology*, 44, 34–45.

Durwood, L., McLaughlin, K. A., & Olson, K. R. (2017). Mental health and self-worth in socially transitioned transgender youth. *Journal of the American Academy of Child & Adolescent Psychiatry*, 56, 116–123.

Finland Ministry of Social Affairs and Health, Council for Choices in Health Care. (2020, June 11). *Medical treatment methods for dysphoria associated with variations in gender identity in minors—Recommendation.* Retrieved from https://palveluvalikoima.fi/documents/1237350/22895008/Summary_minors_en+(1).pdf/fa2054c5-8c35-8492-59d6-b3de1c00de49/Summary_minors_en+(1).pdf?t=1631773838474

Finland Ministry of Social Affairs and Health, Council for Choices in Health Care. (2020, June 16). *Medical treatments for gender dysphoria that reduces functional capacity in transgender people—Recommendation.* Retrieved from https://palveluvalikoima.fi/documents/1237350/22895838/Summary+transgender.pdf/2cc3f053-2e34-39ce-4e21-becd685b3044/Summary+transgender.pdf?t=1592318543000

Freeman, A., Mergl, R., Kohls, E., Székely, A., Gusmao, R., Arensman, E., Koburger, N., Hegerl, U., & Rummel-Kluge, C. (2017). A cross-national study on gender differences in suicide intent. *BMC Psychiatry, 17,* 234.

Green, R. (1987). *The "sissy boy syndrome" and the development of homosexuality*. New Haven, CT: Yale University Press.

Hembree, W. C., Cohen-Kettenis, P. T., Gooren, L., Hannema, S. E., Meyer, W. J., Murad, M. H., Rosenthal, S. M., Safer, T. D., Tangpricha, V., & T'Sjoen, G. G. (2017). Endocrine treatment of gender-dysphoric/ gender-incongruent persons: An Endocrine Society clinical practice guideline. *Journal of Clinical Endocrinology & Metabolism*, 102, 3869–3903.

Hepp, U., Kraemer, B., Schnyder, U., Miller, N., & Delsignore, A. (2005). Psychiatric comorbidity in gender identity disorder. *Journal of Psychosomatic Research, 58*, 259–261.

Hisle-Gorman, E., Schvey, N. A., Adirim, T. A., Rayne, A. K., Susi, A., Roberts, T. A., & Klein, D. A. (2021). Mental healthcare utilization of transgender youth before and after affirming treatment. *The Journal of Sexual Medicine, 18,* 1444–1454.

Holt, V., Skagerberg, E., & Dunsford, M. (2016). Young people with features of gender dysphoria: Demographics and associated difficulties. *Clinical Child Psychology and Psychiatry, 21*, 108–118.

Jacobs, L. A., Rachlin, K., Erickson-Schroth, L., & Janssen, A. (2014). Gender dysphoria and co-occurring autism spectrum disorders: Review, case examples,

and treatment considerations. *LGBT Health, 1*, 277–282.

Janssen, A., Busa, S., Wernick, J. (2019). The complexities of treatment planning for transgender youth with co-occurring severe mental illness: A literature review and case study. *Archives of Sexual Behavior, 48*, 2003–2009.

Janssen, A., Huang, H., & Duncan, C. (2016). Gender variance among youth with autism spectrum disorders: A retrospective chart review. *Transgender Health, 1*, 63–68.

Kalin, N. H. (2020). Reassessing mental health treatment utilization reduction in transgender individuals after gender-affirming surgeries: A comment by the Editor on the process. *American Journal of Psychiatry, 177,* 765.

Kaltiala, R, Heino, E., Työläjärvi, & Suomalainen, L. (2020). Adolescent development and psychosocial functioning after starting cross-sex hormones for gender dysphoria. *Nordic Journal of Psychiatry, 74,* 213–219.

Kaltiala-Heino, R., Sumia, M., Työläjärvi, M., & Lindberg, N. (2015). Two years of gender identity service for minors: Overrepresentation of natal girls with severe problems in adolescent development. *Child and Adolescent Psychiatry and Mental Health, 9*, 9.

Kuper, L. E., Stewart, S., Preston, S., Lau, M., & Lopez, X. (2020). Body dissatisfaction and mental health outcomes of youth on gender- affirming hormone therapy. *Pediatrics, 145*, e20193006.

Lehmann, K., Rosato, M., McKenna, H., & Leavey, G. (2021). Dramaturgical accounts of transgender individuals: Impression management in the presentation of self to specialist gender services. *Archives of Sexual Behavior, 50,* 3539–3549.

Littman, L. (2018). Parent reports of adolescents and young adults perceived to show signs of a raid onset of gender dysphoria. *PLoS ONE, 13*(8), e0202330.

May, T., Pang, K., & Williams, K. J. (2016). Gender variance in children and adolescents with autism spectrum disorder from the National Database for Autism Research. *International Journal of Transgenderism, 18*, 7–15.

McCall, B. (2021, October 7). Psychiatrists shift stance on gender dysphoria, recommend therapy. *Medscape Psychiatry.* Retrieved from www.medscape.com/viewarticle/960390?src=soc_tw_share

McNeil, J., Ellis, S. J., & Eccles, F. J. R. (2017). Suicide in trans populations: A systematic review of prevalence and correlates. Psychology of Sexual Orientation and Gender Diversity, 4, 341–353.

Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin, 129*, 674–697.

Money, J., & Russo, A. J. (1979). Homosexual outcome of discordant gender identity/ role in childhood: Longitudinal follow-up. *Journal of Pediatric Psychology, 4*, 29–41.

Mustanski, B. S., Garofalo, R., & Emerson, E. M. (2010). Mental health disorders,

psychological distress, and suicidality in a diverse sample of lesbian, gay, bisexual, and transgender youths. *American Journal of Public Health, 100*, 2426–2432.

Nainggolan, L. (2021, May 12). Hormonal Tx of youth with gender dysphoria stops in Sweden. Medscape Psychiatry. Retrieved from www.medscape.com/viewarticle/950964?src=soc_tw_share

Olson, K. R., Durwood, L., DeMeules, M., & McLaughlin, K. A. (2016). Mental health of transgender children who are supported in their identities. *Pediatrics, 137*, e20153223.

Pediatric Endocrine Society & Endocrine Society. (2020, December 15). *Transgender health*. Retrieved from www.endocrine.org/advocacy/position-statements/transgender-health.

Pediatric Endocrine Society. (Online). About PES. Retrieved from https://pedsendo.org/about-pes/

Rae, J. R., Gülgoz, S., Durwood, L., DeMeules, M., Lowe, R., Lindquist, G., & Olson, K. R. (2019). Predicting early-childhood gender transitions. *Psychological Science, 30*, 669–681.

Rafferty, J., AAP Committee on psychosocial aspects of child and family health, AAP Committee on adolescence, AAP Section on lesbian, gay, bisexual, and transgender health and wellness. (2018). Ensuring comprehensive care and support for transgender and gender-diverse children and adolescents. *Pediatrics, 142*(4), e20182162

Reisner, S. L., Vetters, R., Leclerc, M., Zaslow, S., Wolfrum, S., Shumer, D., & Mimiaga, M. J. (2015). Mental health of transgender youth in care at an adolescent urban community health center: A matched retrospective cohort study. *Journal of Adolescent Health, 56(3)*, 274–279.

Reuter, T. R., Sharp, C., Kalpakci, A. H., Choi, H. J., & Temple, J. R. (2016). Sexual orientation and Borderline Personality Disorder features in a community sample of adolescents. *Journal of Personality Disorders, 30,* 694–707.

Rodriguez-Seiljas, C., Morgan, T. A., & Zimmerman, M. (2021). A population-based examination of criterion-level disparities in the diagnosis of Borderline Personality Disorder among sexual minority adults. *Assessment, 28,* 1097–1109.

Safer, J. D., Tangpricha, V. (2019). In the clinic: Care of the transgender patient. *Annals of Internal Medicine, 171*(1), ITC1–ITC6.

Sax, L. (2002). How common is Intersex? A response to Ann Fausto-Sterling. *The Journal of Sex Research, 39,* 174–178.

Schumm, W. R., Crawford, D. W., Fawver, M. M., Gray, N. K., Niess, Z. M., & Wagner, A. D. (2019). Statistical errors in major journals: Two case studies used in a basic statistics class to assess understanding of applied statistics. *Psychology and Education—An Interdisciplinary Journal, 56,* 35–42.

Schumm, W. R., & Crawford, D. W. (2020). Is research on transgender children what it seems? Comments on recent research on transgender children with high levels

of parental support. *The Linacre Quarterly, 87,* 9–24.

Singh, D., Bradley, S. J., & Zucker, K. J. (2021). A follow-up study of boys with gender identity disorder. *Frontiers in Psychiatry*, 12, 632784.

Skagerberg, E., Parkinson, R., & Carmichael, P. (2013). Self-harming thoughts and behaviors in a group of children and adolescents with gender dysphoria. *International Journal of Transgenderism, 14*, 86–92.

Skelly, A. C., Dettori, J. R., & Brodt, E. D. (2012). Assessing bias: The importance of considering confounding. *Evidence-based Spine-Care Journal, 3,* 9–12.

Spack, N. P., Edwards-Leeper, L., Feldman, H. A., Leibowitz, S., Mandel, F., Diamond, D. A., & Vance, S. R. (2012). Children and adolescents with gender identity disorder referred to a pediatric medical center. *Pediatrics, 129,* 418–425.

Spack, N. P. (2013). Management of transgenderism. *Journal of the American Medical Association, 309,* 478–484.

Steensma, T. D., & Cohen-Kettenis, P. T. (2018a). A critical commentary on "A critical commentary on follow-up studies and 'desistance' theories about transgender and gender-nonconforming children". *International Journal of Transgenderism, 19*, 225–230.

Steensma, T. D., Cohen-Kettenis, P. T., & Zucker, K. J. (2018b). Evidence for a change in the sex ratio of children referred for gender dysphoria: Data from the Center of Expertise on Gender Dysphoria in Amsterdam (1988–2016). *Journal of Sex & Marital Therapy, 44,* 713–715.

Steensma, T. D., McGuire, J. K., Kreukels, B. P. C., Beekman, A. J., & Cohen-Kettenis, P. T. (2013). Factors associated with desistence and persistence of childhood gender dysphoria: A quantitative follow-up study. *Journal of the American Academy of Child and Adolescent Psychiatry, 52*, 582–590.

Strang, J. F., Kenworthy, L., Dominska, A., Sokoloff, J., Kenealy, L. E., Berl, M., … Wallace, G. L. (2014). Increased gender variance in autism spectrum disorders and attention deficit hyperactivity disorder. *Archives of Sexual Behavior, 43*, 1525–1533.

Strang, J. F., Meagher, H., Kenworthy, L., de Vries, A. L., Menvielle, E., Leibowitz, S., … Anthony, L. G. (2016). Initial clinical guidelines for co-occurring autism spectrum disorder and gender dysphoria or incongruence in adolescents. *Journal of Clinical Child and Adolescent Psychology, 47*, 105–115.

Swedish Agency of Health Technology Assessment and Assessment of Social Services. (2019). *Gender dysphoria in children and adolescents: An inventory of the literature.* Retrieved from: www.sbu.se/en/publications/sbu-bereder/gender-dysphoria-in-children-and-adolescents-an-inventory-of-the-literature/

Temple Newhook, J., Pyne, J., Winters, K., Feder, S., Holmes, C., Tosh, J. Sinnott, M.-L., Jamieson, A., & Pickett, S. (2018). A critical commentary on follow-up studies and "desistance" theories about transgender and gender-nonconforming children. *International Journal of Transgenderism, 19*, 212–224.

Tetelepta, B. (2021, Feb 27). More research is urgently needed into transgender care for young people: 'Where does the large flow of children come from?' [translated]. Algemeen Dagblad. Retrieved from www.ad.nl/nijmegen/dringend-meer-onderzoek-nodig-naar-transgenderzorg-aan-jongeren-waar-komt-de-grote-stroom-kinderen-vandaan~aec79d00/?referrer=https%3A%2F%2Ft.co%2F.

Thrower, E., Bretherton, I., Pang, K. C., Zajac, J. D., & Cheung, A. S. (2020). Prevalence of Autism Spectrum Disorder and Attention-Deficit Hyperactivity Disorder amongst individuals with Gender Dysphoria: A systematic review. *Journal of Autism and Developmental Disorders*, 50, 695–706.

United Kingdom National Health Service (NHS), National Institute for Health and Care Excellence, (2021, March 11). *Evidence review: Gonadotrophin releasing hormone analogues for children and adolescents with gender dysphoria.* Retrieved from www.evidence.nhs.uk/document?id=2334888&returnUrl=search%3ffrom%3d2020-01-01%26q%3dgender%2bdysphoria%26sp%3don%26to%3d2021-03-31

van der Miesen, A. I. R., Steensma, T. D., de Vries, A. L. C., Bos, H., Popma, A. (2020). Psychological functioning in transgender adolescence before and after gender-affirmative care compared with cisgender general population peers. *Journal of Adolescent Health, 66*, 699–704.

Wallien, M. S. C., & Cohen-Kettenis, P. T. (2008). Psychosexual outcome of gender-dysphoric children. *Journal of the American Academy of Child & Adolescent Psychiatry, 47*, 1413–1423.

Wallien, M. S., Swaab, H., & Cohen-Kettenis, P. T. (2007). Psychiatric comorbidity among children with gender identity disorder. *Journal of the American Academy of Child and Adolescent Psychiatry, 46*, 1307–1314.

Warrier, V., Greenberg, D. M., Weir, E., Buckingham, C., Smith, P., Lai, M.-C., Allison, C., & Baron-Cohen, S. (2020). Elevated rates of autism, other neurodevelopmental and psychiatric diagnoses, and autistic traits in transgender and gender-diverse individuals. *Nature Communications, 11,* 3959.

Wiepjes, C. M., den Heijer, M., Bremmer, M. A., Nota, N. M., de Block, C. J. M., Coumou, B. J. G., & Steensma, T. D. (2020). Trends in suicide death risk in transgender people: Results from the Amsterdam Cohort of Gender Dysphoria study (1972–2017). *Acta Psychiatrica Scandinavica, 141,* 486–491.

Wiepjes, C. M., Nota, N. M., de Bok, C. J. M., Klaver, M., de Vries, A. L. C., Wensing-Kruger, S. A., de Jongh, R. T., Bouman, M-B., Steensma, T. D., Cohen-Kettenis, P., Gooren, L. J. G., Kreukels B. P. C., & den Heijer, M. (2018). The Amsterdam Cohort of Gender Dysphoria Study (1972–2015): Trends in prevalence, treatment, and regrets. *Journal of Sexual Medicine, 15*, 582–590.

Winters, K., Temple Newhook, J., Pyne, J., Feder, S., Jamieson, A., Holmes, C., Sinnott, M.-L., Pickett, S., & Tosh J. (2018). Learning to listen to trans and gender diverse children: A Response to Zucker (2018) and Steensma and Cohen-Kettenis (2018). *International Journal of Transgenderism, 19*, 246–250.

Wood, H., Sasaki, S., Bradley, S. J., Singh, D., Fantus, S., Own-Anderson, A., Di Giacomo, A., Bain, J., & Zucker, K. J. (2013). Patterns of referral to a gender

identity service for children and adolescents (1976–2011): Age, sex ratio, and sexual orientation. *Journal of Sex & Marital Therapy, 39,* 1–6.

Zanarini, M. C., Magni, L. R., Temes, C. M., Hein, K. E., Aguirre, B. A., & Goodman, M. (2021). Sexual orientation and gender of intimate relationship partners among adolescents with BPD and psychiatrically healthy adolescents. *Journal of Personality Disorders, 35 (Suppl. B),* 1–7.

Zucker, K. J. (2018). The myth of persistence: Response to "A critical commentary on follow-up studies and 'desistance' theories about transgender and gender-nonconforming children" by Temple Newhook et al. (2018). *International Journal of Transgenderism, 19*, 231–245.

Zucker, K. J. (2019). Adolescents with gender dysphoria: Reflections on some contemporary clinical and research issues. *Archives of Sexual Behavior, 48,* 1983–1992.

Zucker, K. J., & Bradley, S. J. (1995). *Gender identity disorder and psychosexual problems in children and adolescents*. New York: Guilford Press.

Zucker, K. J., Bradley, S. J., Owen-Anderson, A., Kibblewhite, S. J., Wood, H., Singh, D., & Choi, K. (2012). Demographics, behavior problems, and psychosexual characteristics of adolescents with gender identity disorder or transvestic fetishism. *Journal of Sex & Marital Therapy, 38,* 151–189.

Zuger, B. (1984). Early effeminate behavior in boys: Outcome and significance for homosexuality. *Journal of Nervous and Mental Disease, 172*, 90–97.

EXPERT REPORT OF JAMES M. CANTOR, PHD

APPENDIX 1

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EDUCATION

Postdoctoral Fellowship — Jan., 2000–May, 2004
Centre for Addiction and Mental Health • Toronto, Canada

Doctor of Philosophy — Sep., 1993–Jun., 2000
Psychology • McGill University • Montréal, Canada

Master of Arts — Sep., 1990–Jan., 1992
Psychology • Boston University • Boston, MA

Bachelor of Science — Sep. 1984–Aug., 1988
Interdisciplinary Science • Rensselaer Polytechnic Institute • Troy, NY
Concentrations: Computer science, mathematics, physics

EMPLOYMENT HISTORY

Director — Feb., 2017–Present
Toronto Sexuality Centre • Toronto, Canada

Senior Scientist (Inaugural Member) — Aug., 2012–May, 2018
Campbell Family Mental Health Research Institute
Centre for Addiction and Mental Health • Toronto, Canada

Senior Scientist — Jan., 2012–May, 2018
Complex Mental Illness Program
Centre for Addiction and Mental Health • Toronto, Canada

Head of Research — Nov., 2010–Apr. 2014
Sexual Behaviours Clinic
Centre for Addiction and Mental Health • Toronto, Canada

Research Section Head — Dec., 2009–Sep. 2012
Law & Mental Health Program
Centre for Addiction and Mental Health • Toronto, Canada

Psychologist — May, 2004–Dec., 2011
Law & Mental Health Program
Centre for Addiction and Mental Health • Toronto, Canada

Clinical Psychology Intern Sep., 1998–Aug., 1999
Centre for Addiction and Mental Health • Toronto, Canada

Teaching Assistant Sep., 1993–May, 1998
Department of Psychology
McGill University • Montréal, Canada

Pre-Doctoral Practicum Sep., 1993–Jun., 1997
Sex and Couples Therapy Unit
Royal Victoria Hospital • Montréal, Canada

Pre-Doctoral Practicum May, 1994–Dec., 1994
Department of Psychiatry
Queen Elizabeth Hospital • Montréal, Canada

ACADEMIC APPOINTMENTS

Associate Professor Jul., 2010–May, 2019
Department of Psychiatry
University of Toronto Faculty of Medicine • Toronto, Canada

Adjunct Faculty Aug. 2013–Jun., 2018
Graduate Program in Psychology
York University • Toronto, Canada

Associate Faculty (Hon) Oct., 2017–Dec., 2017
School of Behavioural, Cognitive & Social Science
University of New England • Armidale, Australia

Assistant Professor Jun., 2005–Jun., 2010
Department of Psychiatry
University of Toronto Faculty of Medicine • Toronto, Canada

Adjunct Faculty Sep., 2004–Jun., 2010
Clinical Psychology Residency Program
St. Joseph's Healthcare • Hamilton, Canada

PUBLICATIONS

1. Cantor, J. M. (2020). Transgender and gender diverse children and adolescents: Fact-checking of AAP policy. *Journal of Sex & Marital Therapy, 46,* 307–313. doi: 10.1080/0092623X.2019.1698481
2. Shirazi, T., Self, H., Cantor, J., Dawood, K., Cardenas, R.,Rosenfield, K., Ortiz, T., Carré, J., McDaniel, M., Blanchard, R., Balasubramanian, R., Delaney, A., Crowley, W., S Marc Breedlove, S. M., & Puts, D. (2020). Timing of peripubertal steroid exposure predicts visuospatial cognition in men: Evidence from three samples. *Hormones and Behavior, 121, 104712*.
3. Stephens, S., Seto, M. C., Cantor, J. M., & Lalumière, M. L. (2019). The Screening Scale for Pedophilic Interest-Revised (SSPI-2) may be a measure of pedohebephilia. *Journal of Sexual Medicine, 16,* 1655−1663. doi: 10.1016/j.jsxm.2019.07.015
4. McPhail, I. V., Hermann, C. A., Fernane, S., Fernandez, Y. M., Nunes, K. L., & Cantor, J. M. (2019). Validity in phallometric testing for sexual interests in children: A meta-analytic review. *Assessment, 26,* 535–551. doi: 10.1177/1073191117706139
5. Cantor, J. M. (2018). Can pedophiles change? *Current Sexual Health Reports, 10,* 203–206. doi: 10.1007/s11930-018-0165-2
6. Cantor, J. M., & Fedoroff, J. P. (2018). Can pedophiles change? Response to opening arguments and conclusions. *Current Sexual Health Reports, 10,* 213–220. doi: 10.1007/s11930-018-0167-0z
7. Stephens, S., Seto, M. C., Goodwill, A. M., & Cantor, J. M. (2018). Age diversity among victims of hebephilic sexual offenders. *Sexual Abuse, 30,* 332–339. doi: 10.1177/1079063216665837
8. Stephens, S., Seto, M. C., Goodwill, A. M., & Cantor, J. M. (2018). The relationships between victim age, gender, and relationship polymorphism and sexual recidivism. *Sexual Abuse, 30,* 132−146. doi: 10.1177/1079063216630983
9. Stephens, S., Newman, J. E., Cantor, J. M., & Seto, M. C. (2018). The Static-99R predicts sexual and violent recidivism for individuals with low intellectual functioning. *Journal of Sexual Aggression, 24,* 1–11. doi: 10.1080/13552600.2017.1372936
10. Cantor, J. M. (2017). Sexual deviance or social deviance: What MRI research reveals about pedophilia. *ATSA Forum, 29*(2). Association for the Treatment of Sexual Abusers. Beaverton, OR. http://newsmanager.commpartners.com/atsa/issues/2017-03-15/2.html
11. Walton, M. T., Cantor, J. M., Bhullar, N., & Lykins, A. D. (2017). Hypersexuality: A critical review and introduction to the "Sexhavior Cycle." *Archives of Sexual Behavior, 46,* 2231–2251. doi: 10.1007/s10508-017-0991-8
12. Stephens, S., Leroux, E., Skilling, T., Cantor, J. M., & Seto, M. C. (2017). A taxometric analysis of pedophilia utilizing self-report, behavioral, and sexual arousal indicators. *Journal of Abnormal Psychology, 126,* 1114–1119. doi: 10.1037/abn0000291
13. Fazio, R. L., Dyshniku, F., Lykins, A. D., & Cantor, J. M. (2017). Leg length versus torso length in pedophilia: Further evidence of atypical physical development early in life. *Sexual Abuse: A Journal of Research and Treatment, 29,* 500–514. doi: 10.1177/1079063215609936
14. Seto, M. C., Stephens, S., Lalumière, M. L., & Cantor, J. M. (2017). The Revised Screening Scale for Pedophilic Interests (SSPI-2): Development and criterion-related validation. *Sexual Abuse: A Journal of Research and Treatment, 29,* 619–635. doi:

10.1177/1079063215612444

15. Stephens, S., Cantor, J. M., Goodwill, A. M., & Seto, M. C. (2017). Multiple indicators of sexual interest in prepubescent or pubescent children as predictors of sexual recidivism. *Journal of Consulting and Clinical Psychology, 85,* 585–595. doi: 10.1037/ccp0000194
16. Stephens, S., Seto, M. C., Goodwill, A. M., & Cantor, J. M. (2017). Evidence of construct validity in the assessment of hebephilia. *Archives of Sexual Behavior, 46,* 301–309. doi: 10.1007/s10508-016-0907-z
17. Walton, M. T., Cantor, J. M., & Lykins, A. D. (2017). An online assessment of personality, psychological, and sexuality trait variables associated with self-reported hypersexual behavior. *Archives of Sexual Behavior, 46,* 721–733. doi: 10.1007/s10508-015-0606-1
18. Cantor, J. M., Lafaille, S. J., Hannah, J., Kucyi, A., Soh, D. W., Girard, T. A., & Mikulis, D. J. (2016). Independent component analysis of resting-state functional magnetic resonance imaging in pedophiles. *Journal of Sexual Medicine, 13,* 1546–1554. doi: 10.1016/j.jsxm.2016.08.004
19. Cantor, J. M., & McPhail, I. V. (2016). Non-offending pedophiles. *Current Sexual Health Reports, 8,* 121–128. doi: 10.1007/s11930-016-0076-z
20. Cantor, J. M. (2015). Milestones in sex research: What causes pedophilia? In J. S. Hyde, J. D. DeLamater, & E. S. Byers (Eds.), *Understanding human sexuality* (6th Canadian ed.) (pp. 452–453). Toronto: McGraw-Hill Ryerson.
21. Cantor, J. M. (2015). Pedophilia. In R. Cautin & S. Lilienfeld (Eds.), *Encyclopedia of clinical psychology.* Malden, MA: Wiley-Blackwell. doi: 10.1002/9781118625392.wbecp184
22. Nunes, K. L., & Cantor, J. M. (2015). Sex offenders. In P. Whelehan & A. Bolin (Eds.), *International encyclopedia of human sexuality.* Malden, MA: Wiley-Blackwell.
23. Cantor, J. M., Lafaille, S., Soh, D. W., Moayedi, M., Mikulis, D. J., & Girard, T. A. (2015). Diffusion Tensor Imaging of pedophilia. *Archives of Sexual Behavior, 44,* 2161–2172. doi: 10.1007/s10508-015-0599-9
24. Cantor, J. M., & McPhail, I. V. (2015). Sensitivity and specificity for the phallometric test of hebephilia. *Journal of Sexual Medicine, 12,* 1940–1950. doi: 10.1111/jsm12970
25. Dyshniku, F., Murray, M. E., Fazio, R. L., Lykins, A. D., & Cantor, J. M. (2015). Minor physical anomalies as a window into the prenatal origins of pedophilia. *Archives of Sexual Behavior, 44,* 2151–2159. doi: 10.1007/s10508-015-0564-7
26. Fazio, R. L., & Cantor, J. M. (2015). Factor structure of the Edinburgh Handedness Inventory versus the Fazio Laterality Inventory in a population with established atypical handedness. *Applied Neuropsychology, 22,* 156–160. doi: 10.1080/23279095.2014.940043
27. Lykins, A. D., Robinson, J. J., LeBlanc, S., & Cantor, J. M. (2015). The effects of common medications on volumetric phallometry. *Journal of Sexual Aggression, 21,* 385–393. doi: 10.1080/13552600.2014.900121
28. Sutton, K. S., Stratton, N., Pytyck, J., Kolla, N. J., & Cantor, J. M. (2015). Patient characteristics by type of hypersexuality referral: A quantitative chart review of 115 consecutive male cases. *Journal of Sex and Marital Therapy, 41,* 563−580. doi: 10.1080/0092623X.2014.935539
29. Cantor, J. M. (2014). Gold star pedophiles in general sex therapy practice. In Y. M. Binik and K. Hall (Eds.), *Principles and practice of sex therapy* (5th ed.) (pp. 219–234). New York: Guilford.

30. Cantor, J. M., & Sutton, K. S. (2014). Paraphilia, gender dysphoria, and hypersexuality. In P. H. Blaney & T. Millon (Eds.), *Oxford textbook of psychopathology* (3rd ed.) (pp. 589–614). New York: Oxford University Press.
31. Chivers, M. L., Roy, C., Grimbos, T., Cantor, J. M., & Seto, M. C. (2014). Specificity of sexual arousal for sexual activities in men and women with conventional and masochistic sexual interests. *Archives of Sexual Behavior, 43,* 931−940. doi: 10.1007/s10508-013-0174-1
32. Fazio, R. L., Lykins, A. D., & Cantor, J. M. (2014). Elevated rates of atypical-handedness in paedophilia: Theory and implications. *Laterality, 19,* 690−704. doi: 10.1080/1357650X.2014.898648
33. Lykins, A. D., & Cantor, J. M. (2014). Vorarephilia: A case study in masochism and erotic consumption. *Archives of Sexual Behavior, 43,* 181–186. doi: 10.1007/s10508-013-0185-y
34. Cantor, J. M., Klein, C., Lykins, A., Rullo, J. E., Thaler, L., & Walling, B. R. (2013). A treatment-oriented typology of self-identified hypersexuality referrals. *Archives of Sexual Behavior, 42,* 883–893. doi: 10.1007/s10508-013-0085-1
35. Blanchard, R., Kuban, M. E., Blak, T., Klassen, P. E., Dickey, R., & Cantor, J. M. (2012). Sexual attraction to others: A comparison of two models of alloerotic responding in men. *Archives of Sexual Behavior, 41,* 13–29. doi: 10.1007/s10508-010-9675-3
36. Cantor, J. M. (2012). Brain research and pedophilia: What it says and what it means [Invited article]. *Sex Offender Law Report, 13,* 81–85.
37. Cantor, J. M. (2012). Is homosexuality a paraphilia? The evidence for and against. *Archives of Sexual Behavior, 41,* 237–247. doi: 10.1007/s10508-012-9900-3
38. Lykins, A. D., Cantor, J. M., Kuban, M. E., Blak, T., Dickey, R., Klassen, P. E., & Blanchard, R. (2010). Sexual arousal to female children in gynephilic men. *Sexual Abuse: A Journal of Research and Treatment, 22,* 279–289. doi: 10.1177/1079063210372141
39. Lykins, A. D., Cantor, J. M., Kuban, M. E., Blak, T., Dickey, R., Klassen, P. E., & Blanchard, R. (2010). The relation between peak response magnitudes and agreement in diagnoses obtained from two different phallometric tests for pedophilia. *Sexual Abuse: A Journal of Research and Treatment, 22,* 42–57. doi: 10.1177/1079063209352094
40. Cantor, J. M., Blanchard, R., & Barbaree, H. E. (2009). Sexual disorders. In P. H. Blaney & T. Millon (Eds.), *Oxford textbook of psychopathology* (2nd ed.) (pp. 527–548). New York: Oxford University Press.
41. Barbaree, H. E., Langton, C. M., Blanchard, R., & Cantor, J. M. (2009). Aging versus stable enduring traits as explanatory constructs in sex offender recidivism: Partitioning actuarial prediction into conceptually meaningful components. *Criminal Justice and Behavior: An International Journal, 36,* 443–465. doi: 10.1177/0093854809332283
42. Blanchard, R., Kuban, M. E., Blak, T., Cantor, J. M., Klassen, P. E., & Dickey, R. (2009). Absolute versus relative ascertainment of pedophilia in men. *Sexual Abuse: A Journal of Research and Treatment, 21,* 431–441. doi: 10.1177/1079063209347906
43. Blanchard, R., Lykins, A. D., Wherrett, D., Kuban, M. E., Cantor, J. M., Blak, T., Dickey, R., & Klassen, P. E. (2009). Pedophilia, hebephilia, and the DSM–V. *Archives of Sexual Behavior, 38,* 335–350. doi: 10.1007/s10508-008-9399-9.
44. Cantor, J. M. (2008). MRI research on pedophilia: What ATSA members should know

[Invited article]. *ATSA Forum, 20*(4), 6–10.

45. Cantor, J. M., Kabani, N., Christensen, B. K., Zipursky, R. B., Barbaree, H. E., Dickey, R., Klassen, P. E., Mikulis, D. J., Kuban, M. E., Blak, T., Richards, B. A., Hanratty, M. K., & Blanchard, R. (2008). Cerebral white matter deficiencies in pedophilic men. *Journal of Psychiatric Research, 42,* 167–183. doi: 10.1016/j.jpsychires.2007.10.013
46. Blanchard, R., Kolla, N. J., Cantor, J. M., Klassen, P. E., Dickey, R., Kuban, M. E., & Blak, T. (2007). IQ, handedness, and pedophilia in adult male patients stratified by referral source. *Sexual Abuse: A Journal of Research and Treatment, 19,* 285–309. doi: 10.1007/s11194-007-9049-0
47. Cantor, J. M., Kuban, M. E., Blak, T., Klassen, P. E., Dickey, R., & Blanchard, R. (2007). Physical height in pedophilia and hebephilia. *Sexual Abuse: A Journal of Research and Treatment, 19,* 395–407. doi: 10.1007/s11194-007-9060-5
48. Blanchard, R., Cantor, J. M., Bogaert, A. F., Breedlove, S. M., & Ellis, L. (2006). Interaction of fraternal birth order and handedness in the development of male homosexuality. *Hormones and Behavior, 49,* 405–414. doi: 10.1016/j.yhbeh.2005.09.002
49. Blanchard, R., Kuban, M. E., Blak, T., Cantor, J. M., Klassen, P., & Dickey, R. (2006). Phallometric comparison of pedophilic interest in nonadmitting sexual offenders against stepdaughters, biological daughters, other biologically related girls, and unrelated girls. *Sexual Abuse: A Journal of Research and Treatment, 18,* 1–14. doi: 10.1007/s11194-006-9000-9
50. Blanchard, R., Cantor, J. M., & Robichaud, L. K. (2006). Biological factors in the development of sexual deviance and aggression in males. In H. E. Barbaree & W. L. Marshall (Eds.), *The juvenile sex offender* (2nd ed., pp. 77–104). New York: Guilford.
51. Cantor, J. M., Kuban, M. E., Blak, T., Klassen, P. E., Dickey, R., & Blanchard, R. (2006). Grade failure and special education placement in sexual offenders' educational histories. *Archives of Sexual Behavior, 35,* 743–751. doi: 10.1007/s10508-006-9018-6
52. Seto, M. C., Cantor, J. M., & Blanchard, R. (2006). Child pornography offenses are a valid diagnostic indicator of pedophilia. *Journal of Abnormal Psychology, 115,* 610–615. doi: 10.1037/0021-843X.115.3.610
53. Zucker, K. J., Mitchell, J. N., Bradley, S. J., Tkachuk, J., Cantor, J. M., & Allin, S. M. (2006). The Recalled Childhood Gender Identity/Gender Role Questionnaire: Psychometric properties. *Sex Roles, 54,* 469–483. doi 10.1007/s11199-006-9019-x
54. Cantor, J. M., Blanchard, R., Robichaud, L. K., & Christensen, B. K. (2005). Quantitative reanalysis of aggregate data on IQ in sexual offenders. *Psychological Bulletin, 131,* 555–568. doi: 10.1037/0033-2909.131.4.555
55. Cantor, J. M., Klassen, P. E., Dickey, R., Christensen, B. K., Kuban, M. E., Blak, T., Williams, N. S., & Blanchard, R. (2005). Handedness in pedophilia and hebephilia. *Archives of Sexual Behavior, 34,* 447–459. doi: 10.1007/s10508-005-4344-7
56. Cantor, J. M., Blanchard, R., Christensen, B. K., Dickey, R., Klassen, P. E., Beckstead, A. L., Blak, T., & Kuban, M. E. (2004). Intelligence, memory, and handedness in pedophilia. *Neuropsychology, 18,* 3–14. doi: 10.1037/0894-4105.18.1.3
57. Blanchard, R., Kuban, M. E., Klassen, P., Dickey, R., Christensen, B. K., Cantor, J. M., & Blak, T. (2003). Self-reported injuries before and after age 13 in pedophilic and non-pedophilic men referred for clinical assessment. *Archives of Sexual Behavior, 32,* 573–581.

58. Blanchard, R., Christensen, B. K., Strong, S. M., Cantor, J. M., Kuban, M. E., Klassen, P., Dickey, R., & Blak, T. (2002). Retrospective self-reports of childhood accidents causing unconsciousness in phallometrically diagnosed pedophiles. *Archives of Sexual Behavior, 31,* 511–526.
59. Cantor, J. M., Blanchard, R., Paterson, A. D., Bogaert, A. F. (2002). How many gay men owe their sexual orientation to fraternal birth order? *Archives of Sexual Behavior, 31,* 63–71.
60. Cantor, J. M., Binik, Y. M., & Pfaus, J. G. (1999). Chronic fluoxetine inhibits sexual behavior in the male rat: Reversal with oxytocin. *Psychopharmacology*, *144*, 355–362.
61. Binik, Y. M., Cantor, J., Ochs, E., & Meana, M. (1997). From the couch to the keyboard: Psychotherapy in cyberspace. In S. Kiesler (Ed.), *Culture of the internet* (pp. 71–100). Mahwah, NJ: Lawrence Erlbaum.
62. Johnson, M. K., O'Connor, M., & Cantor, J. (1997). Confabulation, memory deficits, and frontal dysfunction. *Brain and Cognition*, *34*, 189–206.
63. Keane, M. M., Gabrieli, J. D. E., Monti, L. A., Fleischman, D. A., Cantor, J. M., & Nolan, J. S. (1997). Intact and impaired conceptual memory processes in amnesia. *Neuropsychology*, *11*, 59–69.
64. Pilkington, N. W., & Cantor, J. M. (1996). Perceptions of heterosexual bias in professional psychology programs: A survey of graduate students. *Professional Psychology: Research and Practice*, *27*, 604–612.

PUBLICATIONS

LETTERS AND COMMENTARIES

1. Cantor, J. M. (2015). Research methods, statistical analysis, and the phallometric test for hebephilia: Response to Fedoroff [Editorial Commentary]. *Journal of Sexual Medicine, 12,* 2499–2500. doi: 10.1111/jsm.13040
2. Cantor, J. M. (2015). In his own words: Response to Moser [Editorial Commentary]. *Journal of Sexual Medicine, 12,* 2502–2503. doi: 10.1111/jsm.13075
3. Cantor, J. M. (2015). Purported changes in pedophilia as statistical artefacts: Comment on Müller et al. (2014). *Archives of Sexual Behavior, 44,* 253–254. doi: 10.1007/s10508-014-0343-x
4. McPhail, I. V., & Cantor, J. M. (2015). Pedophilia, height, and the magnitude of the association: A research note. *Deviant Behavior, 36,* 288–292. doi: 10.1080/01639625.2014.935644
5. Soh, D. W., & Cantor, J. M. (2015). A peek inside a furry convention [Letter to the Editor]. *Archives of Sexual Behavior, 44,* 1–2. doi: 10.1007/s10508-014-0423-y
6. Cantor, J. M. (2012). Reply to Italiano's (2012) comment on Cantor (2011) [Letter to the Editor]. *Archives of Sexual Behavior, 41,* 1081–1082. doi: 10.1007/s10508-012-0011-y
7. Cantor, J. M. (2012). The errors of Karen Franklin's *Pretextuality* [Commentary]. *International Journal of Forensic Mental Health, 11,* 59–62. doi: 10.1080/14999013.2012.672945
8. Cantor, J. M., & Blanchard, R. (2012). White matter volumes in pedophiles, hebephiles, and teleiophiles [Letter to the Editor]. *Archives of Sexual Behavior, 41, 749–752.* doi: 10.1007/s10508-012-9954-2
9. Cantor, J. M. (2011). New MRI studies support the Blanchard typology of male-to-female transsexualism [Letter to the Editor]. *Archives of Sexual Behavior, 40*, 863–864. doi: 10.1007/s10508-011-9805-6
10. Zucker, K. J., Bradley, S. J., Own-Anderson, A., Kibblewhite, S. J., & Cantor, J. M. (2008). Is gender identity disorder in adolescents coming out of the closet? *Journal of Sex and Marital Therapy, 34,* 287–290.
11. Cantor, J. M. (2003, Summer). Review of the book *The Man Who Would Be Queen* by J. Michael Bailey. *Newsletter of Division 44 of the American Psychological Association, 19*(2), 6.
12. Cantor, J. M. (2003, Spring). What are the hot topics in LGBT research in psychology? *Newsletter of Division 44 of the American Psychological Association, 19*(1), 21–24.
13. Cantor, J. M. (2002, Fall). Male homosexuality, science, and pedophilia. *Newsletter of Division 44 of the American Psychological Association, 18*(3), 5–8.
14. Cantor, J. M. (2000). Review of the book *Sexual Addiction: An Integrated Approach. Journal of Sex and Marital Therapy, 26*, 107–109.

EDITORIALS

1. Cantor, J. M. (2012). Editorial. *Sexual Abuse: A Journal of Research and Treatment, 24*.

2. Cantor, J. M. (2011). Editorial note. *Sexual Abuse: A Journal of Research and Treatment, 23,* 414.
3. Barbaree, H. E., & Cantor, J. M. (2010). Performance indicates for *Sexual Abuse: A Journal of Research and Treatment* (SAJRT) [Editorial]. *Sexual Abuse: A Journal of Research and Treatment, 22,* 371–373.
4. Barbaree, H. E., & Cantor, J. M. (2009). *Sexual Abuse: A Journal of Research and Treatment* performance indicators for 2007 [Editorial]. *Sexual Abuse: A Journal of Research and Treatment, 21,* 3–5.
5. Zucker, K. J., & Cantor, J. M. (2009). Cruising: Impact factor data [Editorial]. *Archives of Sexual Research, 38,* 878–882.
6. Barbaree, H. E., & Cantor, J. M. (2008). Performance indicators for *Sexual Abuse: A Journal of Research and Treatment* [Editorial]. *Sexual Abuse: A Journal of Research and Treatment, 20,* 3–4.
7. Zucker, K. J., & Cantor, J. M. (2008). The *Archives* in the era of online first ahead of print[Editorial]. *Archives of Sexual Behavior, 37,* 512–516.
8. Zucker, K. J., & Cantor, J. M. (2006). The impact factor: The *Archives* breaks from the pack [Editorial]. *Archives of Sexual Behavior, 35,* 7–9.
9. Zucker, K. J., & Cantor, J. M. (2005). The impact factor: “Goin’ up” [Editorial]. *Archives of Sexual Behavior, 34,* 7–9.
10. Zucker, K., & Cantor, J. M. (2003). The numbers game: The impact factor and all that jazz [Editorial]. *Archives of Sexual Behavior, 32,* 3–5.

FUNDING HISTORY

Principal Investigators:	Doug VanderLaan, Meng-Chuan Lai
Co-Investigators:	James M. Cantor, Megha Mallar Chakravarty, Nancy Lobaugh, M. Palmert, M. Skorska
Title:	*Brain function and connectomics following sex hormone treatment in adolescents experience gender dysphoria*
Agency:	Canadian Institutes of Health Research (CIHR), Behavioural Sciences-B-2
Funds:	$650,250 / 5 years (July, 2018)

Principal Investigator:	Michael C. Seto
Co-Investigators:	Martin Lalumière , James M. Cantor
Title:	*Are connectivity differences unique to pedophilia?*
Agency:	University Medical Research Fund, Royal Ottawa Hospital
Funds:	$50,000 / 1 year (January, 2018)

Principal Investigator:	Lori Brotto
Co-Investigators:	Anthony Bogaert, James M. Cantor, Gerulf Rieger
Title:	*Investigations into the neural underpinnings and biological correlates of asexuality*
Agency:	Natural Sciences and Engineering Research Council (NSERC), Discovery Grants Program
Funds:	$195,000 / 5 years (April, 2017)

Principal Investigator:	Doug VanderLaan
Co-Investigators:	Jerald Bain, James M. Cantor, Megha Mallar Chakravarty, Sofia Chavez, Nancy Lobaugh, and Kenneth J. Zucker
Title:	*Effects of sex hormone treatment on brain development: A magnetic resonance imaging study of adolescents with gender dysphoria*
Agency:	Canadian Institutes of Health Research (CIHR), Transitional Open Grant Program
Funds:	$952,955 / 5 years (September, 2015)

Principal Investigator:	James M. Cantor
Co-Investigators:	Howard E. Barbaree, Ray Blanchard, Robert Dickey, Todd A. Girard, Phillip E. Klassen, and David J. Mikulis
Title:	*Neuroanatomic features specific to pedophilia*
Agency:	Canadian Institutes of Health Research (CIHR)
Funds:	$1,071,920 / 5 years (October, 2008)

Principal Investigator:	James M. Cantor
Title:	*A preliminary study of fMRI as a diagnostic test of pedophilia*
Agency:	Dean of Medicine New Faculty Grant Competition, Univ. of Toronto
Funds:	$10,000 (July, 2008)

Principal Investigator:	James M. Cantor
Co-Investigator:	Ray Blanchard
Title:	*Morphological and neuropsychological correlates of pedophilia*
Agency:	Canadian Institutes of Health Research (CIHR)
Funds:	$196,902 / 3 years (April, 2006)

KEYNOTE AND INVITED ADDRESSES

1. Cantor, J. M. (2021, September 28). *No topic too tough for this expert panel: A year in review.* Plenary Session for the 40th Annual Research and Treatment Conference, Association for the Treatment of Sexual Abusers.
2. Cantor, J. M. (2019, May 1). *Introduction and Q&A for 'I, Pedophile.'* StopSO 2nd Annual Conference, London, UK.
3. Cantor, J. M. (2018, August 29). *Neurobiology of pedophilia or paraphilia? Towards a 'Grand Unified Theory' of sexual interests.* Keynote address to the International Association for the Treatment of Sexual Offenders, Vilnius, Lithuania.
4. Cantor, J. M. (2018, August 29). *Pedophilia and the brain: Three questions asked and answered.* Preconference training presented to the International Association for the Treatment of Sexual Offenders, Vilnius, Lithuania.
5. Cantor, J. M. (2018, April 13). *The responses to* I, Pedophile *from We, the people.* Keynote address to the Minnesota Association for the Treatment of Sexual Abusers, Minneapolis, Minnesota.
6. Cantor, J. M. (2018, April 11). *Studying atypical sexualities: From vanilla to* I, Pedophile. Full day workshop at the Minnesota Association for the Treatment of Sexual Abusers, Minneapolis, Minnesota.
7. Cantor, J. M. (2018, January 20). *How much sex is enough for a happy life?* Invited lecture to the University of Toronto Division of Urology Men's Health Summit, Toronto, Canada.
8. Cantor, J. M. (2017, November 2). Pedophilia as a phenomenon of the brain: Update of evidence and the public response. Invited presentation to the 7th annual SBC education event, Centre for Addiction and Mental Health, Toronto, Canada.
9. Cantor, J. M. (2017, June 9). Pedophilia being in the brain: The evidence and the public's reaction. Invited presentation to *SEXposium at the ROM: The science of love and sex,* Toronto, Canada.
10. Cantor, J. M., & Campea, M. (2017, April 20). *"I, Pedophile" showing and discussion.* Invited presentation to the 42nd annual meeting of the Society for Sex Therapy and Research, Montréal, Canada.
11. Cantor, J. M. (2017, March 1). *Functional and structural neuroimaging of pedophilia: Consistencies across methods and modalities.* Invited lecture to the Brain Imaging Centre, Royal Ottawa Hospital, Ottawa, Canada.
12. Cantor, J. M. (2017, January 26). *Pedophilia being in the brain: The evidence and the public reaction.* Inaugural keynote address to the University of Toronto Sexuality Interest Network, Toronto, Ontario, Canada.
13. Cantor, J. M. (2016, October 14). *Discussion of CBC's "I, Pedophile."* Office of the Children's Lawyer Educational Session, Toronto, Ontario, Canada.
14. Cantor, J. M. (2016, September 15). *Evaluating the risk to reoffend: What we know and what we don't.* Invited lecture to the Association of Ontario Judges, Ontario Court of Justice Annual Family Law Program, Blue Mountains, Ontario, Canada. [Private link only: https://vimeo.com/239131108/3387c80652]
15. Cantor, J. M. (2016, April 8). *Pedophilia and the brain: Conclusions from the second generation of research.* Invited lecture at the 10th annual Risk and Recovery Forensic Conference, Hamilton, Ontario.

16. Cantor, J. M. (2016, April 7). *Hypersexuality without the hyperbole.* Keynote address to the 10th annual Risk and Recovery Forensic Conference, Hamilton, Ontario.
17. Cantor, J. M. (2015, November). *No one asks to be sexually attracted to children: Living in Daniel's World.* Grand Rounds, Centre for Addiction and Mental Health. Toronto, Canada.
18. Cantor, J. M. (2015, August). *Hypersexuality: Getting past whether "it" is or "it" isn't.* Invited address at the 41st annual meeting of the International Academy of Sex Research. Toronto, Canada.
19. Cantor, J. M. (2015, July). *A unified theory of typical and atypical sexual interest in men: Paraphilia, hypersexuality, asexuality, and vanilla as outcomes of a single, dual opponent process.* Invited presentation to the 2015 Puzzles of Sexual Orientation conference, Lethbridge, AL, Canada.
20. Cantor, J. M. (2015, June). *Hypersexuality.* Keynote Address to the Ontario Problem Gambling Provincial Forum. Toronto, Canada.
21. Cantor, J. M. (2015, May). *Assessment of pedophilia: Past, present, future.* Keynote Address to the International Symposium on Neural Mechanisms Underlying Pedophilia and Child Sexual Abuse (NeMUP). Berlin, Germany.
22. Cantor, J. M. (2015, March). *Prevention of sexual abuse by tackling the biggest stigma of them all: Making sex therapy available to pedophiles.* Keynote address to the 40th annual meeting of the Society for Sex Therapy and Research, Boston, MA.
23. Cantor, J. M. (2015, March. *Pedophilia: Predisposition or perversion?* Panel discussion at Columbia University School of Journalism. New York, NY.
24. Cantor, J. M. (2015, February). *Hypersexuality.* Research Day Grand Rounds presentation to Ontario Shores Centre for Mental Health Sciences, Whitby, Ontario, Canada.
25. Cantor, J. M. (2015, January). *Brain research and pedophilia: What it means for assessment, research, and policy.* Keynote address to the inaugural meeting of the Netherlands Association for the Treatment of Sexual Abusers, Utrecht, Netherlands.
26. Cantor, J. M. (2014, December). *Understanding pedophilia and the brain: Implications for safety and society.* Keynote address for The Jewish Community Confronts Violence and Abuse: Crisis Centre for Religious Women, Jerusalem, Israel.
27. Cantor, J. M. (2014, October). *Understanding pedophilia & the brain.* Invited full-day workshop for the Sex Offender Assessment Board of Pennsylvania, Harrisburg, PA.
28. Cantor, J. M. (2014, September). *Understanding neuroimaging of pedophilia: Current status and implications.* Invited lecture presented to the Mental Health and Addition Rounds, St. Joseph's Healthcare, Hamilton, Ontario, Canada.
29. Cantor, J. M. (2014, June). *An evening with Dr. James Cantor.* Invited lecture presented to the Ontario Medical Association, District 11 Doctors' Lounge Program, Toronto, Ontario, Canada.
30. Cantor, J. M. (2014, April). *Pedophilia and the brain.* Invited lecture presented to the University of Toronto Medical Students lunchtime lecture. Toronto, Ontario, Canada.
31. Cantor, J. M. (2014, February). *Pedophilia and the brain: Recap and update.* Workshop presented at the 2014 annual meeting of the Washington State Association for the Treatment of Sexual Abusers, Cle Elum, WA.
32. Cantor, J. M., Lafaille, S., Hannah, J., Kucyi, A., Soh, D., Girard, T. A., & Mikulis, D. M. (2014, February). *Functional connectivity in pedophilia.* Neuropsychiatry Rounds, Toronto Western Hospital, Toronto, Ontario, Canada.

33. Cantor, J. M. (2013, November). *Understanding pedophilia and the brain: The basics, the current status, and their implications.* Invited lecture to the Forensic Psychology Research Centre, Carleton University, Ottawa, Canada.
34. Cantor, J. M. (2013, November). *Mistaking puberty, mistaking hebephilia.* Keynote address presented to the 32nd annual meeting of the Association for the Treatment of Sexual Abusers, Chicago, IL.
35. Cantor, J. M. (2013, October). *Understanding pedophilia and the brain: A recap and update.* Invited workshop presented at the 32nd annual meeting of the Association for the Treatment of Sexual Abusers, Chicago, IL.
36. Cantor, J. M. (2013, October). *Compulsive-hyper-sex-addiction: I don't care what we all it, what can we* do*?* Invited address presented to the Board of Examiners of Sex Therapists and Counselors of Ontario, Toronto, Ontario, Canada.
37. Cantor, J. M. (2013, September). *Neuroimaging of pedophilia: Current status and implications.* McGill University Health Centre, Department of Psychiatry Grand Rounds presentation, Montréal, Québec, Canada.
38. Cantor, J. M. (2013, April). *Understanding pedophilia and the brain.* Invited workshop presented at the 2013 meeting of the Minnesota Association for the Treatment of Sexual Abusers, Minneapolis, MN.
39. Cantor, J. M. (2013, April). *The neurobiology of pedophilia and its implications for assessment, treatment, and public policy.* Invited lecture at the 38th annual meeting of the Society for Sex Therapy and Research, Baltimore, MD.
40. Cantor, J. M. (2013, April). *Sex offenders: Relating research to policy.* Invited roundtable presentation at the annual meeting of the Academy of Criminal Justice Sciences, Dallas, TX.
41. Cantor, J. M. (2013, March). *Pedophilia and brain research: From the basics to the state-of-the-art.* Invited workshop presented to the annual meeting of the Forensic Mental Health Association of California, Monterey, CA.
42. Cantor, J. M. (2013, January). *Pedophilia and child molestation.* Invited lecture presented to the Canadian Border Services Agency, Toronto, Ontario, Canada.
43. Cantor, J. M. (2012, November). *Understanding pedophilia and sexual offenders against children: Neuroimaging and its implications for public safety.* Invited guest lecture to University of New Mexico School of Medicine Health Sciences Center, Albuquerque, NM.
44. Cantor, J. M. (2012, November). *Pedophilia and brain research.* Invited guest lecture to the annual meeting of the Circles of Support and Accountability, Toronto, Ontario, Canada.
45. Cantor, J. M. (2012, January). *Current findings on pedophilia brain research.* Invited workshop at the San Diego International Conference on Child and Family Maltreatment, San Diego, CA.
46. Cantor, J. M. (2012, January). *Pedophilia and the risk to re-offend.* Invited lecture to the Ontario Court of Justice Judicial Development Institute, Toronto, Ontario, Canada.
47. Cantor, J. M. (2011, November). *Pedophilia and the brain: What it means for assessment, treatment, and policy.* Plenary Lecture presented at the Association for the Treatment of Sexual Abusers, Toronto, Ontario, Canada.
48. Cantor, J. M. (2011, July). *Towards understanding contradictory findings in the neuroimaging of pedophilic men.* Keynote address to 7th annual conference on Research in Forensic Psychiatry, Regensberg, Germany.

49. Cantor, J. M. (2011, March). *Understanding sexual offending and the brain: Brain basics to the state of the art.* Workshop presented at the winter conference of the Oregon Association for the Treatment of Sexual Abusers, Oregon City, OR.
50. Cantor, J. M. (2010, October). *Manuscript publishing for students.* Workshop presented at the 29th annual meeting of the Association for the Treatment of Sexual Abusers, Phoenix, AZ.
51. Cantor, J. M. (2010, August). *Is sexual orientation a paraphilia?* Invited lecture at the International Behavioral Development Symposium, Lethbridge, Alberta, Canada.
52. Cantor, J. M. (2010, March). *Understanding sexual offending and the brain: From the basics to the state of the art.* Workshop presented at the annual meeting of the Washington State Association for the Treatment of Sexual Abusers, Blaine, WA.
53. Cantor, J. M. (2009, January). *Brain structure and function of pedophilia men.* Neuropsychiatry Rounds, Toronto Western Hospital, Toronto, Ontario.
54. Cantor, J. M. (2008, April). *Is pedophilia caused by brain dysfunction?* Invited address to the University-wide Science Day Lecture Series, SUNY Oswego, Oswego, NY.
55. Cantor, J. M., Kabani, N., Christensen, B. K., Zipursky, R. B., Barbaree, H. E., Dickey, R., Klassen, P. E., Mikulis, D. J., Kuban, M. E., Blak, T., Richards, B. A., Hanratty, M. K., & Blanchard, R. (2006, September). *MRIs of pedophilic men.* Invited presentation at the 25th annual meeting of the Association for the Treatment of Sexual Abusers, Chicago.
56. Cantor, J. M., Blanchard, R., & Christensen, B. K. (2003, March). *Findings in and implications of neuropsychology and epidemiology of pedophilia.* Invited lecture at the 28th annual meeting of the Society for Sex Therapy and Research, Miami.
57. Cantor, J. M., Christensen, B. K., Klassen, P. E., Dickey, R., & Blanchard, R. (2001, July). *Neuropsychological functioning in pedophiles.* Invited lecture presented at the 27th annual meeting of the International Academy of Sex Research, Bromont, Canada.
58. Cantor, J. M., Blanchard, R., Christensen, B., Klassen, P., & Dickey, R. (2001, February). *First glance at IQ, memory functioning and handedness in sex offenders.* Lecture presented at the Forensic Lecture Series, Centre for Addiction and Mental Health, Toronto, Ontario, Canada.
59. Cantor, J. M. (1999, November). *Reversal of SSRI-induced male sexual dysfunction: Suggestions from an animal model.* Grand Rounds presentation at the Allan Memorial Institute, Royal Victoria Hospital, Montréal, Canada.

PAPER PRESENTATIONS AND SYMPOSIA

1. Cantor, J. M. (2020, April). "I'd rather have a trans kid than a dead kid": Critical assessment of reported rates of suicidality in trans kids. *Paper presented at the annual meeting of the Society for the Sex Therapy and Research.* Online in lieu of in person meeting.
2. Stephens, S., Lalumière, M., Seto, M. C., & Cantor, J. M. (2017, October). *The relationship between sexual responsiveness and sexual exclusivity in phallometric profiles.* Paper presented at the annual meeting of the Canadian Sex Research Forum, Fredericton, New Brunswick, Canada.
3. Stephens, S., Cantor, J. M., & Seto, M. C. (2017, March). *Can the SSPI-2 detect hebephilic sexual interest?* Paper presented at the annual meeting of the American-Psychology Law Society Annual Meeting, Seattle, WA.
4. Stephens, S., Seto, M. C., Goodwill, A. M., & Cantor, J. M. (2015, October). *Victim choice polymorphism and recidivism.* Symposium Presentation. Paper presented at the 34th annual meeting of the Association for the Treatment of Sexual Abusers, Montréal, Canada.
5. McPhail, I. V., Hermann, C. A., Fernane, S. Fernandez, Y., Cantor, J. M., & Nunes, K. L. (2014, October). *Sexual deviance in sexual offenders against children: A meta-analytic review of phallometric research.* Paper presented at the 33rd annual meeting of the Association for the Treatment of Sexual Abusers, San Diego, CA.
6. Stephens, S., Seto, M. C., Cantor, J. M., & Goodwill, A. M. (2014, October). *Is hebephilic sexual interest a criminogenic need?: A large scale recidivism study.* Paper presented at the 33rd annual meeting of the Association for the Treatment of Sexual Abusers, San Diego, CA.
7. Stephens, S., Seto, M. C., Cantor, J. M., & Lalumière, M. (2014, October). *Development and validation of the Revised Screening Scale for Pedophilic Interests (SSPI–2).* Paper presented at the 33rd annual meeting of the Association for the Treatment of Sexual Abusers, San Diego, CA.
8. Cantor, J. M., Lafaille, S., Hannah, J., Kucyi, A., Soh, D., Girard, T. A., & Mikulis, D. M. (2014, September). *Pedophilia and the brain: White matter differences detected with DTI.* Paper presented at the 13th annual meeting of the International Association for the Treatment of Sexual Abusers, Porto, Portugal.
9. Stephens, S., Seto, M., Cantor, J. M., Goodwill, A. M., & Kuban, M. (2014, March). *The role of hebephilic sexual interests in sexual victim choice.* Paper presented at the annual meeting of the American Psychology and Law Society, New Orleans, LA.
10. McPhail, I. V., Fernane, S. A., Hermann, C. A., Fernandez, Y. M., Nunes, K. L., & Cantor, J. M. (2013, November). *Sexual deviance and sexual recidivism in sexual offenders against children: A meta-analysis.* Paper presented at the 32nd annual meeting of the Association for the Treatment of Sexual Abusers, Chicago, IL.
11. Cantor, J. M. (2013, September). *Pedophilia and the brain: Current MRI research and its implications.* Paper presented at the 21st annual World Congress for Sexual Health, Porto Alegre, Brazil. [Featured among Best Abstracts, top 10 of 500.]
12. Cantor, J. M. (Chair). (2012, March). *Innovations in sex research.* Symposium conducted at the 37th annual meeting of the Society for Sex Therapy and Research, Chicago.
13. Cantor, J. M., & Blanchard, R. (2011, August). fMRI versus phallometry in the diagnosis of pedophilia and hebephilia. In J. M. Cantor (Chair), *Neuroimaging of men's object*

preferences. Symposium presented at the 37th annual meeting of the International Academy of Sex Research, Los Angeles, USA.

14. Cantor, J. M. (Chair). (2011, August). *Neuroimaging of men's object preferences.* Symposium conducted at the 37th annual meeting of the International Academy of Sex Research, Los Angeles.
15. Cantor, J. M. (2010, October). A meta-analysis of neuroimaging studies of male sexual arousal. In S. Stolerú (Chair), *Brain processing of sexual stimuli in pedophilia: An application of functional neuroimaging.* Symposium presented at the 29th annual meeting of the Association for the Treatment of Sexual Abusers, Phoenix, AZ.
16. Chivers, M. L., Seto, M. C., Cantor, J. C., Grimbos, T., & Roy, C. (April, 2010). *Psychophysiological assessment of sexual activity preferences in women.* Paper presented at the 35th annual meeting of the Society for Sex Therapy and Research, Boston, USA.
17. Cantor, J. M., Girard, T. A., & Lovett-Barron, M. (2008, November). *The brain regions that respond to erotica: Sexual neuroscience for dummies.* Paper presented at the 51st annual meeting of the Society for the Scientific Study of Sexuality, San Juan, Puerto Rico.
18. Barbaree, H., Langton, C., Blanchard, R., & Cantor, J. M. (2007, October). *The role of age-at-release in the evaluation of recidivism risk of sexual offenders.* Paper presented at the 26th annual meetingof the Association for the Treatment of Sexual Abusers, San Diego.
19. Cantor, J. M., Kabani, N., Christensen, B. K., Zipursky, R. B., Barbaree, H. E., Dickey, R., Klassen, P. E., Mikulis, D. J., Kuban, M. E., Blak, T., Richards, B. A., Hanratty, M. K., & Blanchard, R. (2006, July). *Pedophilia and brain morphology.* Abstract and paper presented at the 32nd annual meeting of the International Academy of Sex Research, Amsterdam, Netherlands.
20. Seto, M. C., Cantor, J. M., & Blanchard, R. (2006, March). *Child pornography offending is a diagnostic indicator of pedophilia*. Paper presented at the 2006 annual meeting of the American Psychology-Law Society Conference, St. Petersburg, Florida.
21. Blanchard, R., Cantor, J. M., Bogaert, A. F., Breedlove, S. M., & Ellis, L. (2005, August). *Interaction of fraternal birth order and handedness in the development of male homosexuality.* Abstract and paper presented at the International Behavioral Development Symposium, Minot, North Dakota.
22. Cantor, J. M., & Blanchard, R. (2005, July). *Quantitative reanalysis of aggregate data on IQ in sexual offenders.* Abstract and poster presented at the 31st annual meeting of the International Academy of Sex Research, Ottawa, Canada.
23. Cantor, J. M. (2003, August). *Sex reassignment on demand: The clinician's dilemma.* Paper presented at the 111th annual meeting of the American Psychological Association, Toronto, Canada.
24. Cantor, J. M. (2003, June). *Meta-analysis of VIQ–PIQ differences in male sex offenders.* Paper presented at the Harvey Stancer Research Day, Toronto, Ontario, Canada.
25. Cantor, J. M. (2002, August). *Gender role in autogynephilic transsexuals: The more things change…* Paper presented at the 110th annual meeting of the American Psychological Association, Chicago.

26. Cantor, J. M., Christensen, B. K., Klassen, P. E., Dickey, R., & Blanchard, R. (2001, June). *IQ, memory functioning, and handedness in male sex offenders.* Paper presented at the Harvey Stancer Research Day, Toronto, Ontario, Canada.
27. Cantor, J. M. (1998, August). *Convention orientation for lesbian, gay, and bisexual students*. Papers presented at the 106th annual meeting of the American Psychological Association.
28. Cantor, J. M. (1997, August). *Discussion hour for lesbian, gay, and bisexual students*. Presented at the 105th annual meeting of the American Psychological Association.
29. Cantor, J. M. (1997, August). *Convention orientation for lesbian, gay, and bisexual students*. Paper presented at the 105th annual meeting of the American Psychological Association.
30. Cantor, J. M. (1996, August). *Discussion hour for lesbian, gay, and bisexual students*. Presented at the 104th annual meeting of the American Psychological Association.
31. Cantor, J. M. (1996, August). *Symposium: Question of inclusion: Lesbian and gay psychologists and accreditation*. Paper presented at the 104th annual meeting of the American Psychological Association, Toronto.
32. Cantor, J. M. (1996, August). *Convention orientation for lesbian, gay, and bisexual students*. Papers presented at the 104th annual meeting of the American Psychological Association.
33. Cantor, J. M. (1995, August). *Discussion hour for lesbian, gay, and bisexual students*. Presented at the 103rd annual meeting of the American Psychological Association.
34. Cantor, J. M. (1995, August). *Convention orientation for lesbian, gay, and bisexual students*. Papers presented at the 103rd annual meeting of the American Psychological Association.
35. Cantor, J. M. (1994, August). *Discussion hour for lesbian, gay, and bisexual students*. Presented at the 102nd annual meeting of the American Psychological Association.
36. Cantor, J. M. (1994, August). *Convention orientation for lesbian, gay, and bisexual students*. Papers presented at the 102nd annual meeting of the American Psychological Association.
37. Cantor, J. M., & Pilkington, N. W. (1992, August). *Homophobia in psychology programs: A survey of graduate students.* Paper presented at the Centennial Convention of the American Psychological Association, Washington, DC. (ERIC Document Reproduction Service No. ED 351 618)
38. Cantor, J. M. (1991, August). *Being gay and being a graduate student: Double the memberships, four times the problems*. Paper presented at the 99th annual meeting of the American Psychological Association, San Francisco.

POSTER PRESENTATIONS

1. Klein, L., Stephens, S., Goodwill, A. M., Cantor, J. M., & Seto, M. C. (2015, October). *The psychological propensities of risk in undetected sexual offenders.* Poster presented at the 34th annual meeting of the Association for the Treatment of Sexual Abusers, Montréal, Canada.
2. Pullman, L. E., Stephens, S., Seto, M. C., Goodwill, A. M., & Cantor, J. M. (2015, October). *Why are incest offenders less likely to recidivate?* Poster presented at the 34th annual meeting of the Association for the Treatment of Sexual Abusers, Montréal, Canada.
3. Seto, M. C., Stephens, S. M., Cantor, J. M., Lalumiere, M. L., Sandler, J. C., & Freeman, N. A. (2015, August). *The development and validation of the Revised Screening Scale for Pedophilic Interests (SSPI-2).* Poster presentation at the 41st annual meeting of the International Academy of Sex Research. Toronto, Canada.
4. Soh, D. W., & Cantor, J. M. (2015, August). *A peek inside a furry convention.* Poster presentation at the 41st annual meeting of the International Academy of Sex Research. Toronto, Canada.
5. VanderLaan, D. P., Lobaugh, N. J., Chakravarty, M. M., Patel, R., Chavez, S. Stojanovski, S. O., Takagi, A., Hughes, S. K., Wasserman, L., Bain, J., Cantor, J. M., & Zucker, K. J. (2015, August). *The neurohormonal hypothesis of gender dysphoria: Preliminary evidence of cortical surface area differences in adolescent natal females.* Poster presentation at the 31st annual meeting of the International Academy of Sex Research. Toronto, Canada.
6. Cantor, J. M., Lafaille, S. J., Moayedi, M., Mikulis, D. M., & Girard, T. A. (2015, June). *Diffusion tensor imaging (DTI) of the brain in pedohebephilic men: Preliminary analyses.* Harvey Stancer Research Day, Toronto, Ontario Canada.
7. Newman, J. E., Stephens, S., Seto, M. C., & Cantor, J. M. (2014, October). *The validity of the Static-99 in sexual offenders with low intellectual abilities.* Poster presentation at the 33rd annual meeting of the Association for the Treatment of Sexual Abusers, San Diego, CA.
8. Lykins, A. D., Walton, M. T., & Cantor, J. M. (2014, June). *An online assessment of personality, psychological, and sexuality trait variables associated with self-reported hypersexual behavior.* Poster presentation at the 30th annual meeting of the International Academy of Sex Research, Dubrovnik, Croatia.
9. Stephens, S., Seto, M. C., Cantor, J. M., Goodwill, A. M., & Kuban, M. (2013, November). *The utility of phallometry in the assessment of hebephilia.* Poster presented at the 32nd annual meeting of the Association for the Treatment of Sexual Abusers, Chicago.
10. Stephens, S., Seto, M. C., Cantor, J. M., Goodwill, A. M., & Kuban, M. (2013, October). *The role of hebephilic sexual interests in sexual victim choice.* Poster presented at the 32nd annual meeting of the Association for the Treatment of Sexual Abusers, Chicago.
11. Fazio, R. L., & Cantor, J. M. (2013, October). *Analysis of the Fazio Laterality Inventory (FLI) in a population with established atypical handedness.* Poster presented at the 33rd annual meeting of the National Academy of Neuropsychology, San Diego.
12. Lafaille, S., Hannah, J., Soh, D., Kucyi, A., Girard, T. A., Mikulis, D. M., & Cantor, J. M. (2013, August). *Investigating resting state networks in pedohebephiles.* Poster presented at the 29th annual meeting of the International Academy of Sex Research, Chicago.

13. McPhail, I. V., Lykins, A. D., Robinson, J. J., LeBlanc, S., & Cantor, J. M. (2013, August). *Effects of prescription medication on volumetric phallometry output.* Poster presented at the 29th annual meeting of the International Academy of Sex Research, Chicago.
14. Murray, M. E., Dyshniku, F., Fazio, R. L., & Cantor, J. M. (2013, August). *Minor physical anomalies as a window into the prenatal origins of pedophilia.* Poster presented at the 29th annual meeting of the International Academy of Sex Research, Chicago.
15. Sutton, K. S., Stephens, S., Dyshniku, F., Tulloch, T., & Cantor, J. M. (2013, August). *Pilot group treatment for "procrasturbation."* Poster presented at 39th annual meeting of the International Academy of Sex Research, Chicago.
16. Sutton, K. S., Pytyck, J., Stratton, N., Sylva, D., Kolla, N., & Cantor, J. M. (2013, August). *Client characteristics by type of hypersexuality referral: A quantitative chart review.* Poster presented at the 39th annual meeting of the International Academy of Sex Research, Chicago.
17. Fazio, R. L., & Cantor, J. M. (2013, June). *A replication and extension of the psychometric properties of the Digit Vigilance Test.* Poster presented at the 11th annual meeting of the American Academy of Clinical Neuropsychology, Chicago.
18. Lafaille, S., Moayedi, M., Mikulis, D. M., Girard, T. A., Kuban, M., Blak, T., & Cantor, J. M. (2012, July). *Diffusion Tensor Imaging (DTI) of the brain in pedohebephilic men: Preliminary analyses.* Poster presented at the 38th annual meeting of the International Academy of Sex Research, Lisbon, Portugal.
19. Lykins, A. D., Cantor, J. M., Kuban, M. E., Blak, T., Dickey, R., Klassen, P. E., & Blanchard, R. (2010, July). *Sexual arousal to female children in gynephilic men.* Poster presented at the 38th annual meeting of the International Academy of Sex Research, Prague, Czech Republic.
20. Cantor, J. M., Girard, T. A., Lovett-Barron, M., & Blak, T. (2008, July). *Brain regions responding to visual sexual stimuli: Meta-analysis of PET and fMRI studies.* Abstract and poster presented at the 34th annual meeting of the International Academy of Sex Research, Leuven, Belgium.
21. Lykins, A. D., Blanchard, R., Cantor, J. M., Blak, T., & Kuban, M. E. (2008, July). *Diagnosing sexual attraction to children: Considerations for DSM-V.* Poster presented at the 34th annual meeting of the International Academy of Sex Research, Leuven, Belgium.
22. Cantor, J. M., Blak, T., Kuban, M. E., Klassen, P. E., Dickey, R. and Blanchard, R. (2007, October). *Physical height in pedophilia and hebephilia.* Poster presented at the 26th annual meeting of the Association for the Treatment of Sexual Abusers, San Diego.
23. Cantor, J. M., Blak, T., Kuban, M. E., Klassen, P. E., Dickey, R. and Blanchard, R. (2007, August). *Physical height in pedophilia and hebephilia.* Abstract and poster presented at the 33rd annual meeting of the International Academy of Sex Research, Vancouver, Canada.
24. Puts, D. A., Blanchard, R., Cardenas, R., Cantor, J., Jordan, C. L., & Breedlove, S. M. (2007, August). *Earlier puberty predicts superior performance on male-biased visuospatial tasks in men but not women.* Abstract and poster presented at the 33rd annual meeting of the International Academy of Sex Research, Vancouver, Canada.
25. Seto, M. C., Cantor, J. M., & Blanchard, R. (2005, November). *Possession of child pornography is a diagnostic indicator of pedophilia.* Poster presented at the 24th annual meeting of the Association for the Treatment of Sexual Abusers, New Orleans.

26. Blanchard, R., Cantor, J. M., Bogaert, A. F., Breedlove. S. M., & Ellis, L. (2005, July). *Interaction of fraternal birth order and handedness in the development of male homosexuality.* Abstract and poster presented at the 31st annual meeting of the International Academy of Sex Research, Ottawa, Canada.
27. Cantor, J. M., & Blanchard, R. (2003, July). *The reported VIQ–PIQ differences in male sex offenders are artifactual?* Abstract and poster presented at the 29th annual meeting of the International Academy of Sex Research, Bloomington, Indiana.
28. Christensen, B. K., Cantor, J. M., Millikin, C., & Blanchard, R. (2002, February). *Factor analysis of two brief memory tests: Preliminary evidence for modality-specific measurement.* Poster presented at the 30th annual meeting of the International Neuropsychological Society, Toronto, Ontario, Canada.
29. Cantor, J. M., Blanchard, R., Paterson, A., Bogaert, A. (2000, June). *How many gay men owe their sexual orientation to fraternal birth order?* Abstract and poster presented at the International Behavioral Development Symposium, Minot, North Dakota.
30. Cantor, J. M., Binik, Y., & Pfaus, J. G. (1996, November). *Fluoxetine inhibition of male rat sexual behavior: Reversal by oxytocin*. Poster presented at the 26th annual meeting of the Society for Neurosciences, Washington, DC.
31. Cantor, J. M., Binik, Y., & Pfaus, J. G. (1996, June). *An animal model of fluoxetine-induced sexual dysfunction: Dose dependence and time course*. Poster presented at the 28th annual Conference on Reproductive Behavior, Montréal, Canada.
32. Cantor, J. M., O'Connor, M. G., Kaplan, B., & Cermak, L. S. (1993, June). *Transient events test of retrograde memory: Performance of amnestic and unimpaired populations*. Poster presented at the 2nd annual science symposium of the Massachusetts Neuropsychological Society, Cambridge, MA.

EDITORIAL AND PEER-REVIEWING ACTIVITIES

Editor-in-Chief

Sexual Abuse: A Journal of Research and Treatment	Jan., 2010–Dec., 2014

Editorial Board Memberships

Journal of Sexual Aggression	Jan., 2010–Dec., 2021
Journal of Sex Research, The	Jan., 2008–Aug., 2020
Sexual Abuse: A Journal of Research and Treatment	Jan., 2006–Dec., 2019
Archives of Sexual Behavior	Jan., 2004–Present
The Clinical Psychologist	Jan., 2004–Dec., 2005

Ad hoc Journal Reviewer Activity

American Journal of Psychiatry
Annual Review of Sex Research
Archives of General Psychiatry
Assessment
Biological Psychiatry
BMC Psychiatry
Brain Structure and Function
British Journal of Psychiatry
British Medical Journal
Canadian Journal of Behavioural Science
Canadian Journal of Psychiatry
Cerebral Cortex
Clinical Case Studies
Comprehensive Psychiatry
Developmental Psychology
European Psychologist
Frontiers in Human Neuroscience
Human Brain Mapping
International Journal of Epidemiology
International Journal of Impotence Research
International Journal of Sexual Health
International Journal of Transgenderism
Journal of Abnormal Psychology
Journal of Clinical Psychology
Journal of Consulting and Clinical Psychology
Journal of Forensic Psychology Practice
Journal for the Scientific Study of Religion
Journal of Sexual Aggression
Journal of Sexual Medicine
Journal of Psychiatric Research
Nature Neuroscience
Neurobiology Reviews
Neuroscience & Biobehavioral Reviews
Neuroscience Letters
Proceedings of the Royal Society B (Biological Sciences)
Psychological Assessment
Psychological Medicine
Psychological Science
Psychology of Men & Masculinity
Sex Roles
Sexual and Marital Therapy
Sexual and Relationship Therapy
Sexuality & Culture
Sexuality Research and Social Policy
The Clinical Psychologist
Traumatology
World Journal of Biological Psychiatry

GRANT REVIEW PANELS

2017–2021	Member, College of Reviewers, *Canadian Institutes of Health Research,* Canada.
2017	Committee Member, Peer Review Committee—Doctoral Research Awards A. *Canadian Institutes of Health Research*, Canada.
2017	Member, International Review Board, Research collaborations on behavioural disorders related to violence, neglect, maltreatment and abuse in childhood and adolescence. *Bundesministerium für Bildung und Forschung [Ministry of Education and Research],* Germany.
2016	Reviewer. National Science Center [*Narodowe Centrum Nauki*], Poland.
2016	Committee Member, Peer Review Committee—Doctoral Research Awards A. *Canadian Institutes of Health Research*, Canada.
2015	Assessor (Peer Reviewer). Discovery Grants Program. *Australian Research Council,* Australia.
2015	Reviewer. *Czech Science Foundation,* Czech Republic.
2015	Reviewer, "Off the beaten track" grant scheme. *Volkswagen Foundation,* Germany.
2015	External Reviewer, Discovery Grants program—Biological Systems and Functions. *National Sciences and Engineering Research Council of Canada*, Canada
2015	Committee Member, Peer Review Committee—Doctoral Research Awards A. *Canadian Institutes of Health Research*, Canada.
2014	Assessor (Peer Reviewer). Discovery Grants Program. *Australian Research Council,* Australia.
2014	External Reviewer, Discovery Grants program—Biological Systems and Functions. *National Sciences and Engineering Research Council of Canada*, Canada.
2014	Panel Member, Dean's Fund—Clinical Science Panel. *University of Toronto Faculty of Medicine*, Canada.
2014	Committee Member, Peer Review Committee—Doctoral Research Awards A. *Canadian Institutes of Health Research*, Canada.
2013	Panel Member, Grant Miller Cancer Research Grant Panel. *University of Toronto Faculty of Medicine*, Canada.

2013 Panel Member, Dean of Medicine Fund New Faculty Grant Clinical Science Panel. *University of Toronto Faculty of Medicine,* Canada.

2012 Board Member, International Review Board, Research collaborations on behavioural disorders related to violence, neglect, maltreatment and abuse in childhood and adolescence (2nd round). *Bundesministerium für Bildung und Forschung [Ministry of Education and Research],* Germany.

2012 External Reviewer, University of Ottawa Medical Research Fund. *University of Ottawa Department of Psychiatry*, Canada.

2012 External Reviewer, Behavioural Sciences—B. *Canadian Institutes of Health Research*, Canada.

2011 Board Member, International Review Board, Research collaborations on behavioural disorders related to violence, neglect, maltreatment and abuse in childhood and adolescence. *Bundesministerium für Bildung und Forschung [Ministry of Education and Research],* Germany.

TEACHING AND TRAINING

PostDoctoral Research Supervision
Law & Mental Health Program, Centre for Addiction and Mental Health, Toronto, Canada

Dr. Katherine S. Sutton	Sept., 2012–Dec., 2013
Dr. Rachel Fazio	Sept., 2012–Aug., 2013
Dr. Amy Lykins	Sept., 2008–Nov., 2009

Doctoral Research Supervision
Centre for Addiction and Mental Health, Toronto, Canada

Michael Walton • University of New England, Australia	Sept., 2017–Aug., 2018
Debra Soh • York University	May, 2013–Aug, 2017
Skye Stephens • Ryerson University	April, 2012–June, 2016

Masters Research Supervision
Centre for Addiction and Mental Health, Toronto, Canada

Nicole Cormier • Ryerson University	June, 2012–present
Debra Soh • Ryerson University	May, 2009–April, 2010

Undergraduate Research Supervision
Centre for Addiction and Mental Health, Toronto, Canada

Kylie Reale • Ryerson University	Spring, 2014
Jarrett Hannah • University of Rochester	Summer, 2013
Michael Humeniuk • University of Toronto	Summer, 2012

Clinical Supervision (Doctoral Internship)
Clinical Internship Program, Centre for Addiction and Mental Health, Toronto, Canada

Katherine S. Sutton • Queen's University	2011–2012
David Sylva • Northwestern University	2011–2012
Jordan Rullo • University of Utah	2010–2011
Lea Thaler • University of Nevada, Las Vegas	2010–2011
Carolin Klein • University of British Columbia	2009–2010
Bobby R. Walling • University of Manitoba	2009–2010

TEACHING AND TRAINING

Clinical Supervision (Doctoral- and Masters- level practica)
Centre for Addiction and Mental Health, Toronto, Canada

Tyler Tulloch • Ryerson University	2013–2014
Natalie Stratton • Ryerson University	Summer, 2013
Fiona Dyshniku • University of Windsor	Summer, 2013
Mackenzie Becker • McMaster University	Summer, 2013
Skye Stephens • Ryerson University	2012–2013
Vivian Nyantakyi • Capella University	2010–2011
Cailey Hartwick • University of Guelph	Fall, 2010
Tricia Teeft • Humber College	Summer, 2010
Allison Reeves • Ontario Institute for Studies in Education/Univ. of Toronto	2009–2010
Helen Bailey • Ryerson University	Summer, 2009
Edna Aryee • Ontario Institute for Studies in Education/Univ. of Toronto	2008–2009
Iryna Ivanova • Ontario Institute for Studies in Education/Univ. of Toronto	2008–2009
Jennifer Robinson • Ontario Institute for Studies in Education/Univ. of Toronto	2008–2009
Zoë Laksman • Adler School of Professional Psychology	2005–2006
Diana Mandelew • Adler School of Professional Psychology	2005–2006
Susan Wnuk • York University	2004–2005
Hiten Lad • Adler School of Professional Psychology	2004–2005
Natasha Williams • Adler School of Professional Psychology	2003–2004
Lisa Couperthwaite • Ontario Institute for Studies in Education/Univ. of Toronto	2003–2004
Lori Gray, née Robichaud • University of Windsor	Summer, 2003
Sandra Belfry • Ontario Institute for Studies in Education/Univ. of Toronto	2002–2003
Althea Monteiro • York University	Summer, 2002
Samantha Dworsky • York University	2001–2002
Kerry Collins • University of Windsor	Summer, 2001
Jennifer Fogarty • Waterloo University	2000–2001
Emily Cripps • Waterloo University	Summer, 2000
Lee Beckstead • University of Utah	2000

PROFESSIONAL SOCIETY ACTIVITIES

OFFICES HELD

2018–2019	Local Host. Society for Sex Therapy and Research.
2015	Member, International Scientific Committee, World Association for Sexual Health.
2015	Member, Program Planning and Conference Committee, Association for the Treatment of Sexual Abusers
2012–2013	Chair, Student Research Awards Committee, Society for Sex Therapy & Research
2012–2013	Member, Program Planning and Conference Committee, Association for the Treatment of Sexual Abusers
2011–2012	Chair, Student Research Awards Committee, Society for Sex Therapy & Research
2010–2011	Scientific Program Committee, International Academy of Sex Research
2002–2004	Membership Committee • APA Division 12 (Clinical Psychology)
2002–2003	Chair, Committee on Science Issues, APA Division 44
2002	Observer, Grant Review Committee • Canadian Institutes of Health Research Behavioural Sciences (B)
2001–2009	Reviewer • APA Division 44 Convention Program Committee
2001, 2002	Reviewer • APA Malyon-Smith Scholarship Committee
2000–2005	Task Force on Transgender Issues, APA Division 44
1998–1999	Consultant, APA Board of Directors Working Group on Psychology Marketplace
1997	Student Representative • APA Board of Professional Affairs' Institute on TeleHealth
1997–1998	Founder and Chair • APA/APAGS Task Force on New Psychologists' Concerns
1997–1999	Student Representative • APA/CAPP Sub-Committee for a National Strategy for Prescription Privileges
1997–1999	Liaison • APA Committee for the Advancement of Professional Practice
1997–1998	Liaison • APA Board of Professional Affairs
1993–1997	Founder and Chair • APA/APAGS Committee on LGB Concerns

PROFESSIONAL SOCIETY ACTIVITIES

MEMBERSHIPS

2017–2021 Member • *Canadian Sex Research Forum*

2009–Present Member • *Society for Sex Therapy and Research*

2006–Present Member (elected) • *International Academy of Sex Research*

2006–Present Research and Clinical Member • *Association for the Treatment of Sex Abusers*

2003–2006 Associate Member (elected) • *International Academy of Sex Research*

2002 Founding Member • CPA Section on Sexual Orientation and Gender Identity

2001–2013 Member • *Canadian Psychological Association* (CPA)

2000–2015 Member • *American Association for the Advancement of Science*

2000–2015 Member • *American Psychological Association* (APA)

APA Division 12 (Clinical Psychology)

APA Division 44 (Society for the Psychological Study of LGB Issues)

2000–2020 Member • *Society for the Scientific Study of Sexuality*

1995–2000 Student Member • *Society for the Scientific Study of Sexuality*

1993–2000 Student Affiliate • *American Psychological Association*

1990–1999 Member, American Psychological Association of Graduate Students (APAGS)

CLINICAL LICENSURE/REGISTRATION

Certificate of Registration, Number 3793
College of Psychologists of Ontario, Ontario, Canada

AWARDS AND HONORS

2017 Elected Fellow, Association for the Treatment of Sexual Abusers

2011 Howard E. Barbaree Award for Excellence in Research
Centre for Addiction and Mental Health, Law and Mental Health Program

2004 fMRI Visiting Fellowship Program at Massachusetts General Hospital
American Psychological Association Advanced Training Institute and NIH

1999–2001 CAMH Post-Doctoral Research Fellowship
Centre for Addiction and Mental Health Foundation and Ontario Ministry of Health

1998 Award for Distinguished Contribution by a Student
American Psychological Association, Division 44

1995 Dissertation Research Grant
Society for the Scientific Study of Sexuality

1994–1996 McGill University Doctoral Scholarship

1994 Award for Outstanding Contribution to Undergraduate Teaching
"TA of the Year Award," from the McGill Psychology Undergraduate Student Association

MAJOR MEDIA

(Complete list available upon request.)

Feature-length Documentaries

Vice Canada Reports. *Age of Consent.* 14 Jan 2017.
Canadian Broadcasting Company. *I, Pedophile.* Firsthand documentaries. 10 Mar 2016.

Appearances and Interviews

11 Mar 2020. Ibbitson, John. It is crucial that Parliament gets the conversion-therapy ban right. *The Globe & Mail.*
25 Jan 2020. Ook de hulpvaardige buurman kan verzamelaar van kinderporno zin. *De Morgen.*
3 Nov 2019. Village of the damned. *60 Minutes Australia.*
1 Nov 2019. HÅKON F. HØYDAL. Norsk nettovergriper: – Jeg hater meg selv: Nordmannen laster ned overgrepsmateriale fra nettet – og oppfordrer politiet til å gi amnesti for slike som ham.
10 Oct 2019. Smith, T. Growing efforts are looking at how—or if—#MeToo offenders can be reformed. *National Public Radio.*
29 Sep 2019. Carey, B. Preying on Children: The Emerging Psychology of Pedophiles. *New York Times.*
29 Apr 2019. Mathieu, Isabelle. La poupée qui a troublé les Terre-Neuviens. *La Tribune.*
21 Mar 2019. Pope Francis wants psychological testing to prevent problem priests. But can it really do that? *The Washington Post.*
12 Dec 2018. Child sex dolls: Illegal in Canada, and dozens seized at the border. Ontario Today with Rita Celli. *CBC.*
12 Dec 2018. Celli, R. & Harris, K. Dozens of child sex dolls seized by Canadian border agents. *CBC News.*
27 Apr 2018. Rogers, Brook A. The online 'incel' culture is real–and dangerous. *New York Post.*
25 Apr 2018. Yang, J. Number cited in cryptic Facebook post matches Alek Minassian's military ID: Source. *Toronto Star.*
24 Ap 2018 Understanding 'incel'. *CTV News.*
27 Nov 2017. Carey, B. Therapy for Sexual Misconduct? It's Mostly Unproven. *New York Times.*
14 Nov 2017. Tremonti, A. M. The Current. *CBC.*
9 Nov2017. Christensen, J. Why men use masturbation to harass women. *CNN.* http://www.cnn.com/2017/11/09/health/masturbation-sexual-harassment/index.html
7 Nov 2017. Nazaryan, A. Why is the alt-right obsessed with pedophilia? *Newsweek.*
15 Oct 2017. Ouatik, B. Déscouvre. Pédophilie et science. *CBC Radio Canada.*
12 Oct 2017. Ouatik, B. Peut-on guérir la pédophilie? *CBC Radio Canada.*
11 Sep 2017. Burns, C. The young paedophiles who say they don't abuse children. *BBC News.*
18 Aug 2017. Interview. *National Post Radio.* Sirius XM Canada.
16 Aug 2017. Blackwell, Tom. Man says he was cured of pedophilia at Ottawa clinic: 'It's like a weight that's been lifted': But skeptics worry about the impact of sending pedophiles into the world convinced their curse has been vanquished. *National Post.*
26 Apr 2017. Zalkind, S. Prep schools hid sex abuse just like the catholic church. *VICE.*
24 Apr 2017. Sastre, P. Pédophilie: une panique morale jamais n'abolira un crime. *Slate France.*
12 Feb 2017. Payette, G. Child sex doll trial opens Pandora's box of questions. *CBC News.*
26 Nov 2016. Det morke uvettet ["The unknown darkness]". *Fedrelandsvennen.*
13 July 2016. Paedophilia: Shedding light on the dark field. *The Economist.*

1 Jul 2016. Debusschere, B. Niet iedereen die kinderporno kijkt, is een pedofiel: De mythes rond pedofilie ontkracht. *De Morgen.*
12 Apr 2016. O'Connor, R. Terence Martin: The Tasmanian MP whose medication 'turned him into a paedophile'. *The Independent.*
8 Mar 2016. Bielski, Z. 'The most viscerally hated group on earth': Documentary explores how intervention can stop pedophiles. *The Globe and Mail.*
1 Mar 2016. Elmhirst, S. What should we do about paedophiles? *The Guardian.*
24 Feb 2016. The man whose brain tumour 'turned him into a paedophile'. *The Independent.*
24 Nov 2015. Byron, T. The truth about child sex abuse. *BBC Two.*
20 Aug 2015. The Jared Fogle case: Why we understand so little about abuse. *Washington Post.*
19 Aug 2015. Blackwell, T. Treat sex offenders for impotence—to keep them out of trouble, Canadian psychiatrist says. *National Post.*
2 Aug 2015. Menendez, J. BBC News Hour. *BBC World Service.*
13 Jul 2015. The nature of pedophilia. *BBC Radio 4.*
9 Jul 2015. The sex-offender test: How a computerized assessment can help determine the fate of men who've been accused of sexually abusing children. *The Atlantic.*
10 Apr 2015. NWT failed to prevent sex offender from abusing stepdaughter again. *CBC News.*
10 Feb 2015. Savage, D. "The ethical sadist." In Savage Love. *The Stranger.*
31 Jan 2015. Begrip voor/van pedofilie [Understanding pedophilia]. *de Volkskrant.*
9 Dec 2014. Carey, B. When a rapist's weapon is a pill. *New York Times*.
1 Dec 2014. Singal, J. Can virtual reality help pedophiles? *New York Magazine.*
17 Nov2014. Say pedófile, busco aydua. *El Pais.*
4 Sep 2014. Born that way? *Ideas, with Paul Kennedy.* CBC Radio One.
27 Aug 2014. Interrogating the statistics for the prevalence of paedophilia. BBC.
25 Jul 2014. Stephenson, W. The prevalence of paedophilia. *BBC World Service.*
21 Jul 2014. Hildebrandt, A. Virtuous Pedophiles group gives support therapy cannot. *CBC.*
26 Jan 2014. Paedophilia a result of faulty wiring, scientists suggest. *Daily Mail.*
22 Dec 2013. Kane, L. Is pedophilia a sexual orientation? *Toronto Star.*
21 Jul 2013. Miller, L. The turn-on switch: Fetish theory, post-Freud. *New York Magazine.*
1 Jul 2013. Morin, H. Pédophilie: la difficile quête d'une origine biologique. *Le Monde.*
2 Jun 2013. Malcolm, L. The psychology of paedophilia. *Australian National Radio.*
1 Mar 2013. Kay, J. The mobbing of Tom Flanagan is unwarranted and cruel. *National Post.*
6 Feb 2013. Boy Scouts board delays vote on lifting ban on gays. *L.A. Times.*
31 Aug 2012. CNN Newsroom interview with Ashleigh Banfield. *CNN.*
24 Jun 2012. CNN Newsroom interview with Don Lemon. *CNN.*

LEGAL TESTIMONY, PAST 5 YEARS

2021	Cross et al. v Loudoun School Board	Loudoun, VA
2021	Allan M. Josephson v Neeli Bendapudi	Western District of Kentucky
2021	Re Commitment of Michael Hughes (Frye Hearing)	Cook County, Illinois
2019	US vs Peter Bright	Southern District of New York, NY
2019	Probate and Family Court (Custody Hearing)	Boston, Massachusetts
2019	Re Commitment of Steven Casper (Frye Hearing)	Kendall County, Illinois
2019	Re Commitment of Inger (Frye Hearing)	Poughkeepsie, NY
2018	Re Commitment of Fernando Little (Frye Hearing)	Utica, NY
2018	Canada vs John Fitzpatrick (Sentencing Hearing)	Toronto, Ontario, Canada

EXPERT REPORT OF JAMES M. CANTOR, PHD

APPENDIX 2

JOURNAL OF SEX & MARITAL THERAPY
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Transgender and Gender Diverse Children and Adolescents: Fact-Checking of AAP Policy

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ABSTRACT

The American Academy of Pediatrics (AAP) recently published a policy statement: *Ensuring comprehensive care and support for transgender and gender-diverse children and adolescents*. Although almost all clinics and professional associations in the world use what's called the *watchful waiting* approach to helping gender diverse (GD) children, the AAP statement instead rejected that consensus, endorsing *gender affirmation* as the only acceptable approach. Remarkably, not only did the AAP statement fail to include any of the actual outcomes literature on such cases, but it also misrepresented the contents of its citations, which repeatedly said the very opposite of what AAP attributed to them.

The American Academy of Pediatrics (AAP) recently published a policy statement entitled, *Ensuring comprehensive care and support for transgender and gender-diverse children and adolescents* (Rafferty, AAP Committee on Psychosocial Aspects of Child and Family Health, AAP Committee on Adolescence, AAP Section on Lesbian, Gay, Bisexual, and Transgender Health and Wellness, 2018). These are children who manifest discontent with the sex they were born as and desire to live as the other sex (or as some alternative gender role). The policy was quite a remarkable document: Although almost all clinics and professional associations in the world use what's called the *watchful waiting* approach to helping transgender and gender diverse (GD) children, the AAP statement rejected that consensus, endorsing only *gender affirmation*. That is, where the consensus is to delay any transitions after the onset of puberty, AAP instead rejected waiting before transition. With AAP taking such a dramatic departure from other professional associations, I was immediately curious about what evidence led them to that conclusion. As I read the works on which they based their policy, however, I was pretty surprised—rather alarmed, actually: These documents simply did not say what AAP claimed they did. In fact, the references that AAP cited as the basis of their policy instead outright contradicted that policy, repeatedly endorsing *watchful waiting*.

The AAP statement was also remarkable in what it left out—namely, the actual outcomes research on GD children. In total, there have been 11 follow-up studies of GD children, of which AAP cited one (Wallien & Cohen-Kettenis, 2008), doing so without actually mentioning the outcome data it contained. The literature on outcomes was neither reviewed, summarized, nor subjected to meta-analysis to be considered in the aggregate—It was merely disappeared. (The list of all existing studies appears in the appendix.) As they make clear, *every* follow-up study of GD children, without exception, found the same thing: Over puberty, the majority of GD children cease to want to transition. AAP is, of course, free to establish whatever policy it likes on

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whatever basis it likes. But any assertion that their policy is based on evidence is demonstrably false, as detailed below.

AAP divided clinical approaches into three types—conversion therapy, watchful waiting, and gender affirmation. It rejected the first two and endorsed *gender affirmation* as the only acceptable alternative. Most readers will likely be familiar already with attempts to use conversion therapy to change sexual orientation. With regard to gender identity, AAP wrote:

> "[C]onversion" or "reparative" treatment models are used to prevent children and adolescents from identifying as transgender or to dissuade them from exhibiting gender-diverse expressions. … Reparative approaches have been proven to be not only unsuccessful[38] but also deleterious and are considered outside the mainstream of traditional medical practice.[29,39–42]

The citations were:

38. Haldeman DC. The practice and ethics of sexual orientation conversion therapy. *J Consult Clin Psychol.* 1994;62(2):221–227.

29. Adelson SL; American Academy of Child and Adolescent Psychiatry (AACAP) Committee on Quality Issues (CQI). Practice parameter on gay, lesbian, or bisexual sexual orientation, gender nonconformity, and gender discordance in children and adolescents. *J Am Acad Child Adolesc Psychiatry.* 2012;51(9):957–974.

39. Byne W. Regulations restrict practice of conversion therapy. *LGBT Health.* 2016;3(2):97–99.

40. Cohen-Kettenis PT, Delemarrevan de Waal HA, Gooren LJ. The treatment of adolescent transsexuals: changing insights. *J Sex Med.* 2008;5(8):1892–1897.

41. Bryant K. Making gender identity disorder of childhood: historical lessons for contemporary debates. *Sex Res Soc Policy.* 2006;3(3):23–39.

42. World Professional Association for Transgender Health. *WPATH De-Psychopathologisation Statement.* Minneapolis, MN: World Professional Association for Transgender Health; 2010.

AAP's claims struck me as odd because *there are no studies of conversion therapy for gender identity*. Studies of conversion therapy have been limited to *sexual orientation,* and, moreover, to the sexual orientation *of adults,* not to gender identity and not of children in any case. The article AAP cited to support their claim (reference number 38) is indeed a classic and well-known review, but it is a review of sexual orientation research *only*. Neither gender identity, nor even children, received a single mention in it. Indeed, the narrower scope of that article should be clear to anyone reading even just its title: "The practice and ethics of *sexual orientation* conversion therapy" [italics added].

AAP continued, saying that conversion approaches for GD children have already been rejected by medical consensus, citing five sources. This claim struck me as just as odd, however—I recalled associations banning conversion therapy for sexual orientation, but not for gender identity, exactly because there is no evidence for generalizing from adult sexual orientation to childhood gender identity. So, I started checking AAP's citations for that, and these sources too pertained only to sexual orientation, not gender identity (specifics below). What AAP's sources *did* repeatedly emphasize was that:

A. Sexual orientation of adults is unaffected by conversion therapy and any other [known] intervention;
B. Gender dysphoria in childhood before puberty desists in the majority of cases, becoming (cis-gendered) homosexuality in adulthood, again regardless of any [known] intervention; and
C. Gender dysphoria in childhood persisting after puberty tends to persist entirely.

That is, in the context of GD children, it simply makes no sense to refer to externally induced "conversion": The majority of children "convert" to cisgender or "desist" from transgender

regardless of any attempt to change them. "Conversion" only makes sense with regard to adult sexual orientation because (unlike childhood gender identity), adult homosexuality never or nearly never spontaneously changes to heterosexuality. Although gender identity and sexual orientation may often be analogous and discussed together with regard to social or political values and to civil rights, they are nonetheless distinct—with distinct origins, needs, and responses to medical and mental health care choices. Although AAP emphasized to the reader that "gender identity is not synonymous with 'sexual orientation'" (Rafferty et al., 2018, p. 3), they went ahead to treat them as such nonetheless.

To return to checking AAP's fidelity to its sources: Reference 29 was a practice guideline from the Committee on Quality Issues of the American Academy of Child and Adolescent Psychiatry (AACAP). Despite AAP applying this source to *gender identity,* AACAP was quite unambiguous regarding their intent to speak to sexual orientation and *only* to sexual orientation: "Principle 6. Clinicians should be aware that there is no evidence that *sexual orientation* can be altered through therapy, and that attempts to do so may be harmful. There is no established evidence that change in a predominant, enduring *homosexual* pattern of development is possible. Although sexual fantasies can, to some degree, be suppressed or repressed by those who are ashamed of or in conflict about them, sexual desire is not a choice. However, behavior, social role, and—to a degree—identity and self-acceptance are. Although operant conditioning modifies sexual fetishes, it does not alter *homosexuality*. Psychiatric efforts to alter *sexual orientation* through 'reparative therapy' *in adults* have found little or no change in *sexual orientation,* while causing significant risk of harm to self-esteem" (AACAP, 2012, p. 967, italics added).

Whereas AAP cites AACAP to support gender affirmation as the only alternative for treating GD children, AACAP's actual view was decidedly neutral, noting the lack of evidence: "Given the lack of empirical evidence from randomized, controlled trials of the efficacy of treatment aimed at eliminating gender discordance, the potential risks of treatment, and longitudinal evidence that gender discordance persists in only a small minority of untreated cases arising in childhood, further research is needed on predictors of persistence and desistence of childhood gender discordance as well as the long-term risks and benefits of intervention before any treatment to eliminate gender discordance can be endorsed" (AACAP, 2012, p. 969). Moreover, whereas AAP rejected watchful waiting, what AACAP recommended was: "In general, it is desirable to help adolescents who may be experiencing gender distress and dysphoria to defer sex reassignment until adulthood" (AACAP, 2012, p. 969). So, not only did AAP attribute to AACAP something AACAP never said, but also AAP withheld from readers AACAP's actual view.

Next, in reference 39, Byne (2016) also addressed only sexual orientation, doing so very clearly: "Reparative therapy is a subset of conversion therapies based on the premise that *same-sex attraction* are reparations for childhood trauma. Thus, practitioners of reparative therapy believe that exploring, isolating, and repairing these childhood emotional wounds will often result in reducing *same-sex attractions*" (Byne, 2016, p. 97). Byne does not say this of gender identity, as the AAP statement misrepresents.

In AAP reference 40, Cohen-Kettenis et al. (2008) did finally pertain to gender identity; however, this article never mentions conversion therapy. (!) Rather, in this study, the authors presented that clinic's lowering of their minimum age for cross-sex hormone treatment from age 18 to 16, which they did on the basis of a series of studies showing the high rates of success with this age group. Although it did strike me as odd that AAP picked as support against conversion therapy an article that did not mention conversion therapy, I could imagine AAP cited the article as an example of what the "mainstream of traditional medical practice" consists of (the logic being that conversion therapy falls outside what an 'ideal' clinic like this one provides). However, what this clinic provides is the very *watchful waiting* approach that AAP rejected. The approach

espoused by Cohen-Kettenis (and the other clinics mentioned in the source—Gent, Boston, Oslo, and now formerly, Toronto) is to make puberty-halting interventions available at age 12 because: "[P]ubertal suppression may give adolescents, together with the attending health professional, more time to explore their gender identity, without the distress of the developing secondary sex characteristics. The precision of the diagnosis may thus be improved" (Cohen-Kettenis et al., 2008, p. 1894).

Reference 41 presented a very interesting history spanning the 1960s–1990s about how feminine boys and tomboyish girls came to be recognized as mostly pre-homosexual, and how that status came to be entered into the DSM at the same time as homosexuality was being *removed* from the DSM. Conversion therapy is never mentioned. Indeed, to the extent that Bryant mentions treatment at all, it is to say that treatment is entirely irrelevant to his analysis: "An important omission from the *DSM* is a discussion of the kinds of treatment that GIDC children should receive. (This omission is a general orientation of the DSM and not unique to GIDC)" (Bryant, 2006, p. 35). How this article supports AAP's claim is a mystery. Moreover, how AAP could cite a 2006 history discussing events of the 1990s and earlier to support a claim about the *current* consensus in this quickly evolving discussion remains all the more unfathomable.

Cited last in this section was a one-paragraph press release from the World Professional Association for Transgender Health. Written during the early stages of the American Psychiatric Association's (APA's) update of the DSM, the statement asserted simply that "The WPATH Board of Directors strongly urges the de-psychopathologisation of gender variance worldwide." Very reasonable debate can (and should) be had regarding whether gender dysphoria should be removed from the DSM as homosexuality was, and WPATH was well within its purview to assert that it should. Now that the DSM revision process is years completed however, history has seen that APA ultimately retained the diagnostic categories, rejecting WPATH's urging. This makes AAP's logic entirely backwards: That WPATH's request to depathologize gender dysphoria was *rejected* suggests that it is *WPATH's* view—and therefore the AAP policy—which fall "outside the mainstream of traditional medical practice." (!)

AAP based this entire line of reasoning on their belief that conversion therapy is being used "to prevent children and adolescents from identifying as transgender" (Rafferty et al., 2018, p. 4). That claim is left without citation or support. In contrast, what is said by AAP's sources is "delaying affirmation should *not* be construed as conversion therapy or an attempt to change gender identity" in the first place (Byne, 2016, p. 2). Nonetheless, AAP seems to be doing exactly that: simply relabeling any alternative approach as equivalent to conversion therapy.

Although AAP (and anyone else) may reject (what they label to be) conversion therapy purely on the basis of political or personal values, there is no evidence to back the AAP's stated claim about the existing science on gender identity at all, never mind gender identity of children.

AAP also dismissed the watchful waiting approach out of hand, not citing any evidence, but repeatedly calling it "outdated." The criticisms AAP provided, however, again defied the existing evidence, with even its own sources repeatedly calling watchful waiting the current standard. According to AAP:

> [G]ender affirmation is in contrast to the outdated approach in which a child's gender-diverse assertions are held as "possibly true" until an arbitrary age (often after pubertal onset) when they can be considered valid, an approach that authors of the literature have termed "watchful waiting." This outdated approach does not serve the child because critical support is withheld. Watchful waiting is based on binary notions of gender in which gender diversity and fluidity is pathologized; in watchful waiting, it is also assumed that notions of gender identity become fixed at a certain age. The approach is also influenced by a group of early studies with validity concerns, methodologic flaws, and limited follow-up on children who identified as TGD and, by adolescence, did not seek further treatment ("desisters").[45,47]

The citations from AAP's reference list are:

45. Ehrensaft D, Giammattei SV, Storck K, Tishelman AC, Keo-Meier C. Prepubertal social gender transitions: what we know; what we can learn—a view from a gender affirmative lens. *Int J Transgend.* 2018;19(2):251–268

47. Olson KR. Prepubescent transgender children: what we do and do not know. *J Am Acad Child Adolesc Psychiatry.* 2016;55(3):155–156.e3

I was surprised first by the AAP's claim that watchful waiting's delay to puberty was somehow "arbitrary." The literature, including AAP's sources, repeatedly indicated the pivotal importance of puberty, noting that outcomes strongly diverge at that point. According to AAP reference 29, in "*prepubertal* boys with gender discordance—including many without any mental health treatment—the cross gender wishes usually fade over time and do not persist into adulthood, with only 2.2% to 11.9% continuing to experience gender discordance" (Adelson & AACAP, 2012, p. 963, italics added), whereas "when gender variance with the desire to be the other sex is present *in adolescence,* this desire usually does persist through adulthood" (Adelson & AACAP, 2012, p. 964, italics added). Similarly, according to AAP reference 40, "Symptoms of GID *at prepubertal ages* decrease or even disappear in a considerable percentage of children (estimates range from 80–95%). Therefore, any intervention in childhood would seem premature and inappropriate. However, GID persisting *into early puberty* appears to be highly persistent" (Cohen-Kettenis et al., 2008, p. 1895, italics added). That follow-up studies of prepubertal transition differ from postpubertal transition is the very meaning of non-arbitrary. AAP gave readers exactly the reverse of what was contained in its own sources. If AAP were correct in saying that puberty is an arbitrarily selected age, then AAP will be able to offer another point to wait for with as much empirical backing as puberty has.

Next, it was not clear on what basis AAP could say that watchful waiting withholds support—AAP cited no support for its claim. The people in such programs often receive substantial support during this period. Also unclear is on what basis AAP could already know exactly which treatments are "critical" and which are not—Answering that question is the very purpose of this entire endeavor. Indeed, the logic of AAP's claim appears entirely circular: It is only if one were already pre-convinced that gender affirmation is the only acceptable alternative that would make watchful waiting seem to withhold critical support—What it delays is gender affirmation, the method one has already decided to be critical.

Although AAP's next claim did not have a citation appearing at the end of its sentence, binary notions of gender were mentioned both in references 45 and 47. Specifically, both pointed out that existing outcome studies have been about people transitioning from one sex to the other, rather than from one sex to an in-between status or a combination of masculine/feminine features. Neither reference presented this as a reason to reject the results from the existing studies of complete transition however (which is how AAP cast it). Although it is indeed true that the outcome data have been about complete transition, some future study showing that partial transition shows a different outcome would not invalidate what is known about complete transition. Indeed, data showing that partial transition gives better outcomes than complete transition would, once again, support the watchful waiting approach which AAP rejected.

Next was a vague reference alleging concerns and criticisms about early studies. Had AAP indicated what those alleged concerns and flaws were (or which studies they were), then it would be possible to evaluate or address them. Nonetheless, the argument is a red herring: Because all of the later studies showed the same result as did the early studies, any such allegation is necessarily moot.

Reference 47 was a one-and-a-half page commentary in which the author off-handedly mentions criticisms previously made of three of the eleven outcome studies of GD children, but does not provide any analysis or discussion. The only specific claim was that studies (whether early or late) had limited follow-up periods—the logic being that had outcome researchers lengthened the follow-up period, then people who seemed to have desisted might have returned to the clinic as

cases of "persistence-after-interruption." Although one could debate the merits of that prediction, AAP instead simply withheld from the reader the result from the original researchers having tested that very prediction directly: Steensma and Cohen-Kettenis (2015) conducted another analysis of their cohort, by then ages 19–28 (mean age 25.9 years), and found that 3.3% (5 people of the sample of 150) later returned. That is, in long-term follow-up, the childhood sample showed 66.7% desistence instead of 70.0% desistance.

Reference 45 did not support the claim that watchful-waiting is "outdated" either. Indeed, that source said the very opposite, explicitly referring to watchful waiting as the *current* approach: "Put another way, if clinicians are straying from SOC 7 guidelines for social transitions, not abiding by the watchful waiting model *favored by the standards,* we will have adolescents who have been consistently living in their affirmed gender since age 3, 4, or 5" (Ehrensaft et al., 2018, p. 255). Moreover, Ehrensaft et al. said there are cases in which they too would still use watchful waiting: "When a child's gender identity is unclear, the watchful waiting approach can give the child and their family time to develop a clearer understanding and is not necessarily in contrast to the needs of the child" (p. 259). Ehrensaft et al. are indeed critical of the watchful waiting model (which they feel is applied too conservatively), but they do not come close to the position the AAP policy espouses. Where Ehrensaft summaries the potential benefits and potential risks both to transitioning and not transitioning, the AAP presents an ironically binary narrative.

In its policy statement, AAP told neither the truth nor the whole truth, committing sins both of commission and of omission, asserting claims easily falsified by anyone caring to do any fact-checking at all. AAP claimed, "This policy statement is focused specifically on children and youth that identify as TGD rather than the larger LGBTQ population"; however, much of that evidence was about sexual orientation, not gender identity. AAP claimed, "Current available research and expert opinion from clinical and research leaders … will serve as the basis for recommendations" (pp. 1–2); however, they provided recommendations entirely unsupported and even in direct opposition to that research and opinion.

AAP is advocating for something far in excess of mainstream practice and medical consensus. In the presence of compelling evidence, that is just what is called for. The problems with Rafferty, however, do not constitute merely a misquote, a misinterpretation of an ambiguous statement, or a missing reference or two. Rather, AAP's statement is a systematic exclusion and misrepresentation of entire literatures. Not only did AAP fail to provide compelling evidence, it failed to provide the evidence at all. Indeed, AAP's recommendations are *despite* the existing evidence.

Disclosure statement

No potential conflict of interest was reported by the author.

References

Rafferty, J., AAP Committee on Psychosocial Aspects of Child and Family Health, AAP Committee on Adolescence, AAP Section on Lesbian, Gay, Bisexual, and Transgender Health and Wellness. (2018). Ensuring comprehensive care and support for transgender and gender-diverse children and adolescents. *Pediatrics*, *142*(4), e20182162 doi:10.1542/peds.2018-2162

Steensma, T. D., & Cohen-Kettenis, P. T. (2015). More than two developmental pathways in children with gender dysphoria? *Journal of the American Academy of Child and Adolescent Psychiatry*, *52*, 147–148. doi:10.1016/j.jaac.2014.10.016

Wallien, M. S. C., & Cohen-Kettenis, P. T. (2008). Psychosexual outcome of gender-dysphoric children. *Journal of the American Academy of Child and Adolescent Psychiatry*, *47*, 1413–1423. doi:10.1097/CHI.0b013e31818956b9

Appendix

Count	Group	Study
2/16 4/16 10/16	gay* trans-/crossdress straight*/uncertain	Lebovitz, P. S. (1972). Feminine behavior in boys: Aspects of its outcome. *American Journal of Psychiatry, 128,* 1283–1289.
2/16 2/16 12/16	trans- uncertain gay	Zuger, B. (1978). Effeminate behavior present in boys from childhood: Ten additional years of follow-up. *Comprehensive Psychiatry, 19,* 363–369.
0/9 9/9	trans- gay	Money, J., & Russo, A. J. (1979). Homosexual outcome of discordant gender identity/role: Longitudinal follow-up. *Journal of Pediatric Psychology, 4,* 29–41.
2/45 10/45 33/45	trans-/crossdress uncertain gay	Zuger, B. (1984). Early effeminate behavior in boys: Outcome and significance for homosexuality. *Journal of Nervous and Mental Disease, 172,* 90–97.
1/10 2/10 3/10 4/10	trans- gay uncertain straight	Davenport, C. W. (1986). A follow-up study of 10 feminine boys. *Archives of Sexual Behavior, 15,* 511–517.
1/44 43/44	trans- cis-	Green, R. (1987). *The "sissy boy syndrome" and the development of homosexuality*. New Haven, CT: Yale University Press.
0/8 8/8	trans- cis-	Kosky, R. J. (1987). Gender-disordered children: Does inpatient treatment help? *Medical Journal of Australia, 146,* 565–569.
21/54 33/54	trans- cis-	Wallien, M. S. C., & Cohen-Kettenis, P. T. (2008). Psychosexual outcome of gender-dysphoric children. *Journal of the American Academy of Child and Adolescent Psychiatry, 47,* 1413–1423.
3/25 6/25 16/25	trans- lesbian/bi- straight	Drummond, K. D., Bradley, S. J., Badali-Peterson, M., & Zucker, K. J. (2008). A follow-up study of girls with gender identity disorder. *Developmental Psychology, 44*, 34–45.
17/139 122/139	trans- cis-	Singh, D. (2012). *A follow-up study of boys with gender identity disorder*. Unpublished doctoral dissertation, University of Toronto.
47/127 80/127	trans- cis-	Steensma, T. D., McGuire, J. K., Kreukels, B. P. C., Beekman, A. J., & Cohen-Kettenis, P. T. (2013). Factors associated with desistence and persistence of childhood gender dysphoria: A quantitative follow-up study. *Journal of the American Academy of Child and Adolescent Psychiatry, 52,* 582–590.

*For brevity, the list uses "gay" for "gay and cis-", "straight" for "straight and cis-", etc.

IN THE UNITED STATES DISTRICT COURT

FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA

* * * * * *

B.P.J., by her next friend and mother, HEATHER JACKSON,

Plaintiffs

vs.

WEST VIRGINIA STATE BOARD OF EDUCATION, HARRISON COUNTY BOARD OF EDUCATION, WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION, W. CLAYTON BURCH in his official capacity as State Superintendent, and DORA STUTLER in her official capacity as Harrison County Superintendent, PATRICK MORRISEY in

* Case No. 2:21-CV-00316

VIDEOTAPED DEPOSITION OF

MARY D. FRY, PH.D.

March 29, 2022

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his official capacity as Attorney * General, and THE STATE OF WEST * VIRGINIA, * Defendants *

* * * * * *

VIDEOTAPED DEPOSITION OF MARY D. FRY, PH.D. March 29, 2022

VIDEOTAPED DEPOSITION OF

MARY D. FRY, PH.D. taken on behalf of the Intervenor herein, pursuant to the Rules of Civil Procedure, taken before me, the undersigned, Nicole Montagano, a Court Reporter and Notary Public in and for the Commonwealth of Pennsylvania, taken via videoconference, on Tuesday, March 29, 2022 at 10:03 a.m.

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STIPULATION

(It is hereby stipulated and agreed by and between counsel for the respective parties that reading, signing, sealing, certification and filing are not not waived.)

PROCEEDINGS

MARY D. FRY, PH.D.,

CALLED AS A WITNESS IN THE FOLLOWING PROCEEDING, AND HAVING FIRST BEEN DULY SWORN, TESTIFIED AND SAID AS FOLLOWS:

MS. BURKDOLL: My name is Dana Burkdoll, CSR, Notary for the State of Kansas.

ATTORNEY TRYON: We might want to go off the record.

VIDEOGRAPHER: Going off the record. Current time reads 10:03 a.m.

OFF VIDEOTAPE

(WHEREUPON, AN OFF RECORD DISCUSSION WAS HELD.)

ON VIDEOTAPE

VIDEOGRAPHER: We are now back on the record my name is Jacob Stock. I'm a Certified Legal Video Specialist employed by Sargent's Court Reporting Services. The date today is March 29th, 2022. The current time reads 10:05 a.m. Eastern Standard Time. This deposition is being taken remotely by a Zoom conference. The caption of this case is in the United States District Court for the Southern District of West Virginia, Charleston Division. BPJ, et al. versus the West Virginia Board of Education, et al. Civil Action Number 2:21-CV-00316. The name of the witness is Mary Fry, who has already been sworn in. Will the attorneys present state their names and the parties they represent?

ATTORNEY TRYON: This is David Tryon representing the State of West Virginia and I'm with the Attorney General's Office.

ATTORNEY VEROFF: Julie Veroff with Cooley, LLP. I represent the Plaintiff. And I'll let my co-counsel introduce themselves.

ATTORNEY HARTNETT: Hi. This is Kathleen Hartnett from Cooley. I'm in the room with Julie,

representing Plaintiff.

ATTORNEY KANG: Hi. This is Katelyn Kang representing Plaintiffs.

ATTORNEY REINHARDT: This is Elizabeth Reinhardt with Cooley, also for Plaintiffs.

ATTORNEY HELSTROM: Zoe Helstrom, with Cooley, also for Plaintiffs.

ATTORNEY SWAMINATHAN: This is Sruti Swaminathan from Lambda Legal also for Plaintiff.

ATTORNEY SCRUGGS: Johnathan Scruggs with Alliance for Freedom for the intervening Defendants. And also with me on the Zoom is Rachel Csutoros, also for the intervening Defendant.

ATTORNEY CROPP: This is Jeffery Cropp from Steptoe & Johnson representing the Defendants Harrison County Board of Education and Superintendent Dora Stutler.

ATTORNEY GREEN: This is Roberta Green here on behalf of West Virginia Secondary School Activities Commission.

VIDEOGRAPHER: And if that is everyone we can begin.

ATTORNEY TRYON: Is Kelly on the line? Did I miss that?

ATTORNEY GREEN: Actually I just got a text from Kelly that she can't locate the link.

ATTORNEY VEROFF: Let's go off the record while we reach out to her.

VIDEOGRAPHER: Going off the record. The time reads 10:08 a.m.

OFF VIDEOTAPE

(WHEREUPON, A SHORT BREAK WAS TAKEN.)

ON VIDEOTAPE

VIDEOGRAPHER: We are back on the record. The current time reads 10:08 Eastern Standard Time.

ATTORNEY MORGAN: This is Kelly Morgan on behalf of the West Virginia Board of Education and Superintendant Burch.

ATTORNEY TRYON: Okay.

Then I think we will move forward now. So prior to going on the record we would limit objections to objection to privilege, objections to scope and objections to form which would include all other objections, and that is when we say objection we'll preserve those objections. Is that acceptable to you, Julie?

ATTORNEY VEROFF: Yes, thank you so much.

ATTORNEY TRYON: Does anybody else have any objection to doing it that way? Okay. Then let's move forward.

EXAMINATION

BY ATTORNEY TRYON:

Q. Hello, Professor Fry. How are you?

A. Doing well. Thank you.

Q. Do you prefer calling you Professor Green --- excuse me Professor Fry? Does that work?

A. Sure.

Q. Okay.

Can you state your full name for the record please?

A. Mary Diane Fry.

Q. Are you represented by counsel this morning?

A. Yes.

Q. And who is your --- primarily representing you today?

A. Julie, Julie Veroff.

Q. Great. And have you been deposed before?

A. I have not.

Q. Have you testified in court before?

A. One time.

Q. Tell me about that.

A. Years ago my husband and I returned from our honeymoon and we found out we had been robbed. And a neighbor had seen three guys crawling out of our bedroom window, and so I appeared in court to share what was missing when we returned.

Q. Well, I'm sorry. That doesn't sound like a great way to end a honeymoon. So any other times you testified at trial?

A. No.

Q. And when we're speaking, you know, since we're in a deposition, this is a communication privilege unlike any other, but one of the things that we need to make to make it easier for the court reporter to understand what we're doing. So when I ask you a question please make sure you answer verbally as opposed to just nodding your head.

Okay?

A. Okay.

Q. If you don't understand a question that I ask you, tell me and I'll try and rephrase.

All right?

A. Sounds good.

Q. And if you answer I'll have to assume that you understood the question. Do you understand that?

A. Yes.

Q. And as we stated off the record, if you need a break at any time, let us know. We will break for you and the only caveat on that is once I ask a question you have to wait until you finish your answer before we can take a break.

All right?

A. Okay. Thank you.

Q. Do you have any questions about this proceeding before we get started?

A. No.

Q. Okay.

Well, just for the record, this deposition is being conducted as on Cross Examination. And Professor Fry, did you bring any documents to the deposition today?

A. Yes.

Q. What did you bring?

A. I have before me my Declaration, the House Bill, my expert report and my Vitae.

Q. And when you talk --- mention your Declaration,

is this the first one that was filed in the case? Is that what you mean?

A. Yes.

Q. Is there anyone else in the room with you at this point?

A. No.

Q. What documents did you review in preparation for your deposition today?

A. I reviewed my statement and my Vitae and some of the Court documents, the Complaint and a cursory review of some of the other statements. I reviewed the Plaintiff's statement and her mother's statement.

Q. Any other Court documents besides the Complaint and the statement with the Plaintiff and the mother?

A. A cursory review of other expert witnesses and, yeah, any of the case documents, a cursory review.

Q. Which expert reports did you look at?

A. I couldn't call them all by name but the expert witnesses that are medical experts.

Q. The Plaintiff's experts or Defendants' or both?

A. Both.

Q. So there is a total of, now including yours, eight expert reports. Have you seen all of those?

A. You know, I'm not positive. There was a report

from two on each side and then a response, and so I --- and again I didn't read these in detail, but I did have a look at them.

Q. Okay.

Was there anything in particular that you were looking for when you looked through those expert reports?

A. No, just trying to get a sense of the case. I kept a focus on my purpose here today.

Q. And so are you aware of this case? Do you know who BPJ is?

A. Yes.

Q. And who is BPJ?

A. She is a young athlete in West Virginia who is a transathlete and wanted to play sports in her school.

Q. And you understand BPJ is the Plaintiff.

Is that right?

A. Yes.

Q. Do you know who Heather Jackson is?

A. Her mother.

Q. Have you ever spoken to either one of them?

A. I have not.

Q. So I presume by the same rationale you have not met either one of them either.

Correct?

A. I have not.

Q. When did you first hear about BPJ?

A. About a year ago I was contacted by Plaintiff's Counsel in late April.

Q. And of course, don't tell me anything that your counsel --- any discussions you had after you were retained by counsel, but prior to being retained by counsel --- well, let me back up.

At one point you were retained by counsel to be an expert in this case.

Right?

A. Right.

Q. When was that?

A. Late April, early May, I believe.

Q. And what were you first told about the case before you were retained?

A. That this case involved a young athlete who was headed to Middle School and really wanted to be able to play sports.

Q. Were you told which sport?

A. I think so at the time.

Q. So at this point in time do you know which sports BPJ wanted to participate in at the time that BPJ

filed the lawsuit?

A. You know, it's hard to recall. There's quite a bit of water under the bridge. I know now that she wanted to do cheerleading and run track, and I'm not sure I could tell you the exact date I knew either one of those.

Q. Okay.

Let me rephrase my question because I'm not asking what the date was, I'm asking if you now know what --- at this time what sport BPJ participated in?

A. Yes.

Q. And which one?

A. She participated in cheerleading and now track.

Q. And so it was cross-country is that the same thing as track?

A. Sorry, cross-country. It's a different season, cross-country.

Q. Is that part of track and field or is it different?

A. It's a different season, yeah. I mean, usually it's grouped together, track and cross-country, but I should have said cross-country. That is what I meant.

Q. Okay.

At the time that you were retained had you already prepared any report similar to what was ultimately filed in this case on your behalf?

A. Yes.

Q. So tell me about that.

A. Okay.

Q. So let me make sure we are communicating. So before you were contacted by counsel for BPJ, had you already prepared something that what was filed as your Declaration?

A. Yes.

Q. Okay.

Tell me about that.

A. Okay.

In the spring of 2020 I was contacted to see if I would be willing to be an expert witness first in the Connecticut case, transathlete case and then in Idaho. And those sort of overlapped in the spring of 2020 a little bit, but I've been involved in providing expert reports for both of those.

Q. Okay.

So you did serve as an expert witness in the Connecticut case.

Is that right?

A. Yes.
Q. Was something that you prepared filed in the Connecticut case?
A. Yes.
Q. Same thing in the Idaho case?
A. Yes.
Q. Have you served as an expert witness in any other cases besides those two?
A. I'm serving as an expert witness in the Florida case as well.
Q. But you, to date, have not testified in any of those cases.
Right?
A. That's correct.
Q. And you haven't been deposed in those cases either I take it.
Right?
A. That's right. I have not.
Q. Have you actually prepared an expert report for Florida at this point?
A. Yes.
Q. Has that been submitted to court yet?
A. I believe so.
ATTORNEY TRYON: At this point your

initial report that was filed with the court, the initial Declaration. Let's mark that as Exhibit-1 and I will ask the court reporter to bring that up.

(Whereupon, Exhibit 1, Declaration, marked for identification.)

BY ATTORNEY TRYON:
Q. And feel free to look at your hard copy as we are discussing these exhibits, okay, Professor?
A. Okay.
ATTORNEY VEROFF: Sorry. I think this is the expert report and I think you were asking for the Declaration.
ATTORNEY TRYON: Yes, right.
VIDEOGRAPHER: My apologies.
ATTORNEY TRYON: It should have the Court stamp on the left at the top as I recall.
VIDEOGRAPHER: I see that. My apologies.
BY ATTORNEY TRYON:
Q. So first of all, I want to establish that this is the Declaration that you first prepared for this case.
Is that right?

A. Yes.
ATTORNEY TRYON: And Jake, do you have that marked as Exhibit-1? Are you able to do that?
VIDEOGRAPHER: I don't have it marked with a sticker at the moment, but I can mark them if you want me to.
ATTORNEY TRYON: Yes. That would be great.
VIDEOGRAPHER: Okay.
ATTORNEY TRYON: And what I would like to do, the expert report, which is the one that you previously brought up, Jake, that would be Exhibit-2. So if you could bring that up and make sure we all understand what Exhibit-2 is.

(Whereupon, Exhibit 2, Expert Report of Dr. Fry, was marked for identification.)

ATTORNEY TRYON: Will you be able to mark these while we are in this proceeding, Jake.
VIDEOGRAPHER: I have it on my computer but I'm not on my computer at the moment. I don't think I can unless we could go off record for me to do so.
ATTORNEY TRYON: We will keep on going

and ask if you recognize what they are and then maybe during a break you can do that.
VIDEOGRAPHER: That works for me.
ATTORNEY TRYON: And for the record we will be looking at the statute, which we will be marking as Exhibit-3 to this deposition.

(Whereupon, Exhibit 3, HB-3293, was marked for identification.)

BY ATTORNEY TRYON:
Q. So now let's go to Exhibit-2, which is your current expert report. I'm going to try to manipulate my page so I can see you, Professor, at the same time. I can switch this over to another screen, but it's not working. Let's try this. All right. So looking at Number 4 --- let me back up, paragraph number three, you say you have knowledge of the matters stated in this expert report and Declaration. I have collected and cite to relevant literature concerning the issues that arise in this litigation. Do you see that?
A. Yes.
Q. So what are the issues that arise in this litigation as you understand it?

ATTORNEY VEROFF: I'm sorry. I'll just object to the extent that complete paragraph three wasn't read.

ATTORNEY TRYON: Okay.

BY ATTORNEY TRYON:

Q. Okay.

Feel free to read the entire paragraph if you want but I'm just asking about that specific clause.

A. The issues that are relevant are that there's a categorical exclusion of transathletes. And that is of concern because of the many benefits that athletes reap from having the opportunity to participate in sports.

Q. Any other issues that arise in this litigation?

A. Nothing comes to mind at the moment.

Q. So that's what you refer to when you say issues arise in this litigation, and you said the categorical exclusion of transgender athletes because of benefits athletes receive from sport. Is that about right? It's not exactly what you said, but that is about right?

A. Yeah, because of the categorical exclusion of transgender athletes in sports that prevent them from having opportunities to reap all the benefits in sport.

Q. You have said already on the record and you also say in paragraph four that in preparing this expert

report and Declaration I reviewed West Virginia HB-3293, the bill at issue in this litigation.

Right?

A. Yes.

Q. So how --- did you read the entire thing?

A. The entire bill?

Q. That's my question.

A. Yes, yes.

Q. What did the legislature say the purpose is?

A. Well, to prevent transgender females from participating in a sport in West Virginia.

Q. The bill does not use the word transgender at all, does it?

ATTORNEY VEROFF: Sorry. Mr. Tryon, I'm going to object. If you're going to ask the witness about the bill, if you could please put it up on the screen so she could have it in front of her.

ATTORNEY TRYON: We will do it in a moment. I think she's looking at it anyway, so it's been put up on the screen.

ATTORNEY VEROFF: Is that right, Professor Fry? Do you have a hard copy of the bill in front of you?

THE WITNESS: Yes.

ATTORNEY TRYON: So that would be Exhibit-3. Are you finding that, Jake? You're muted.

VIDEOGRAPHER: I'm looking in my folder. I just had it this morning. It might be on my other computer. Counsel, if you want to go off the record I can grab that and then get the software to mark these for you.

ATTORNEY TRYON: Okay.

How long would that take?

VIDEOGRAPHER: Three minutes.

ATTORNEY TRYON: Okay.

Let's do that.

VIDEOGRAPHER: Okay.

I apologize truly. Going off the record. The current time reads 10:30 a.m.

OFF VIDEOTAPE

(WHEREUPON, A SHORT BREAK WAS TAKEN.)

ON VIDEOTAPE

VIDEOGRAPHER: We are back on the record. The current time reads 10:34 a.m. Eastern Standard Time.

ATTORNEY TRYON: And Jake, if you could bring up Exhibit-3 now, please, which is the HB-3293.

So this has previously been marked but for this deposition we will mark it as Exhibit-3.

BY ATTORNEY TRYON:

Q. So this is the House Bill that you --- the law that you reviewed, Professor Fry?

A. Yes.

Q. Excuse me. And nowhere in here does it use the word transgender, does it?

A. No.

ATTORNEY VEROFF: Objection.

BY ATTORNEY TRYON:

Q. Take a look at paragraph one --- excuse me, page one, under 18-2-25(e), line 1A, it starts A, legislature hereby finds there are inherent differences between biological males and biological females and that these differences are cause for celebration as determined by the Supreme Court of the United States in United States versus Virginia 1996, in parentheses. Do you see that?

A. Yes.

Q. Do you agree with that statement?

ATTORNEY VEROFF: Objection.

BY ATTORNEY TRYON:

Q. Go ahead.

A. Yes.
Q. Number two in parentheses says, these inherent differences are not a valid justification for sex-based classifications that make overbroad generalizations or perpetuate the legal, social and economic inferiority of either sex. Rather these inherent differences are a valid justification for sex-based classifications when they realistically reflect the fact that the sexes are not similarly situated in certain circumstances, as recognized by the Supreme Court of the United States in Michael V. Sonoma County Association of Intercollegiate Athletics, and NIA in parentheses or National Junior College Athletic Association. I goofed that. Sorry. I skipped a page. So continuing it said in Michael M. v. Sonoma County Superior Court 1981, in parentheses, and Supreme Court of Appeals in West Virginia in Israel v. Secondary Schools Commission in 1989 in parentheses. Other than the citations of those cases do you agree with that statement?
ATTORNEY VEROFF: Objection.
THE WITNESS: I believe that it's more complex than just to have a binary understanding of males and females.
BY ATTORNEY TRYON:

Q. So let me restrict my question to this part. It says these inherent differences are a valid justification for sex-based classifications when they realistically reflect the fact that sexes are not similarly situated in certain circumstances. That clause, do you agree with or disagree with?
ATTORNEY VEROFF: Objection.
THE WITNESS: Yeah, I would just say that it's all --- more complex than just saying that we have males and females.
BY ATTORNEY TRYON:
Q. Okay.
I'm sorry, what did you say last?
A. Yeah, that it's more complex than just considering them --- everyone fits tightly into a male or female category.
Q. And so you would disagree with that statement?
ATTORNEY VEROFF: Objection.
THE WITNESS: Yeah, I would agree with the first sentence, that we shouldn't use these to discriminate.
BY ATTORNEY TRYON:
Q. Does that specific clause, you don't agree with that, is that a fair statement?

ATTORNEY VEROFF: Objection.
THE WITNESS: The first sentence of number two?
BY ATTORNEY TRYON:
Q. I'm sorry. Let me make sure we're clear on the record. The phrase that says these inherent differences are a valid justification for sex-based classifications when they realistically reflect the fact that sexes are not similarly situated in certain circumstances, that clause, as I understand your testimony, you do not agree with in its entirety. Is that true?
ATTORNEY VEROFF: Sorry, Mr. Tryon. Objection.
THE WITNESS: Right, that's true.
BY ATTORNEY TRYON:
Q. Okay.
Number three, it says in the context of sports involving competitive stellar contact --- actually, strike that.
Let's move down. I want to make sure I understand. These are using terms that are defined below, so I want to see if we have a mutual agreement on the meaning of these terms. And on line 25, as shown on the left-hand side, it defines, quote, biological sex,

closed quote, means an individual's physical form as a male or female based solely on the individual's reproductive biology and genetics at birth. Do you see that?
A. Yes, I see that.
Q. Is that a fair definition of biological sex?
ATTORNEY VEROFF: Objection.
THE WITNESS: I disagree. I think it is more complex than that.
BY ATTORNEY TRYON:
Q. Okay.
How would you define biological sex?
ATTORNEY VEROFF: Objection.
THE WITNESS: Based on multiple factors besides just the reproductive biology in genetics at birth.
BY ATTORNEY TRYON:
Q. Okay.
And what would your definition be?
ATTORNEY VEROFF: Objection.
THE WITNESS: I'm not sure.
BY ATTORNEY TRYON:
Q. Okay.
Well, the reason I ask is because we are

probably using these terms throughout this deposition today, so I'm trying to make sure we have a mutual understanding of what biological sex means. So I don't want to try and impose upon you a definition that you are uncomfortable with.

A. Okay.

Q. So if you could give me something that you would be comfortable with, I would appreciate it.

ATTORNEY VEROFF: Objection.

THE WITNESS: Yeah, I would feel more comfortable --- yeah, I'm not sure, to be honest.

BY ATTORNEY TRYON:

Q. All right.

So I assume that the definition of female in here you're also uncomfortable with. Is that a fair statement?

A. Yes.

ATTORNEY VEROFF: Objection.

BY ATTORNEY TRYON:

Q. How about the definition of male, can we reach an agreement that male means an individual whose biological sex determined at birth is male?

ATTORNEY VEROFF: Objection.

THE WITNESS: Yes, I would not agree with

that.

BY ATTORNEY TRYON:

Q. You would not agree with that. Does the word male have a meaning to you?

ATTORNEY VEROFF: Objection.

THE WITNESS: Yes. I feel like it's related to how people see themselves in terms of male or female.

BY ATTORNEY TRYON:

Q. So it's only --- the term male only means how somebody sees him or herself?

ATTORNEY VEROFF: Objection.

THE WITNESS: They view their identity as male and female, I think that's the critical thing.

BY ATTORNEY TRYON:

Q. And does biology have any importance at all?

ATTORNEY VEROFF: Objection.

THE WITNESS: Yes, it does. It's just not the only factor.

BY ATTORNEY TRYON:

Q. So how about this, how about if we will refer to male today, male or boy, we mean someone whose birth --- on whose Birth Certificate it designates them as male or as male?

ATTORNEY VEROFF: Objection.

BY ATTORNEY TRYON:

Q. Can we use that as a definition today?

ATTORNEY VEROFF: Objection.

THE WITNESS: I think it's more appropriate to use the term to refer to people who identify as male.

BY ATTORNEY TRYON:

Q. So you don't think there is such a thing as a biological male? Is that what you are telling me?

ATTORNEY VEROFF: Objection.

THE WITNESS: I think term biological male is a complex term, that a lot goes into that.

BY ATTORNEY TRYON:

Q. You're familiar with the term cismale, right?

A. Yes.

Q. What does that mean?

A. Well, first is somebody whose identity aligns with their birth characteristics.

Q. Okay.

What birth characteristics are those?

ATTORNEY VEROFF: Objection.

THE WITNESS: I think the male, female category works in general, but there is people who fall

in between and may not be from a biological perspective nice and tightly categorized into either of those categories. So when I say it is complex, it is is not just the way somebody was born or one particular, you know, physical characteristic or so.

BY ATTORNEY TRYON:

Q. Well, I'm just try to understand the term you just gave me. You said that cisgender is someone that identifies in the same --- identifies with the sex that corresponds with their birth characteristics. And I'm asking what you meant when you said birth characteristics.

ATTORNEY VEROFF: Objection.

THE WITNESS: Yeah, I feel like there's medical terms that go beyond my expertise. But in my understanding, someone can be born and have characteristics of cross gender. So using just a binary system where we categorize and put everyone in either a male or female category is limiting and not helpful.

BY ATTORNEY TRYON:

Q. So then what is a cisgender person?

ATTORNEY VEROFF: Objection.

THE WITNESS: Someone who may align physically at birth with one of the genders. And also

when I say align, those match up with how they perceive themselves along with their birth characteristics.
BY ATTORNEY TRYON:
Q. Again you use that term birth characteristics. I need to know what you mean by that.
ATTORNEY VEROFF: Objection.
THE WITNESS: Again, using this in --- in --- from my perspective, I would listen to the doctors who study this and say that we can't just classify people tightly into these categories. And some people may share characteristics of either gender at birth and so it may be more complicated.
BY ATTORNEY TRYON:
Q. So we still don't even have a definition of cisgender from you.
ATTORNEY VEROFF: Objection.
BY ATTORNEY TRYON:
Q. So you don't know what birth characteristics are? Is that what you are telling me?
ATTORNEY VEROFF: Objection, asked and answered?
THE WITNESS: Yeah, I think some people are born and they fit nicely into these categories of male and female. I'm just acknowledging that not

everyone does. And if they do fit nicely into those, nicely just meaning that they are --- they, you know, are considered male at birth and they also perceive that they are than --- or the other way is female, then that would be a cisgender person.
ATTORNEY TRYON: Jake, how do I get to the live feed?
VIDEOGRAPHER: You mean like the video feed or like the real time?
ATTORNEY TRYON: Yes.
VIDEOGRAPHER: Give me one sec, I'll repost the link.
ATTORNEY TRYON: Are you going to put that in the chat room?
VIDEOGRAPHER: It should be visible now.
BY ATTORNEY TRYON:
Q. When you --- you used the term now considered male at birth. Can you tell me what you mean by that?
ATTORNEY VEROFF: Objection.
BY ATTORNEY TRYON:
Q. I'm not trying to trick you. I'm just trying to establish some definition so we can communicate properly today.
A. Yeah.

ATTORNEY VEROFF: Objection.
THE WITNESS: Yeah, I think a medical professional says that a baby has all the characteristics of a male, right. I'm just simply saying that everyone doesn't fit nice and tightly into that male or female, that there's two cross overs that the doctors seem to agree on.
BY ATTORNEY TRYON:
Q. And what the doctors seem to agree on is what they put on the Birth Certificate, right, at least initially? Fair statement?
ATTORNEY VEROFF: Objection.
THE WITNESS: Yeah. I'd say in general doctors choose one or the other that's closest.
BY ATTORNEY TRYON:
Q. So at least for purposes of today, when I say male or boy can we agree that I'm referring to someone who on the Birth Certificate, the original Birth Certificate, it is stated that that person is male?
A. I can agree to proceed that way.
Q. Okay.
And the same thing with respect to female or girl.
Right?

ATTORNEY VEROFF: Objection.
THE WITNESS: Yes. Can we also agree that if I -- that I can use the term transfemale to refer to someone who may share characteristics across gender and may identify as a female?
BY ATTORNEY TRYON:
Q. Let's be clear on that. Please tell me what your definition of trans --- let's first cite what does transgender mean?
ATTORNEY VEROFF: Objection.
THE WITNESS: Transgender refers to someone who may have been classified as birth as one gender but identifies as the other gender.
BY ATTORNEY TRYON:
Q. And then transgender girl, can you give me your definition of that?
A. Yes, someone who may have been assigned the male sex at birth and identifies as female.
Q. And then transgender boy?
A. Someone who may have been assigned female --- assigned a female gender at birth but perceives --- identifies with a male sex, male gender.
Q. Now, when I asked you about transgender you said someone classified at birth. And then when I asked you

about transgender girl you said assigned. Is there a difference between classified and assigned in your mind?

ATTORNEY VEROFF: Objection.

THE WITNESS: No, there wasn't a distinction there.

BY ATTORNEY TRYON:

Q. Okay.

And could that sex of a child be assigned before birth?

ATTORNEY VEROFF: Objection.

THE WITNESS: Yeah, possibly.

BY ATTORNEY TRYON:

Q. Going back to the bill itself, on line 12, on page two, in the context of sports involving competitive skill or contact biological males and biological females are not, in fact, similarly situated. Do you agree with that statement?

ATTORNEY VEROFF: Objection.

THE WITNESS: I'm not sure what that statement means by the fact similarly situated.

BY ATTORNEY TRYON:

Q. Okay.

Let's go to the next sentence. Biological males would displace females to a substantial extent if

permitted to compete on teams designated for biological females and then it cites a case. Do you agree with that statement?

ATTORNEY VEROFF: Objection.

THE WITNESS: I believe there can be a fair playing ground for people who are born male and who receive treatment, follow the rules and play the sport for them to be able to participate as females.

BY ATTORNEY TRYON:

Q. So I take it you do not fully agree with that statement.

Is that a fair statement?

A. Yeah.

ATTORNEY VEROFF: Objection.

THE WITNESS: I do not.

BY ATTORNEY TRYON:

Q. Item Number 5, line 21 says, classification of teams according to biological sex is necessary to promote equal athletic opportunities for the female sex. Do you agree with that statement?

ATTORNEY VEROFF: Objection.

THE WITNESS: Not if it means excluding transgender athletes.

BY ATTORNEY TRYON:

Q. Okay.

I need to apologize at this point. On the floor where I'm at they are doing construction, so periodically you may hear pounding or other noise, and I'm sorry about that.

Let me ask you about the definition of another word that appears periodically, the word arbitrary. And I looked that up in a dictionary, an online dictionary, Cambridge.org, and the definition it gave me was based on chance rather than being planned or based on reason. Is that a fair definition of arbitrary?

ATTORNEY VEROFF: Objection.

THE WITNESS: I'm not sure.

BY ATTORNEY TRYON:

Q. Okay.

What is your definition of arbitrary?

ATTORNEY VEROFF: Objection.

THE WITNESS: I'm not sure.

BY ATTORNEY TRYON:

Q. You have a Bachelor's Degree.

Right?

A. I do.

Q. And a Master's Degree.

Right?

A. Yes.

Q. So I recall you also have a Ph.D.

Is that right?

A. That is right.

Q. And you can't define for me what arbitrary means?

ATTORNEY VEROFF: Objection.

THE WITNESS: No, not at the moment.

BY ATTORNEY TRYON:

Q. You used the word arbitrary in this report, yet you don't know what it means?

ATTORNEY VEROFF: Objection.

THE WITNESS: Yeah. Do you want to go to where I used it?

BY ATTORNEY TRYON:

Q. No. I want to know if you, in fact, don't know what arbitrary means?

ATTORNEY VEROFF: Objection. I think the witness has asked to see where term is used in her report. And it would be helpful to show it to her for context.

ATTORNEY TRYON: Thank you, Counsel. I would like the witness to tell me how she doesn't know --- since she has a Ph.D., she can't tell me what

arbitrary means. And then you won't even agree with the definition that I found in the Cambridge.org Dictionary.

ATTORNEY VEROFF: Objection.

THE WITNESS: Can you repeat that definition again?

BY ATTORNEY TRYON:

Q. Based on chance rather than being planned or based on reason.

A. Okay.

I'm going to go back and accept that.

Q. Okay.

In paragraph seven of your report --- we can go back to the report now. This is Exhibit-2. In paragraph seven that is on the screen or you can look at your hard copy, you mention that you spent five years teaching physical education and coaching tennis at schools and summer camps. Tell me a little bit about your coaching tennis.

A. Yes, I was the head coach of both the boys and the girls team, high school. And the --- we had a varsity and a junior varsity team. They competed in the fall season. That was a team competition. And then the individual in spring, so it is a year-round sport in Texas.

Q. So why did they divide it between varsity and junior varsity?

A. Because some of the kids are --- because it gives the more advanced athletes a chance to compete at the varsity level and can be very inclusive and give a lot of kids an opportunity to play also as well with a junior varsity.

Q. And you had no problem with that, right?

ATTORNEY VEROFF: Objection.

THE WITNESS: That's right.

BY ATTORNEY TRYON:

Q. And then you said they divided it into boys and girls teams. Why did they do that?

ATTORNEY VEROFF: Objection.

THE WITNESS: Because, in general, that classification works, but there are exceptions to it.

BY ATTORNEY TRYON:

Q. And when you said boys, what did you mean by boys?

A. I mean those who may have been classified as a male in their lives and also identify that way.

Q. So the team, the tennis team was based on those who were born, classified as males and also identified that way?

A. Again, I can't speak for every athlete.

Q. And then when you said there was a girls team, what did that mean? What did you have to be to be on the girls team?

A. Yeah. And in general, they are females and see that classification as appropriate and participate as females.

Q. And why is that classification appropriate for tennis?

ATTORNEY VEROFF: Objection.

THE WITNESS: I think it's in general appropriate to have --- to let males and females compete separately.

BY ATTORNEY TRYON:

Q. Is that because in general males are better at tennis?

ATTORNEY VEROFF: Objection.

THE WITNESS: I wouldn't agree with that.

BY ATTORNEY TRYON:

Q. Then why is it appropriate to let them compete separately?

ATTORNEY VEROFF: Objection.

THE WITNESS: Yeah, I think males would, in general, due to, you know, their physical

characteristics would have a --- could have an advantage.

BY ATTORNEY TRYON:

Q. What kind of advantage?

ATTORNEY VEROFF: Objection.

THE WITNESS: Yeah, greater --- greater testosterone levels, which can lead to --- which can impact muscle mass and size.

BY ATTORNEY TRYON:

Q. As the coach, did you actually observe that there was a difference, performance difference between boys and girls teams?

A. I would ---.

Q. I'm sorry. Let me rephrase that. As the coach, did you actually observe that there was a performance difference between boys and girls?

A. Yes.

ATTORNEY VEROFF: Objection.

THE WITNESS: I think if you compare the mean level of ability across the two, then there is a moderate difference, but there was --- there was big differences within each gender. I had some very talented males and some males that were not very talented. And the same with females. Ability levels

really varied. And I had females across my years coaching high school that were stronger than males. So it is not a --- you have to be careful to say that every male out performs every female because that has not been my experience.

BY ATTORNEY TRYON:

Q. Understood. On the average, though, is it safe to say that the boys out perform the females?

ATTORNEY VEROFF: Objection.

THE WITNESS: Right, if we just look at a mean across the gender, yes.

BY ATTORNEY TRYON:

Q. Okay.

You used the word mean instead of average. Can you explain?

A. Yes, on average.

Q. Okay.

I just want to make sure we are communicating correctly.

A. Sure.

Q. Have you ever done --- looked at the standard deviation, the bell curve for each of those groups?

ATTORNEY VEROFF: Objection.

THE WITNESS: I'm familiar with the bell

curve. Do you mean ---?

BY ATTORNEY TRYON:

Q. Okay.

Have you looked at the bell curve for performance between those two groups of tennis players, boys versus girls?

ATTORNEY VEROFF: Objection.

THE WITNESS: Okay.

I have been --- I haven't collected data that I could share from when I coached high school. What I could say is that, if we took any skill, let's say their ability to serve accurately or hit a crisp volley or hit a solid backhand across the court, that their --- those bell curves are very close to each other, but overall for just looking at the two groups the boys could have a slight advantage. But those two bell curves, if we are looking at the bottom of those, you're going to say there is tremendous variability with the males and females. And so it is easy to get kind of focused on this small mean difference across gender when there is huge differences across, you know, each gender as well.

BY ATTORNEY TRYON:

Q. Understood. As far as the first standard

deviation, do you know if the first standard deviation would overlap between two groups?

ATTORNEY VEROFF: Objection.

THE WITNESS: I think so in high school tennis, right.

BY ATTORNEY TRYON:

Q. Okay.

Have you actually --- that's from just your generalized experience, but have you actually done a data compilation to determine that?

ATTORNEY VEROFF: Objection.

THE WITNESS: No.

BY ATTORNEY TRYON:

Q. Do you know of such a thing, any studies that do that?

A. I couldn't identify specifically studies, but when I see these things like if I --- if I pick up the Kansas City paper or after the marathon I see males and females interspersed all the way through with their times, right. So it's not a thing where every male that ran the marathon out performed every female that ran the marathon. So I think it's pretty consistent that those differences are smaller, too, if we are not talking about the elite of elite athletes.

Q. When you were coaching, how long did you coach?

A. I coached four years full time and then my graduate program at Greensboro I was --- I had an assistantship at a Middle School to teach --- to assist teachers with teaching physical education.

Q. In paragraph eight of your report it says that you graduated with a Master of Science in sports psychology/pedagogy from the University of North Carolina in Greensboro, North Carolina, in 1990. During that did you take any classes in sports biomechanics?

A. I believe I took one.

Q. What is sports biomechanics?

A. Sports biomechanics looks at the study of movement and how to optimize skills and movement patterns.

Q. And is it fair to say that the biomechanics of males and females are different?

ATTORNEY VEROFF: Objection.

THE WITNESS: With regard to everything across the board, like walking?

BY ATTORNEY TRYON:

Q. In athletics --- well, we'll talk about in walking. Is it different in walking?

ATTORNEY VEROFF: Objection.

THE WITNESS: I would say there is more similarity across the genders, more variability with age than across genders on most movements.

BY ATTORNEY TRYON:

Q. Okay.

So you don't think there is a difference between males and females in the context of biomechanics?

ATTORNEY VEROFF: Objection.

THE WITNESS: Yeah, I think I just need something more specific, right, if males in general can generate more power or something in a particular movement, that may be the case. It is not my area of expertise.

BY ATTORNEY TRYON:

Q. Okay. Fair enough. Are you a psychologist?

A. I am not.

Q. Are you a psychiatrist?

A. No.

Q. Have you had any clinical experience seeing any patients?

A. Not clinical experience, no.

Q. Other types of experience seeing patients?

A. No.

Q. And so I a presume you never treated any patients?

A. That's correct.

Q. Have you ever worked as a counselor or social worker?

A. No.

Q. Have you ever counseled with kids on either a formal basis or informal basis on mental health issues?

A. I'm on the educational side of sports psychology and so I might provide educational information, right, about how to develop strong mental skills, right, that are going to help you enjoy your sport better and perform better, right. It's all on the educational side, so not on a diagnosis side or treatment of mental health. That would be beyond my credentials and I would refer athletes to someone else.

Q. Okay.

Have you ever counseled with kids on gender dysphoria issues?

A. I have not.

Q. Have you counseled with kids or young adults on transgender issues?

A. I have not. To say that would be beyond my expertise and training.

Q. Fair enough.

ATTORNEY TRYON: Well, we've been going a little over an hour. I'm happy to keep on going. But if you need a break, let me know.

ATTORNEY VEROFF: I think it would be good to take a short break.

VIDEOGRAPHER: Going off the record. The current time reads 11:15 Eastern Standard Time.

OFF VIDEOTAPE

(WHEREUPON, A SHORT BREAK WAS TAKEN.)

ON VIDEOTAPE

VIDEOGRAPHER: We are back on the record. The current time reads 11:27 Eastern Standard Time.

BY ATTORNEY TRYON:

Q. In paragraph nine of your report you refer to a Coacher's Guide of Maximizing Youth Sport Experience. And did you write that whole book?

A. With colleagues, we did.

Q. Does that book address transgender athletes at all?

A. It addresses how to create an environment that can be inclusive and help all athletes have a great

experience. It's not specifically written --- you know, it's not about about transgender athletes overall. What I would say they're included in the sense that it is beneficial to be inclusive in sport.

Q. Is the term transgender, does it appear in the book at all?

A. Beyond -- I'm not sure.

Q. When was that book written?

A. It was released in 2020.

Q. When was the first time that you became aware of the issue of transgender girls participating in girls sports?

ATTORNEY VEROFF: Objection.

THE WITNESS: I'm not sure. Years ago. I take conferences regularly, or sports psychology conference, and there has been sessions for a long time.

ATTORNEY TRYON: Let me ask you to take a look at some documents. Jake, if you can pull up the document Cortisole and Stress Response during the Game and Practice in Female Collegiate Soccer Players.

VIDEOGRAPHER: Do you want that marked?

ATTORNEY TRYON: Yes, this would be Number 4.

(Whereupon, Exhibit 4, Article by Dr. Fry, was marked for identification.)

ATTORNEY TRYON: And just for the court reporter, my name is spelled T-R-Y-O-N.

BY ATTORNEY TRYON:

Q. Okay.

This is a document, an article that you wrote, correct, Professor Fry?

A. This was a Master's thesis from one of our students and I served on her committee.

Q. I see. Who is Andrew Fry?

A. He's my husband.

Q. Okay.

Why did this document only focus on female soccer players?

A. Typically, in a Master's thesis you kind of can keep things smaller and tighter, and it's not like a doctoral dissertation I think would be one of the key reasons. There's probably been less research with females and cortisol because it's a little more complicated with menstrual cycles and all that, too. And I think this athlete --- I'm sorry, this student was very interested in any female student to the literature.

Q. Is there a difference in cortisol and stress responses between male and female soccer players?

ATTORNEY VEROFF: Objection.

THE WITNESS: Yeah, you know, this is --- I would need to review this. And again, it's beyond my expertise in looking at gender differences in cortisol.

BY ATTORNEY TRYON:

Q. So I'm a little puzzled. You said that you're on the committee to review the students' work. Did I get that about right?

A. I helped with this project, but this was her thesis research, and she also had some I think psychological measures. This has been a while. It was published in 2007, but she was --- I'm not even sure I could tell you what year she graduated or if this was right over, but you know, quite a bit of time has passed. I would have to go back and review this and it is not my primary area of expertise, but I was an author on this paper.

Q. So when you say you're an author, does that mean you wrote portions of it or just supervised it?

A. You know, it varies and I would have to go back to this one. Honestly, in reviewing it, I haven't looked at this in a long time.

Q. Do you know how the student identified if someone was a female?

A. I think she used a female collegiate soccer team and so those were female athletes on the team.

Q. Do you know if any of those female athletes were transfemales?

A. No, I don't.

Q. Would that have made a difference for the study if some were transfemales and others were what I would call biological females?

ATTORNEY VEROFF: Objection.

THE WITNESS: I don't know. And I think it would depend on where the transathletes were.

BY ATTORNEY TRYON:

Q. Where they were? What do you mean?

A. I'm sorry, where they --- I'm sorry, Dana just came in with cords and I got distracted for a second. With where they were in the transitioning process.

ATTORNEY TRYON: Okay.

If you could bring up the next document, Examination of the Psychometric Properties of Perceived Motivational Climate in Sports Questionnaire.

VIDEOGRAPHER: I'm sorry. Can you repeat that title?

ATTORNEY TRYON: Yes. Examination of the Psychometric Properties of the Perceived Motivational Climate in Sports Questionnaire.

VIDEOGRAPHER: Okay.

Just give me one moment?

THE WITNESS: You may want to take this home for bedtime reading tonight, right.

ATTORNEY TRYON: This is now marked as Exhibit-5, I believe.

(Whereupon, Exhibit 5, Article, was marked for identification.)

BY ATTORNEY TRYON:

Q. Have you seen this document before?

A. I have. It's been a while since I looked at it, but, yeah, I have.

Q. And what is the purpose of this document?

A. So there was a measure, a perceived motivational climate of sports questionnaire. And Maria Newton in her dissertation, she wanted to expand on the measure and create little subscales within what we call task in ego involving climates. And I think she ran it with a couple of samples here just to be able to test the

psychometrics of the measure.

Q. Why was this one limited to female athletes?

A. It's a good question. Why does any researcher includes females, males and/or both? Maria had access to, as I remember, a massive tournament, volleyball tournament, and could get the group onboard and be able to access a lot of teams because research is hard to do. You really need to be able to access a number of teams and she was able to do that with this study.

Q. So you don't know why it would be separated to be only for female athletes?

A. I think she was only interested in volleyball and in particular females.

Q. Is there a difference in volleyball between female and male athletes?

ATTORNEY VEROFF: Objection.

THE WITNESS: A difference in what sense?

BY ATTORNEY TRYON:

Q. In psychometric properties, the perceived motivational climate?

A. Okay.

So while she didn't look at that in the study because she only had females, so we just have to look at the broader literature, right. And the theory

predictions hold up in that athletes can perceive the climate as very task involving or ego involving, right. And in some samples athletes, you know, males or females may see it one way or another more, but the predictions just align consistently that if you perceive the task involving climate at least to good things. Like people have more fun and try harder, they're more committed to their sports, they have better relationships with others, those kind of things.

Q. All right.

ATTORNEY TRYON: I'm finished with that exhibit then. Let me then ask you some other questions.

BY ATTORNEY TRYON:

Q. Is your expertise limited to sports psychology?

A. Sports psychology is a broad term, you know, but yes, I would say that is my expertise. I don't know if you would consider youth sport as a part of that.

Q. I'm sorry. I missed what you said.

A. The youth sport.

Q. Oh, youth support?

A. Yes, in particular within sports psychology my focus has been on youth.

Q. Okay.

A. Not exclusively.

Q. So just to be clear, you are not an exercise physiologist, right?

A. I am not.

Q. And you are not a medical doctor. Correct?

A. That's correct.

Q. And you don't have expertise in the science of performance advantage, do you?

A. No.

Q. And you have no expertise in sports safety. Is that true?

A. Yes, true.

Q. And do you have any expertise in concussion management?

A. No.

Q. Do you have any expertise in ACL injuries?

A. No.

Q. Have you done any research studies or papers regarding transgender females in sports?

A. No.

Q. Have you taught any classes on that?

A. Not like a complete course, but it's a topic that we can cover in our undergraduate score psychology class.

Q. And so is that a class that you teach?

A. Yes.

Q. And what exactly have you covered with regard to transgender females in that class?

A. So late this semester I'm teaching the class and later in April we have a trans --- a transfemale who is a retired athlete and coach coming in for that day and we will probably take a partial class before that just to have some discussions and lay some groundwork. It is an educational session where we just --- we have students who may be well informed and passionate about transathletes in sport and we have had other students who have had very little exposure. So it's not a big --- it's not a big chunk of the class, right, it's a class or two that we touch on it.

Q. Aside from any research, have you attended any seminars or classes on transgender females in sports?

A. Yes. Typically at our national conference, the Association of Applied Sports Psychology, you know, that's a jampacked schedule, and probably most conferences I'll sit in on a session. Sometimes they --- they will do a webinar, things like that. So over the years, yes, I have participated in those.

Q. Have you reviewed any literature on transgender

participation in sports to prepare your opinion in this case?

A. Like over the last two years I've read some. I couldn't point or identify, hey, this is exactly the literature I've read. Just someone who's reading often in my --- you know, within sports psychology.

Q. Your bibliography doesn't include any papers studying transgender athletes, does it?

A. No.

Q. And have you done any studies or papers regarding the harm to motivation on females when biological boys or trans/transgender girls are allowed to compete on girls teams?

ATTORNEY VEROFF: Objection.

THE WITNESS: I have.

BY ATTORNEY TRYON:

Q. Do you mean have not?

A. I'm sorry, have not.

Q. Have you taught any classes on that topic?

ATTORNEY VEROFF: Objection.

THE WITNESS: I have not.

BY ATTORNEY TRYON:

Q. Have you attended any seminars or classes on that topic?

ATTORNEY VEROFF: Objection.

THE WITNESS: I have not.

BY ATTORNEY TRYON:

Q. Have you prepared any papers regarding differences for motivation between males and females?

ATTORNEY VEROFF: Objection.

THE WITNESS: Yes.

BY ATTORNEY TRYON:

Q. Okay.

Well, what are those?

A. Okay.

I think in, oh, gosh --- in --- sometimes in papers we, you know, we see if there were gender differences in terms of motivation. When there are differences they're slight and we are back to that bell curve mean thing that there might be a slight difference but they don't impact the hypotheses in the sense that --- in the sense that someone has a high task orientation and/or perceives a task involving climate or caring climate, whether you are male or female those predictions hold up in terms of the outcomes.

Q. Are there papers in your bibliography that would show that to be the case that it's the same for boys and girls. Feel free to take a look at it. You have got it

there.

VIDEOGRAPHER: I would note that we gained another participant. If they would identify themselves for the record.

ATTORNEY PELET: Good morning. My name is Valeria Pelet del Toro for Cooley, LP, for Plaintiff BPJ.

THE WITNESS: Thank you for that time. The Hogue, Fry and Fry 2017, I have to review that paper. I can't remember if there were any gender differences. These were Middle School kids who were ---.

BY ATTORNEY TRYON:

Q. Let me stop you for just a second. Can you tell me what page that's on?

A. Yes, page 14, the second from the last reference.

Q. And which one is it again?

A. The Hogue Fry and Fry, 2017.

Q. Page 14 you said?

A. Yes, page 14, the second reference from the bottom of the page.

Q. I'm seeing Walling, M.D.

A. Okay. Sorry.

Q. Maybe the pagination is different on your copy.

A. I'm sorry. Are you looking at the expert report and Declaration?

Q. Yes, I am.

A. Okay.

It should be the same. If you go in alphabetical order, Hogue with an H, H-O-G-U-E.

Q. Okay.

Here is the issue. I see. Hogue, et cetera.

A. Yes.

Q. There's two by Hogue. Which year? They're both 2013.

A. The 2017.

Q. What is the title?

A. The title is the Differential Impact of Motivational Climate on Adolescents Psychological and Physiological Stress Responses.

ATTORNEY TRYON: It is on page three. Can you bring that up, Jake? It is under 14.

VIDEOGRAPHER: I was trying to look for it too.

ATTORNEY VEROFF: I think there is two page 14s. So there is a bibliography that directly follows the expert report and then there is the

citations that are encompassed in Exhibit A, the first page 14.

ATTORNEY TRYON: Thank you, Julie, for helping us out with that. I see it now. I'm sorry for that confusion.

BY ATTORNEY TRYON:

Q. You were going to explain that paper.

A. I'm sorry. Did you ask me to explain the paper?

Q. Yes. You were starting to talk about that, so I would appreciate if you could talk about that?

A. So in this study Middle School kids are recruited to participate in an intervention. They come in and they learn an activity. And they're assigned --- randomly assigned to either caring task involving climate or an ego involving climate. And as they participate across the interventions, their cortisol is measured. Cortisol is a stress hormone and it can indicate that people are experiencing higher stress. And so in this study we found that athletes in the caring task environment climate, their cortisol levels actually decreased, right, suggesting that they were not stressed. In addition they had more fun, they indicated they tried harder, they made more progress learning the activity, they experienced, you know, less shame, less

embarrassment, less anxiety. That is what I'm recalling from memory, okay. There are probably a couple of other things.

And if they participated in an ego involving climate you got to flip all of those. They didn't have as much fun, didn't indicate that they wanted to continue with the activity and their cortisol levels were significantly higher than those in the other group. And the results were consistent for males and females. What I would have to go back and check is were there any --- going back to these slight mean differences, were there any differences between the males and females in the other variables. And that I couldn't tell you without reviewing it. But in general, the purpose of the study was to see how this environment affects kids and the results were similar for males and females.

Q. And what age group was that?

A. This was Middle School, so six, seven and eight graders. I think it leaned heavier on the six grade, seven grade participants, but the mean age was probably 12.

Q. Any other papers in your bibliography talking about whether or not there is a difference between males and females and how they are motivated, if there is any

difference between them that is?

A. Yeah. I think with any of these studies, honestly, I just have to go back and see if there were any minor little differences between gender, but across gender the results are consistent.

Q. Okay. All right.

Let me ask you, have you prepared any papers regarding motivations for biological boys identifying as girls?

A. I have not.

Q. Have you prepared any papers regarding transgender girls?

A. I have not.

Q. Have you studied that issue?

A. No.

Q. Would that be something worth studying?

A. It could --- I'm sorry. Could you repeat that?

Q. Motivation regarding transgender girls?

A. Yes, it could be valuable.

Q. As far as you know, has anyone studied that?

A. Yeah, I --- you know, I hear people saying, you know, that there is just going to be more and more research coming out. I think there is isolated papers out there probably that people have had a look at or ---

but I couldn't name them right now for you.

Q. Have you prepared any papers regarding coaching transgender girls versus biological girls?

A. I have not.

ATTORNEY VEROFF: Objection.

BY ATTORNEY TRYON:

Q. Are you aware of any studies that do address that?

ATTORNEY VEROFF: Objection.

THE WITNESS: No.

BY ATTORNEY TRYON:

Q. Have you prepared any papers regarding the opportunity for collegiate athletic scholarships motivates student athletes?

A. Have I prepared any papers?

Q. That is my question.

A. No.

Q. Would you agree that the opportunity for collegiate athletic scholarships does, in fact, motivate the student athletes?

A. Some student athletes.

Q. Now, you qualify that as some. Any idea what that percentage might be?

A. No.

Q. Are you familiar with Title 9?

ATTORNEY VEROFF: Objection.

THE WITNESS: Yes, to some degree.

BY ATTORNEY TRYON:

Q. Tell me what your understanding of Title 9 is in the context of girls sports.

ATTORNEY VEROFF: Objection.

THE WITNESS: More opportunities are provided to girls to the same degree as boys and that fairness is given across other aspects of resources and so on, facilities and things like that.

BY ATTORNEY TRYON:

Q. Have you ever written any papers on Title 9?

A. No.

Q. Have you written any papers on college scholarships for girls?

A. On college scholarships for girls?

Q. Yes.

A. No.

Q. So you wouldn't be an expert on that, would you?

A. No.

Q. Have you submitted any comments to the Department of Education on proposed rules or regulations under Title 9?

A. No.

Q. Let me ask you a question a little bit different than the one earlier. Can the opportunity for scholarships for girls collegiate sports be a motivator for girls to compete in girls sports?

A. It can be for some athletes.

Q. So in paragraph 11 of your expert report, which is Exhibit-2, it says on the national level I've served with the Association of Applied Sports --- Sport Psychology, AASP, as a member of the Program Review Committee. That is correct, isn't it?

A. Yes.

Q. It's my understanding that the purpose of that organization is primarily to help train coaches. Is that fair?

A. No, that would be not accurate.

Q. Tell me the purpose of it.

A. Okay.

It is an organization of professionals that work in the area of sport and exercise psychology and to say there's probably two aims, that these professionals are trying to help people, a wide variety of people across the lifespan reap off the benefits from participation in physical activity and also help people perform up to

their potential or help them perform better. It is a mix of the organization. There are people who are faculty members and people that are involved in the team, are involved in programs but there's also people that are trained on the clinical side or that are more focused on sort of counseling aspects of sports psychology.

Q. Are you actually a member of the organization?

A. Yes, I am.

Q. Now, on the website it said that there is 2900 members in 50 countries. Is that about right to your knowledge?

A. That sounds right.

Q. So I divided that out. That would be 58 per country. That doesn't sound very big per country. So let me ask you, do you know how many of those are members are in the United States?

A. I don't know. I would guess it's heavily weighted in the U.S. I would say over half. I think there's a lot of countries that might have one person or so. So even though 50 countries are represented, you know, some of them are small and may have a really small participation, right.

Q. Okay. Fair enough.

So you mention in this paragraph the certification exam. So there is a certification exam. Is that right?

A. Yes. It's pretty new. There has been a certification. The fact that it is exam based is a new direction over the last few years.

Q. What is the purpose or meaning of that certification?

A. It's called CMPC, Certified Medical Performance Consultant, and it is good for the field because the people who have that credential, it designates sort of, you know, acceptable level of competence to go out and to work with athletes and coaches. So there is a number of courses people have to have. They have to have hours of training working directly with athletes. And then when they complete all those requirements they take --- they take an exam.

Q. Have you taken the exam?

A. I'm --- I'm about to in the coming months. A little back story on this is that the certification originally came out as I was wrapping up my doctoral training, and I would have needed to stay another year to get the other requirements that I was missing and my doctoral advisor at the time said, you know, yeah, I'd

just go and graduate and get rolling in your career. And she wasn't sure if this would take off or how big a deal it would be, and so over the years it has been sort of slow to take off. I have, for example, people come and say do you have this AASP Certification until the last year or two. So I think the public is becoming, you know, more aware of it.

I was asked to write the chapter in the Essentials Text, which is really the text for people to prepare for the exam. And so I was asked to write the motivation chapter, a key chapter on motivation theories. And so there's this double blind system on writing one of the chapters that I needed to wait longer to actually take the exam. But currently I'm an approved mentor to train students who are seeking the certification.

Q. But you don't have the certification at this point.

Correct?

A. Right. Just as a mentor. I have --- I received all the thumbs up on every --- on --- you know, you submit a packet of materials showing you have all the credentials and all. So I've done that. I just need now to sit for the exam. And I haven't done that yet.

I will probably do it once the semester is over.

Q. Do you consider yourself an athlete?

A. I'm smiling. I do.

Q. Okay.

A. I work closely with the Women's Inner Sport Network in Kansas City and they say that should be the mantra. Every female should say I'm an athlete. I'm not currently competing.

Q. Okay.

What sports have you participated in?

A. Tennis and softball were my primary sports.

Q. And when did you compete in or participate in those?

A. Softball was kind of a Middle School thing and I transitioned to tennis as I hit high school and competed through high school and college and then probably through my 20s still competing in tournaments around the state.

Q. So after college were you still competing in some fashion?

A. I was, yeah. Just one of the nice things about teaching and you have that summer break. And my friends enjoyed playing so we would play in tournaments around the state.

Q. Did you want to win?

A. I did.

Q. And so were you --- let's go back to the terms you already mentioned, like ego oriented and task oriented, right?

A. Uh-huh (yes), yes.

Q. And so tell me just in layman's terms what those mean.

A. Okay.

They were developed in a theory by a guy named John Nicholls and he said --- what he was really --- the question he was trying to address is what should we be doing if we are trying to help every athlete reach their own potential. And so his theory it has three facets to it. One is the goal orientation and those refer to your personal definition of success. And so some people --- he identified two, task orientation and ego. And people who have a high task orientation, they really feel most successful when they can walk away knowing they gave their best effort and they're focused on their improvement over time. But that is where genuine feelings of success come.

In contrast, some people have a strong ego orientation and they're more focused on how they compare

to everyone or are they winning. And they may say, yeah, good for me, I tried hard, who cares. What I care about is how did I compare to everyone. Did I demonstrate confidence? Did I look better than others, did I win?

Q. And can somebody have both an ego orientation and a task orientation?

A. Yes. They can be high in both, high in one and low in another.

Q. And when you were playing tennis, were you --- which one were you? Ego oriented or task oriented?

A. I think I've always had a high task orientation. I just loved sport and the chance to complete, and I would say I had a moderate ego orientation.

Q. Is one better than the other?

A. It depends what your aim is. If we want athletes to have fun and to keep playing and to try hard to have good relationships with others and to be good sports, then we should try to promote task orientation because ego orientation is not related to those things pretty consistently.

Q. And under your theory then should we try to suppress ego orientation?

A. No. I think the second part of the theory is

what kind of environment we create for our athletes, and so the research is very strong in this area suggesting many benefits when we can create a task and a caring climate for athletes. So the problem with the climate for a coach is that you really need to pick what am I going to do because you can't do both or it becomes a wash or a neutral environment. So those features of each of the climates, they're really in direct contrast with one another.

Q. When you say you are an athlete, what does that mean to be an athlete?

A. You know, for me it means someone who just loves having the opportunity to do their best and to try and improve and to walk away on one --- you know, today I'm going to go out there, I'm going to give my best and tomorrow I'm going to get up and go do it again whatever happened, right, because there is just so much fun and joy that comes from having that opportunity.

Q. So just as I recall you said you do like to win, right?

A. I do.

Q. And you can like to win and want to win whether you are personally ego oriented or task oriented, right?

A. Absolutely. I mean, who plays sports and

doesn't want to win. I mean, that's just sort of a given. What does winning mean for us, right? Is it a chance for me to kind of put my chest out and say I'm better than you, I beat you, or is it kind of a celebration of me being able to say, boy, I've worked hard and I can see I'm improving, right.

Q. Right. But if you are in an environment where you basically are prevented from winning, that would be very discouraging.

Right?

A. I'm not aware of any of those environments where you are prevented from winning.

Q. Well, what if the coach doesn't let you play?

A. Does that mean like you're not a starter or --- is that what you're referring to?

Q. Well, if you are just a bench warmer, would that be discouraging to some people?

A. You know, this comes back to the climate. If a coach is saying you're an important part of this team which is one of the features of a task and caring climate, right, you're valuable, you push everybody, your opportunities are going to be coming. And what it's really about is let's do all we can to help you keep developing, right. If we are just like, hey,

please stay out of the way, go sit at the end of the bench, go down to the end of the court because I'm working with these few star athletes I've got here, then yeah, it would be discouraging.

Q. Would you agree that rules are important in sports?

A. Yes.

Q. So you mentioned you have played tennis and softball. And what other sports are you familiar with?

A. Played a little bit of volleyball going through --- yeah, you know, I grew up in Texas and tennis is just a year-round sport, right.

Q. Right.

A. So that is a lot of my experience. My son is a baseball player, so I've watched an awful lot of baseball as well.

Q. Are you familiar with track and cross-country even though you haven't done it?

A. Yeah, yes.

Q. Are you familiar with football?

A. Yes.

Q. So how about basketball?

A. Yes.

Q. Who is going to go on in the final four?

A. Absolutely. A little excitement here in town.

Q. Yes. So do sports have to be athletic to be sports?

ATTORNEY VEROFF: Objection.

THE WITNESS: Do they have to be athletic?

BY ATTORNEY TRYON:

Q. That is my question.

A. Okay.

I think it just depends on how you define athletic.

Q. Well that's what I'm wondering. So for example, are video games sports?

A. You know, some universities are considering those. They have sports teams and they are considering that part of the athletics. It's not my particular area of interest.

Q. Okay.

So some sports are solo and some are with teams.

Is that a fair statement?

A. Yes and no. Again, I would say it is how you define it, right. If you are going to say a track team with the best individual, I would say there is relays

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and it depends how the coach approaches it. Are we just a lot of individuals doing our thing out here, are we a team working together?

Q. Well, when you --- so that may be in high school there is teams. But outside of high school or college there are sports you participate in that, for example, a marathon, you could be on a marathon and simply you're participating as an individual, right?

A. Uh-huh (yes), I agree.

Q. And but --- so some athletic events can be done without being on a team. Are there others that you can think of besides marathons?

A. Sure. As people graduate and they can run races, yeah, they can participate in weightlifting.

Q. And a lot of these things ---?

A. They could have ---.

Q. Sorry to interrupt you. Go ahead.

A. I'm sorry. They could swim. I'm just throwing out another one.

Q. Yeah. So swimming is both --- you do it as a sole --- as an individual but also as part of a team in high school and college, right?

A. Right.

Q. And both cases you, as an individual, want to win in these sports but also you're trying to help your team win. Is that a fair statement?

A. Yes, at its best.

Q. And there is sometimes when you feel like running, it can be something you just like to run. You don't have to be on a team or you can compete, you just run on your own, right?

A. That's true.

Q. I see little kids, why walk when you can run. So that's something that you can do alone or you can do with your family, right?

A. Uh-huh (yes).

Q. Is that a yes?

A. Yes, sorry.

Q. Thanks. And it's something you can do either competitively or not competitively, right?

A. Yes,

Q. Now when you're on a team, for example, a track team, you're competing against other people on your team.

Is that right?

A. Again, I would just say --- I would just check --- that is not how I would phrase it if I were a coach, that we're competing against each other. I would say we are a team and we are working together to bring out the best in each one of us, but the goal is every athlete reach their potential.

Q. But every one of those kids on a track team still wants to be the best on the track team as a general rule, right?

A. I don't know that that is necessarily true, but I think they want to compete and they want to do well. I would agree with that.

Q. I probably overstated that, but many of them --- at least some of them want to be the best on the team, the fastest on the team, right?

A. Yes.

Q. So those are the people that are comparing themselves to others and just want to be --- so they would be ego centered, ego oriented.

Is that right? But not necessarily?

A. Yeah, not necessarily.

Q. Okay.

A. Do you want me to comment on it?

Q. Sure.

A. Okay.

If I could just use an example. Like a track athlete, Al Oerter was an athlete in the '50s and '60s, he won four gold medals consecutively across four Olympics, it's crazy, throwing the discus. And he said --- a reporter asked him how did you beat the world, how were you so great, how were you better than everybody else these four Olympics, and he said --- his response was like that's nonsense. It is never about being better than somebody else. It's about being the best that you can be, right. And so what if is just good enough. What if I beat you, good, but maybe I can be so much better than that. So for my sights to be set on just being better than you it is limiting, right. And if you are so much better than me and so much less talented, why don't I just focus every day on being the best that I can be, right. So Al Oreter, you think four time Olympic gold medalist, he's got to be high on ego orientation. He's somebody who's really high in task and would have been lower. But we could look at other athletes that would be the flip and definitely. So when you say athletes who want to win that doesn't distinguish the task and ego aspect of it.

Q. So task and ego orientation doesn't affect somebody's desire to win. Desire to win is separate from the ego versus task orientation, that's what you're saying, right?

A. I think it comes down more to what does winning mean.
Q. All sports have rules, we've established that, right?
A. Uh-huh (yes).
Q. Is that a yes?
A. Yes.
Q. The purposes of the rules is, one, tells you how to play the game, right?
A. Yes.
Q. Another is for safety. You have rules for safety, is that right?
A. Yes.
Q. And you have rules to make things fair, right?
A. Yes.
Q. What other reasons do we have rules in sports? Does that cover it?
A. Nothing else comes to mind right now.
Q. Who generally makes rules for sports?
A. The leagues and sports organizations per se.
Q. Would it be fair to say that the participants rely on the rules?
A. Rely on the rules?
Q. Yes.

A. Fair to say that participants when they join a league or, you know, their understanding that there are rules that they need to abide by.
Q. And they expect that others have to abide by those same rules; right?
A. Yes.
Q. And it is important to have consistent rules, rules that don't change periodically, right?
A. I think rules change all the time in sports.
Q. Why do they change?
A. I think they change because they are recognizing those things that you mentioned that maybe something would be safer or something would be more fair or more inclusive.
Q. And sometimes those changes are made in anticipation of problems, not waiting for problems to happen.
Is that fair?
ATTORNEY VEROFF: Objection.
THE WITNESS: Yeah, I'm not sure.
BY ATTORNEY TRYON:
Q. Okay.
What about safety, rules for safety, do sometimes safety rules anticipate problems and sometimes they react to problems that have already occurred?
ATTORNEY VEROFF: Objection.
THE WITNESS: Yes.
BY ATTORNEY TRYON:
Q. Is that a yes?
A. Yes.
Q. And then how about fairness, we have rules designed for fairness and those are sometimes set in motion because of something that has happened, right?
A. Uh-huh (yes).
Q. Yes?
A. Yes.
Q. And other times it's in anticipation of problems that we see might come down the road but we want to set rules for fairness, right?
ATTORNEY VEROFF: Objection.
THE WITNESS: Yes.
BY ATTORNEY TRYON:
Q. And in all sports there is scoring, right?
A. Yes.
Q. That is part of the rules, right?
A. Uh-huh (yes), yes.
Q. And those scores decide who wins, right?
A. Yes.

Q. Would you say scoring is a motivator?
A. For some athletes.
Q. When an athlete perceives something as being unfair, that's a de-motivator, would you agree?
ATTORNEY VEROFF: Objection.
THE WITNESS: In some cases.
BY ATTORNEY TRYON:
Q. So sports also have rankings, individual rankings and team rankings, right?
A. That's right.
Q. And for some athletes those rankings are motivators, right?
A. Yes, for some.
Q. And sports, you give out trophies for winners, right?
A. I'm sorry. You broke up.
Q. In sports we give out --- at least in some cases we give out trophies to winners, right?
A. In some cases.
Q. So let me see if I understand. Are you advocating that sports should eliminate scoring?
ATTORNEY VEROFF: Objection.
THE WITNESS: No.
BY ATTORNEY TRYON:

Q. Are you advocating that they should eliminate rankings?

A. I don't think it would hurt at lower levels. I don't think we need to have have a focus on that when you're five or six years old, on rankings, and we ought to be focused just on learning the game and having fun, but in general I'm not opposed to us having --- identifying winners and ranking teams and so on.

Q. And sports teams, the coaches decide who plays in different positions in different games.

Is that right?

A. That's right.

Q. And should how good the student athlete is have anything to do with when, where and how to play according to the coach?

ATTORNEY VEROFF: Objection.

THE WITNESS: Should the athlete's talent have something to do with how much playing time they get?

BY ATTORNEY TRYON:

Q. That would be a fair way to characterize my question, yes. What is your answer?

A. I would agree with that particularly as we move up in levels. I really like the rules that some youth

sport leagues have that we have eight-year-olds and we're not just going to say, hey, Julie, you're on the bench because you're not as good so you don't get any playing time. I like the rules that say everybody gets in there a few innings and gets some playing time or gets to bat, or whatever the sport might be. So I think it really varies on what sport we are talking about.

Q. Let's look back at your report, Exhibit-2. Look at paragraph 35. Do you see that?

A. Yes, I do.

Q. The first sentence says, thus the benefits associated with youth and young adult sport are not limited to whether athletes are winning competitions, where they are ranked in their sport or what level of publicity they are getting.

Do you see that?

A. Yes.

Q. So you would agree with me that one of the benefits is the opportunity to win competitions.

Right?

A. I would probably word it one of the benefits is the opportunity to compete.

Q. Well, here you say winning. You say it is not limited to whether athletes are winning, which suggests

that winning competitions is one of the benefits.

Correct?

ATTORNEY VEROFF: Objection.

THE WITNESS: Yeah. I think what I mean by that is if only --- if you have to win to have a great experience in sports, then half of our teams are not going to have a good experience, right. So what I'm suggesting here is that and as the data backs this up that if you are in a good climate, then you can go out there and have fun and try hard and maybe your team didn't end up with a winning record, but you can still reap the benefits. And so it is not the case that only winning teams reap these benefits that come along with sports.

BY ATTORNEY TRYON:

Q. So you are saying winning is not a benefit?

ATTORNEY VEROFF: Objection.

THE WITNESS: I'm going to say winning can be a benefit. It's not a primary one in my mind in sport, but yes, winning can help us see our improvement and, you know, winning has its place for sure.

BY ATTORNEY TRYON:

Q. And you see athletes when they win, they are pretty excited, aren't they?

A. Many of them are.

Q. Well, have you ever seen anybody disappointed about winning?

A. Maybe not disappointed, but if --- let's just say you are really skilled in tennis and you come and you know, you leave me behind, you beat me 6061, there might not be a lot of joy for you in beating me, right, but for some athletes it might be, hey, it's another win for me and I'm super excited about that. So that is what I mean.

Q. And where they're ranked in their sport, that is one of the benefits.

Right?

ATTORNEY VEROFF: Objection.

THE WITNESS: Yeah, I think we may have a different view on benefits. With benefits I'm just thinking what's going to help us long term. And it reminds me of this Olympic gold medalist who said her kid was going through kind of a junk drawer and found her gold medal, right. So winning --- she's a gold medalist, didn't mean as much as all the experience and just reflecting on the ability to give your best effort and to build these relationships and to push yourself so hard. Those seem like benefits more than, you know, the

trophy or something winning. I'm not disputing that winning, yeah, can be fun and it is definitely part of sport.

BY ATTORNEY TRYON:

Q. Yeah. And so all those things you just mentioned certainly are benefits to sports. I'm not trying to suggest that's not the case. I just want to understand when you say in this paragraph, thus benefits associated with youth and young adult sports are not limited to whether athletes are winning competitions, where they are ranked in their sport or what level of publicity they are getting, it's not limited to that, but it does include those three things, right?

ATTORNEY VEROFF: Objection.

THE WITNESS: I'm going to give you that those are benefits. I'm just going to put them down lower on what we value.

BY ATTORNEY TRYON:

Q. Okay.

A. Or more important benefits.

Q. Is the opportunity to get a college scholarship also a benefit in youth sports?

A. For a very small proportion of children in youth --- in our youth sport world are able to secure college

scholarships and go on, and so our youth sport world shouldn't be centered around that I believe.

Q. But for those that want to and can get college scholarships, that is a big benefit for them, right?

A. Yes, that's very cool.

Q. And it can be worth tens of thousands of dollars, right?

A. Yes, it can.

Q. And even just being recruited to play on a college team, that's a big benefit for high schoolers, right?

A. Yes, for some.

Q. Well, right, for some. And in order to get there you need to be able to --- have the opportunity to --- well, strike that.

And for obviously a smaller minority still the opportunity to ultimately go on and play professional sports, that is another benefit, right?

A. Yeah, it's a benefit for such a small proportion that, again, I would just say that's not how we should set up our sports world, for those few.

Q. I understand that, but nonetheless there are many who never get to that place, but that's what they strive for and that's one of the reasons why they are in

sports, right?

ATTORNEY VEROFF: Objection.

THE WITNESS: I think there could be people like that for sure.

BY ATTORNEY TRYON:

Q. And same thing with scholarships, there are a lot of kids that want to get scholarships, they may not get them, but they're in sports because they want to get that scholarship and they think they'll be able to. Fair statement?

ATTORNEY VEROFF: Objection.

THE WITNESS: Yeah, I'm not sure what the percentages are. There are probably a lot more who would like to have a college scholarship who don't receive them because of the small proportion who do, right. But definitely. That's called extrinsic motivation. If I'm just playing a sport because that's the --- that's what I'm going for is a scholarship, yeah, there could definitely be athletes focused along those lines.

BY ATTORNEY TRYON:

Q. And would you agree that colleges generally select scholarship athletes from the pool of people that are actually playing high school athletics? That is a

correct statement, right?

A. I would say the majority have played high school athletics, yes.

Q. And those that are seeking that scholarship are athletes who use their high school performance to compete for college scholarships, right?

ATTORNEY VEROFF: Objection.

THE WITNESS: Yes, probably many do.

BY ATTORNEY TRYON:

Q. And the market for athletic scholarships is, in fact, competitive, right?

A. Many schools it is. Definitely not all schools, though.

Q. Okay.

What would it be otherwise?

A. I think some of the --- some smaller schools just will --- we have a local college that will give students like $8,000 or $10,000 a year towards their tuition fees if they participate on a sport team. And of course, you know, there has to be some level of skill there, but I wouldn't --- it is a good place for people who want to continue to play a sport but may not have the highest skill levels and definitely aren't being recruited at the division --- for the most part, a

Division I level or something like that.

Q. But they still compete for that scholarship, fair enough?

A. Yes.

ATTORNEY VEROFF: We've been going for a little over an hour. I just wanted to check in see, David, if you have a sense of when you are wrapping up this module. Maybe it would be a good time to take a break.

ATTORNEY TRYON: Yes, give me another five minutes and we can break if anybody wants to.

ATTORNEY VEROFF: Great.

ATTORNEY TRYON: Well, we can break right now. I'll leave it up to the witness. I'm not going to force it upon the witness or Plaintiff's Counsel. Would you like a short break?

THE WITNESS: That would be great. Thank you.

ATTORNEY TRYON: Let's go back how about 20 till. Does that work?

VIDEOGRAPHER: Going off the record. The current time reads 12:32:00 p.m. Eastern Standard Time.

OFF VIDEOTAPE

(WHEREUPON, A SHORT BREAK WAS TAKEN.)

ON VIDEOTAPE

VIDEOGRAPHER: We are back on the record. The current time reads 12:41 Eastern Standard Time.

BY ATTORNEY TRYON:

Q. So let me then ask you, Professor Fry, have you heard of the International View for Sociology of Sport?

A. That journal?

Q. Yes.

A. Yes, I've heard of it.

Q. Okay.

Are you familiar with Warren Whisenant?

A. No.

Q. Okay.

How about Jeremy S. Jordan?

A. No.

Q. Okay. Fair enough. Let me show you Exhibit --- if we could mark this, I guess we're at Exhibit 6, Fairness and Enjoyment in School Sponsored Youth Sports. If you could bring that up, Jacob.

(Whereupon, Exhibit 6, Fairness and Enjoyment in School Sponsored Youth Sports, was marked for identification.)

ATTORNEY TRYON: Jacob, if you could just put --- I think we've done this before. Put this in a PDF in the chat box, can you do that?

VIDEOGRAPHER: Yes, I just have to do that while it is not being shared and then I can share it again.

ATTORNEY TRYON: Okay.

Well I think we can just share it for now and then we can put it in there. If not, then if we need to, we can do it.

VIDEOGRAPHER: Okay.

I mean, I already have it dragged in.

ATTORNEY TRYON: Great. It doesn't take long at all. Great.

BY ATTORNEY TRYON:

Q. So have you ever seen this article before?

A. I haven't. Can you enlarge it a little bit? And what year was this at the top?

Q. It looks like 2008.

A. Thank you.

ATTORNEY VEROFF: If you give the witness a minute if she wants to scroll and get a sense of what this is.

BY ATTORNEY TRYON:

Q. Well, before I ask you any questions about this let me just ask you some questions overall. Would you agree that fairness in sports is an important value?

A. Yes.

ATTORNEY VEROFF: Objection.

BY ATTORNEY TRYON:

Q. And have you done any research on the issue of fairness and sports?

A. No. I'm just hesitating because we have included measures of sportspersonship, being a good sport. So if you include that then, yes. But in general, just fairness, I would say no.

Q. Okay.

Have you read any papers that specifically focus on fairness in sports?

A. You know, probably, but I couldn't name them.

Q. Okay.

Let's go down to --- I really only have one question here, which we'll look at and then if you want to review more of the article you are certainly welcome to do that. But if you go to what is labeled as page 97 at the top.

A. Could I just read the abstract first? Do you mind?

Q. Yes.

VIDEOGRAPHER: If you need that made bigger, let me know.

THE WITNESS: Maybe one more notch up. Thank you.

VIDEOGRAPHER: You're welcome.

THE WITNESS: Okay.

BY ATTORNEY TRYON:

Q. If you turn to 97, and the third full paragraph on that page it says an organizational climate embracing fairness is a critical factor influencing student athletes' attitude towards the sport they participate in and their desire to continue participation. Do you agree with that statement?

ATTORNEY VEROFF: I will just remind the witness if she would find it helpful to read more context around that statement before you answer, you're welcome to do so.

THE WITNESS: Yes, I think it would be helpful to look at how they measure fairness and, you know, the methods used in the study, but in general I can imagine that, yeah, that this is true.

BY ATTORNEY TRYON:

Q. Okay.

You don't --- just as a general statement you don't disagree with it?

A. Right.

Q. So I'm not going to ask you about any of their results or anything else, I just wanted to get your reaction on that statement. And you are not offering any expert opinion on fairness in sports.

Right?

A. That's right.

Q. Are you offering an expert opinion on whether or not HB-3293 is fair?

A. I'm --- I believe that the sport organizations at every level really value being inclusive and it would be harmful to exclude athletes where they wouldn't have an opportunity to reap the benefits of sport.

Q. And there are a lot of things that go into fairness, right?

ATTORNEY VEROFF: Objection.

THE WITNESS: Yes.

BY ATTORNEY TRYON:

Q. And it requires balancing of interests of various people and groups and values; right?

ATTORNEY VEROFF: Objection.

THE WITNESS: Yes.

BY ATTORNEY TRYON:

Q. You have not attempted to do that balancing in connection with HB-3293, have you?

ATTORNEY VEROFF: Objection.

THE WITNESS: Yeah, I think my expertise is to weigh in on all the benefits that athletes would not have an opportunity to reap if they weren't able to participate. But I think there are people who know a whole lot more more with any sport about how to keep making the rules fair for everyone.

BY ATTORNEY TRYON:

Q. Okay.

But just to be clear you have not attempted to do that balancing with HB-3293?

ATTORNEY VEROFF: Objection.

THE WITNESS: I'm not sure I understand the question.

BY ATTORNEY TRYON:

Q. Okay.

Let me try again. We established that fairness depends on balancing a lot of interests and views of different groups, different people, right?

A. Yes.

ATTORNEY VEROFF: Objection.

BY ATTORNEY TRYON:

Q. And that balancing, you have not attempted to do with respect to 32 --- HB-3293.

Correct?

ATTORNEY VEROFF: Objection.

THE WITNESS: I think it would be unfair to categorically exclude a group of athletes from having the opportunity to participate. So I'm not sure if that --- if you interpret that as balancing or not balancing.

BY ATTORNEY TRYON:

Q. Have you balanced the interests --- have you looked at the interests of other people in that decision that went into 32, HB-3293?

ATTORNEY VEROFF: Objection.

THE WITNESS: Yes, I think this House Bill is not fair to transfemale athletes.

BY ATTORNEY TRYON:

Q. Okay.

We will move onto that in little bit then. What is your qualifications to determine fairness?

ATTORNEY VEROFF: Objection.

THE WITNESS: I think I was called to be

an expert witness in this case to speak to the many benefits that come from participating in sports. And so from my experience as an athlete and a coach and a scholar in this area I think I have, you know, insight and can speak to the many benefits and how we should do all we can to prevent --- or all we can to not exclude athletes from having the opportunity to participate.

BY ATTORNEY TRYON:

Q. You said you are a tennis player, right?

A. Yes.

Q. When is the last time you played tennis?

A. I --- there's a wall right outside my office, and so I hit on a backboard. I haven't played a match in a little while. I'm not sure the last time was.

Q. And when you played --- the most recent time you played competitively, was that in a league or how does that work?

A. I haven't played leagues in a while. It was just for fun. I'd play with a couple of my friends, when we go to conferences, we bring our racquets and we get together and play. I've moved into, you know, other exercise forms now and I swim and hike and so on.

Q. And so when you were playing tennis, team, is that what it was, on a team?

A. Uh-huh (yes), yes.

Q. What team was that?

A. I played USTA leagues. Those are for adults. And after college, you know, there is just like a circuit in Texas that you can sign up for tournaments all around the State and play and go for ranking.

Q. But in college you played, right?

A. Yes.

Q. And was that on a girls team or a mixed team or what? I don't know much about tennis so I'm just trying to understand that.

A. Okay.

There was a men's and women's team. We had a head coach for both and assistant. Maybe in the last year there were separate head coaches, but we worked out together. We traveled to tournaments together. When you add up the score you got to --- you got to --- the women had a score and the men had a score, so it wasn't a total team win like that.

Q. Okay.

So if you're on the women's team and you go up against some other team and they just said we're going to have boys, we're going to have men participate in the women's team against you, you wouldn't have thought that was fair, right?

ATTORNEY VEROFF: Objection.

THE WITNESS: Well, I'm assuming you mean transfemales playing and ---?

BY ATTORNEY TRYON:

Q. I do not mean that. I meant exactly what I said. If you go to compete against another team and that team says we have two men, biological men, and they are going to compete against you, you would have said that is not fair, right?

ATTORNEY VEROFF: Objection.

THE WITNESS: I would have said --- sorry.

ATTORNEY VEROFF: That is all right.

THE WITNESS: I think I would have said what are the rules, right. And if the rules are that somebody could play, then I would say bring them on, right. And if the rules are that they can't play, then I'd say, yeah, we probably shouldn't do it that way until the rules change, right.

BY ATTORNEY TRYON:

Q. So whatever the rules are by definition are fair, right?

ATTORNEY VEROFF: Objection.

THE WITNESS: No, I didn't say that. I'm

sorry, Julie.

ATTORNEY VEROFF: No, that's quite all right.

THE WITNESS: I didn't say the rules are always fair, but I think we have to start somewhere and we have to acknowledge them and respect them.

BY ATTORNEY TRYON:

Q. Well, if they said we are going to have these men compete against you and they just changed the rules on you, wouldn't you object to the rules being changed?

ATTORNEY VEROFF: Objection.

THE WITNESS: Yeah. You know, in the context of what is taking place that seems not like a very realistic example in my mind. So I'm not sure I'm thinking about it.

BY ATTORNEY TRYON:

Q. So you don't want to answer my question?

ATTORNEY VEROFF: Objection.

THE WITNESS: Yeah, I think it's --- I think what we are talking about is just more complicated, right, and it is not just --- if we are talking about transfemale athletes, I think we are talking about a different ball game than you are.

BY ATTORNEY TRYON:

Q. Yeah. Well, I was not talking about them, at least not yet. I'm just asking if suddenly men are allowed to compete against women in tennis, whether or not they identify as female, do you think that would be fair to the women?

ATTORNEY VEROFF: Objection.

THE WITNESS: Again, I would just go back to the rules. But just in general, that if I decide today, hey, I will go --- we have a really weak men's tennis team, so today I think I'll go play on the males tennis team, yeah, I don't think that would be right, right, that I could switchover to win. Right. The point is can people be their genuine, authenticate self and play with a gender identity that they have.

BY ATTORNEY TRYON:

Q. So I mean you're answering your own question your own way, but so that's fine, but you have also said that you think HB-3293, which sets a rule, you think that rule is unfair, right?

A. Yes, I do.

ATTORNEY VEROFF: Objection.

BY ATTORNEY TRYON:

Q. But the legislature balanced a lot of different interests in making that rule, right?

ATTORNEY VEROFF: Objection.

THE WITNESS: I don't know. I don't know that that is true.

BY ATTORNEY TRYON:

Q. You don't know one way or the other what interests they balanced, right?

A. I don't know what their ---.

ATTORNEY VEROFF: Objection.

THE WITNESS: --- I don't know what their knowledge base is or their real involvement. I don't know if they've taken a close look. It looks like in this situation, that PBJ (sic), that people close to it are saying, hey, let's let this child play, right, and, you know, the world is not going to end and kids can have good experiences and we can --- we can go. So yeah, I can't speak to what the legislators have --- the background they've done or their mindset.

BY ATTORNEY TRYON:

Q. Do you think that the legislation, this legislation should be tailored to each individual?

ATTORNEY VEROFF: Objection.

THE WITNESS: No, no. I think the sport organizations at every level, from the Olympic Committee to the NCAA, all of them are saying we really value

being inclusive and let's do all we can to, you know, balance these things and make things fair but also being inclusive and not totally excluding a group of athletes.

BY ATTORNEY TRYON:

Q. So what would be the rule that you would set up for high school for transgender people --- let me rephrase that. What would be the rule that you would set up in high school sports for a male who expresses that he is now identifying as female should be allowed to participate in girls sports?

ATTORNEY VEROFF: Objection. Go ahead.

THE WITNESS: Yeah, I think we should rely on the experts and the medical doctors and the exercise physiologists who really study this and can say, hey, across these sports this is --- seems to create a fair playing ground. I think, you know, it sounds like our local weatherman, we have incoming data, right, but this is relatively new in the sport world and I think all of these researchers are gathering more data all the time that is going to help inform these decisions moving forward on how we create it. So you know, I'm not an expert to say, hey, what would those exact guidelines be, but just to have a blanket exclusion of all we set the stakes to do a lot of harm,

and BPJ would be a recipient of that harm in my opinion.

BY ATTORNEY TRYON:

Q. So we should rely on experts about safety for one thing, right?

ATTORNEY VEROFF: Objection.

THE WITNESS: Yes.

BY ATTORNEY TRYON:

Q. And we should also rely upon experts in performance, right?

ATTORNEY VEROFF: Objection.

THE WITNESS: Yes.

BY ATTORNEY TRYON:

Q. So you keep focusing on BPJ, so if we are going to focus on each individual, we have to have in each sport an example of someone who is a male identifying as a female has to be individually evaluated to determine whether that person should be allowed to participate in whatever sport that person wants to be in?

ATTORNEY VEROFF: Objection.

THE WITNESS: No, I didn't say that. And it may be just we could have general guidelines at the high school level. I'm just saying I'm not --- that is not my expertise as on the performance and exercise physiology of it all to think what would be fair. I

think as we branch up and get to more elite levels, then that seems to be the direction that NCAA is going, that, hey, let's pull in these national governing bodies across the sport because they know the sport the best and are in the best position to maybe offer those guidelines.

BY ATTORNEY TRYON:

Q. Do you have an opinion about other --- well, we will get to that later. Let's go back to your report and if we could go to after paragraph 17. Well, that doesn't seem right. There we go. Okay. The title of this section on top of page five it says Focusing Solely on Performance Outcomes Undermines the Benefits of Sport for Youth and Young Adult Athletes. Do you see that?

A. Yes.

Q. Are you aware of any middle schools, elementary schools or high schools that focus primarily on outcomes?

ATTORNEY VEROFF: Objection.

THE WITNESS: No.

BY ATTORNEY TRYON:

Q. Are you aware of any surveys or studies of middle schools or high schools that find out if there are any schools that focus solely on performance

outcomes?

ATTORNEY VEROFF: Objection.

THE WITNESS: I would just say that it depends what we mean by solely focus on performance outcomes. I think there are coaches out there that absolutely that is their primary thing and they care less about the hollistic, you know, wellness and just the overall experience of their kids and they are just trying to put the team together that is going to give them the best chance to win.

BY ATTORNEY TRYON:

Q. What coaches are you aware of in high school that do that?

A. Just in my experience across years. I see --- I see coaches that are very focused on winning that use a lot of punishment for mistakes and that seems to be what drives them.

Q. And so you believe there are coaches out there that focus solely on performance outcomes for youth and young adult athletes?

A. Yes, it just seems like a weird way to talk about it, that I'm not sure when --- I mean to put a percentage, if you're asking that, so are there coaches that 100 percent they're just focused on winning and

winning only, I'm not sure. I think there are probably coaches out there that are.

Q. Sorry. Go ahead.

A. Yeah, probably most, you know, it's not a 100 percent, but when we say primary that that's what's really driving the boat for them. I think there are coaches out there.

Q. Well, you didn't say primary. You said solely. Those are your words, right?

A. Right.

ATTORNEY VEROFF: Objection.

BY ATTORNEY TRYON:

Q. Do you now want to modify that in your opinion?

ATTORNEY VEROFF: I'm sorry, objection.

THE WITNESS: Sorry. I'm just going back to this wording that you're talking about. Are you saying ---?

BY ATTORNEY TRYON:

Q. At the heading. Right about paragraph 18.

A. Sorry. I was looking underneath. Yeah, I mean it in the sense that that seems to be what all the discussion is about, that all were focused on just this isn't fair in terms of performance, and I'm saying that is missing a bigger picture of what youth sport can be.

Q. What discussion is that? You said that discussions all about it. What discussions are you talking about?

ATTORNEY VEROFF: Objection.

THE WITNESS: The idea that it's not fair for transathletes to participate, right. And the only reason that we have any concern about this is from the performance issue. So in this case, I'm just saying if we think about BPJ and her being excluded from having the opportunity to play a sport, there's a lot at stake there as well as the other side is saying, hey, is this fair in terms of performance for athletes, right. That is what I meant by this.

BY ATTORNEY TRYON:

Q. So who is --- but you're not aware of any schools or colleges that have a policy of focusing solely on performance outcomes, right?

A. Right.

Q. But you think the statute, HB-3293 solely focuses on performance outcomes?

ATTORNEY VEROFF: Objection.

THE WITNESS: I'm not sure what leads me to say that, but I think the statute excludes a group of athletes and that that would be unfortunate that they

wouldn't have a chance to just reap these benefits that can come from being a sports team.

BY ATTORNEY TRYON:

Q. So you are not saying that you believe that HB-3293 focuses solely on performance outcomes, right?

A. Okay. I'm not saying that. I think performance outcomes is --- seems to be a piece in it.

Q. Is that an appropriate piece to consider?

ATTORNEY VEROFF: Objection.

BY ATTORNEY TRYON:

Q. Let me rephrase that. Is performance outcomes something that's an appropriate thing for a legislature or a school to focus on?

ATTORNEY VEROFF: Objection.

THE WITNESS: Yes.

BY ATTORNEY TRYON:

Q. Now, in paragraph 18 itself, you say, the second sentence, a myopic focus on winning in youth and young adult athletes ignore the other important benefits that school athletics offers young athletes such as teamwork and camaraderie which all advance when all athletes have the opportunity to play the sports they love and reap the benefits of such participation. Do you see that?

A. Yes.

Q. When you say a myopic focus, you're not excluding an appropriate level of focus on winning. Right?

ATTORNEY VEROFF: Objection.

THE WITNESS: That's right.

BY ATTORNEY TRYON:

Q. Is there a reasonable variance of opinions in the sporting world --- sports world on what exactly the proper focus on winning ought to be versus the other benefits?

ATTORNEY VEROFF: Objection.

THE WITNESS: Yes, I think there is an agreement within our field of sport exercise psychology that at the youth sport level the focus should be on giving as many kids as possible a chance to participate in youth support, right. And then as athletes move up the levels, that there is more emphasis and importance placed on winning.

BY ATTORNEY TRYON:

Q. What do you mean by that, as athletes move up the levels?

A. That typically there's a greater focus in high school than middle school, greater focus in middle school than elementary school, not that they have

organized sports within their schools, but just compare that to Little League, that as you move up to college, the emphasis on winning may increase and so on.

Q. Thank you. Would you agree with me that there is nothing in HB-3293 that says there should be a sole or myopic focus on winning in any of the sports it covers?

ATTORNEY VEROFF: Objection.

THE WITNESS: Yes, I would agree.

BY ATTORNEY TRYON:

Q. And the law doesn't say anything anywhere that there are not other benefits to sports other than winning. Right?

ATTORNEY VEROFF: Objection.

THE WITNESS: Right.

ATTORNEY VEROFF: I think if we are going to have any questions about what the law says we should put it back up on the screen.

ATTORNEY TRYON: I don't have any more questions on that.

ATTORNEY VEROFF: Thank you.

BY ATTORNEY TRYON:

Q. Let's look at paragraph 21 in your report. You say there are many benefits to young people from

participating in athletic activities discussed further herein. Do you see that?

A. Yes.

Q. Is it possible that some young people are actually harmed by participation in athletic activities?

ATTORNEY VEROFF: Objection.

THE WITNESS: Yes, I think so.

BY ATTORNEY TRYON:

Q. What are some of those possible harms?

A. Some of those harms might be they have abusive coaches that push them too hard physically, that you know, don't treat them in a developmentally appropriate way, that there --- coaches allow like bullying to go on, that kids are made to feel shame if they don't perform well. Those kind of things.

Q. Outside the coaching, you mentioned bullying. So in sports that happens, right, some athletes bully other athletes, right?

A. It happens sometimes.

Q. And that can have long-term lasting negative impacts, right?

A. Yes.

Q. Are you aware that sometimes those who are athletes also belittle those who are not?

A. Yes, I'm aware of that.
Q. Let's move onto paragraph number 23. In paragraph 23 you talked about achievement goal perspective theory, right?
A. Yes.
Q. Does this theory apply to outside sports, say for example, to academics?
A. Yes, John Nicholls actually started there in classroom research.
Q. So goal perspective theory is about goals, right?
A. Yes.
Q. And how to set goals and how to reach goals?
A. Not exactly. I would use sort of another area of goal setting, but goal perspective theory is more about what is our --- how do we define success and how are we kind of valuing what is important in life. Some people think of goal perspective is how we set goals, right, that they need to be specific measurable. That is sort of another part of the literature. And instead, Nicholls is just thinking how to understand people's perspective on what they are trying to get out of things, right. And if you have this task goal perspectives that you are moving through life thinking

how can I just give it my best and be the best that I can be. And if you are moving through life with an ego perspective, you are thinking, hey, how can I demonstrate my competent --- my competence and show other people I'm better.
Q. And that happens in all aspects of life, right, not just in academics?
A. Yes, it's a pretty relevant theory.
Q. You probably see it in faculty lounges and college boards and you will certainly see it lots of places in academia, right?
A. Right, academia from I'm guessing law firms and probably everywhere we go in the world.
Q. You bet. Absolutely you see it in law firms and pretty much every place, I agree with you.
Let me look at paragraph 24 with you. You say first is the developmental component of achievement goal perspective theory. Young children are incapable of accurately comparing their ability to others, overestimate their ability and are naturally focused on their effort as a marker of success. So I'm not saying that's wrong, but I don't see a source for that. Do you have a source for that statement?
A. I do. Nicholls 1989 and my dissertation. I

apologize for missing that.
Q. Your dissertation?
A. Yes, I did a --- this was my line of work. Early in my career I did a series of three studies kind of tapping into those, how children gain an understanding of the concepts of effort, luck and ability.
Q. They gain an understanding of concepts of effort, of luck and ability. Is that what you said?
A. Yes.
Q. What does that mean, luck and ability?
A. So when kids are really little those --- they don't clearly distinguish these. So they just think, hey, whoever tries hardest, they are going to do the best, right, and they don't recognize ability in the same way that we do as we mature over time and that we understand, hey, gosh, you could run circles around me today, you were a much better, faster or stronger runner than I am, for example, right. And that doesn't mean that I can't try harder to improve but our ability levels are really different today.
So in these studies we set up scenarios and we show kids, and so there's kind of a contrast. Somebody didn't try hard at all actually outperformed somebody

who seems to be focused and concentrating, and we say, you know, what do we think is happening here. And so these concepts are just really blurred and kids are saying yeah, you know, this person is definitely trying harder. I don't know why they didn't perform very well. This person looks like they are not trying hard. But if they both do it again and they try hard then I think they will get the same score. So just this wide variety of scenarios. Kids don't distinguish like luck and ability. So you know, if you're around little kids, you know, they like games like Chutes and Ladders or Candyland. Those are a hundred percent luck games, right. There's no ---.
Q. Now I understand. I thought you said lock, L-O-C-K. You are saying luck, L-U-C-K?
A. Right, right.
Q. Thank you. I didn't mean to have you go on with that long explanation when I just misunderstood your one word. But thank you for that explanation. That helps me understand what you're saying here.
So my --- then I'm just interested in what is it that at some point little kids somehow realize that they have overestimated their ability, is that something that just naturally happens or is it something that other

people have to point out for them for them to realize it, whether it be teachers or coaches or just the kids around them?

A. Okay.

So just a quick example. Nicholls would put a list of faces, you know, like generic smiley faces 1 to 30 and you go in with a class of five-year-olds and you interview them one at a time. And you say, okay, this is everybody in your class and they are listed by how good a reader they are, right. And so this person is the very best in your class, right, this person is just the worst reader, this person is the middle. Which one is you? And the mean for kids in kindergarten is like three, which tells us they're all saying well, that's me up there, high, right, I'm the best reader in the class. But as you move through those elementary school years, the mean shifts to like 15 by the time they're say in sixth grade, because when you ask six graders, all right, here's everybody in your class, where do you fit in, they are much more accurate. And when they ask the teachers, there's no correlation, right, with younger kids, because they are all over the place. But by the time you get to the upper elementary grades it correlates highly with what the teachers are saying in

terms of the kids' reading ability. And Nicholls said this is so key because it makes Middle School a very key developmental period as kids are gaining this understanding all of a sudden now there is a reason to try your hardest or withdraw effort because you don't want to look silly. You know that other people might be more skilled than you. And that's why he was so passionate about this theory. Even though we are capable of looking at the world that way, we all can choose to just stay focused on our effort and ability and being the best that we can be.

Q. So there are people that --- sorry.

A. That is the other piece of the climate, how do we train teachers and coaches to create that environment. That tells people keep that task involvement going.

Q. And there are people that continue to overestimate their abilities throughout life, right?

A. Yes.

Q. And that is exacerbated if those people are never corrected to let them know in some way that their abilities are not what they think they are, right?

ATTORNEY VEROFF: Objection.

THE WITNESS: Yeah, I'd say our bigger

issue within education is not that kids are overestimating but they're --- you know, don't have as high self-esteem or confidence and those type of things. But are there people out there that could be overestimating? Absolutely.

BY ATTORNEY TRYON:

Q. So Nicholls did the study of academic. Did he do any study athletically?

A. That's where I picked it up and looked in the physical domain and made scenario specific to physical activity and conducted these three studies that looked at effort and luck and ability with kids aged 5 to 12 and sort of replicated his work, and we found that kids move through these same levels of understanding in the physical domain where things are a little bit more obvious for us to see, right. If we're sitting here working on math problems we not be able --- it might not be as evident that, hey, somebody is moving through these and they are stronger, right. But in the physical domain, when we see each other and move and we can see each other's skill levels, in some of these things move a tiny bit faster but it was the same sort of stages of development, if you will.

Q. Is your dissertation cited in your bibliography?

A. No, it is not.

Q. Is it in your list of publications?

A. It's in my Vitae.

Q. You have a lot of publications. Can you direct me to it?

A. You're going to go back a ways. Okay. So the dissertation study is on 1997, it's on page six. Fry and Duda.

Q. I see Fry and Duda, 1997.

A. Yes, those are my dissertation studies. And I followed it up with two studies at the top of that page, Fry 2000. There are two different studies.

Q. Okay.

Let me move on to paragraph 25 of your report. I just goofed on my --- there we go. I lost all the pictures, so I couldn't see you anymore. Just one of the hazards of technology. Okay. So I'm looking at paragraph 25 and you talk about task. Here you talk about goal --- primary goal orientations are task and ego orientation, right?

A. Yes.

Q. So you're not saying --- I think you've said this before, but I just want to make sure I understand. You're not saying that ego orientation is bad from an

individual basis, are you? It just kind of sounds like it's a pejorative. You don't mean it that way, do you?

A. I think it depends on what your aim is and if you have --- if you want athletes to have fun and try hard and have good relationships and, you know, feel good about themselves, have confidence, have empathy for others, things like that, then it's not something we would want to promote is the orientation because across a wide body of literature those just don't lead to what we call adaptive outcomes, right.

On the other hand, many elite athletes are high in task and ego orientation, right. And the big deal here is that people really need that high task orientation to sustain motivation over time with the ups and downs and overcoming injuries, with all of that, but ego orientation isn't necessarily a bad thing in this case. But it probably isn't great if you don't have that high task orientation to go with it.

Q. So let's move on to paragraph 26. Okay. So in the last sentence, I think it is the next to last sentence. Okay. The sentence that starts when the environment created by coaches and others is a caring environment, do you see that part?

A. Yes.

Q. It continues, athletes are more likely to perceive the overall climate as task-involving. A caring environment is one where athletes feel safe, welcome, comfortable and valued and are treated with kindness and respect by all in the sports setting. You wrote that, right?

A. Yes.

Q. And that means a caring environment for all athletes, right?

A. Yes.

Q. And a caring environment also requires rules?

A. Yes.

Q. A caring environment still includes the coach --- let me rephrase that. A caring environment still includes the coach and officials and requires them to make calls that make --- that some athletes don't like and may even get upset, right?

ATTORNEY VEROFF: Objection.

THE WITNESS: Right.

BY ATTORNEY TRYON:

Q. So how do you square that with a caring environment when the rules are going to make some athletes unhappy?

A. So this is about coaches kind of saying, yes, I want to be intentional and I want to do everything I can to create this environment that is going to help bring out the best in my athletes, right, and I don't have total control over what my athletes perceive. I'm just going to do what I can to promote these features that are in the last sentence. I'm also going to get athletes, trying to get them to buy in so that they see how valuable this is if we create this caring task-involving climate. It doesn't in any way mean, you know, we're not going to get a bad call or things aren't going to happen, things don't go our way, somebody starts before I do. Right. All kinds of things. Those are just part of sports, right, but this refers to the coaches buying into this truckload of research that we have that shows how we can help all athletes have a good experience.

Q. You're not advocating for laws requiring a task oriented environment, are you?

A. No. That would be tempting. No. We're just saying if our goal is to help athletes reach their potential, then we have a lot of scholarship to guide --- to guide what we do. We know a lot about how to make that happen.

Q. Do you think coaches are unfair if they don't adopt a task oriented approach?

ATTORNEY VEROFF: Objection.

THE WITNESS: I think they do a lot of harm, right, and they set athletes up to experience all these negative aspects, right, and they don't have fun and they don't try as hard. They don't have as good a relationship, they experience shame. And all of that stuff just means that a lot of kids aren't going to stick with it and we are going to lose a lot. And that just has long-term implications for people living physically active lives, right. When you have bad experiences, you know, a lot of people are running back out there to keep participating.

BY ATTORNEY TRYON:

Q. Well, officials make calls all the time that upset athletes. Athletes think they're unfair or they're wrong. You're a tennis player. You remember John McEnroe?

A. I do.

Q. He yelled all the time. All the time is an exaggeration. He frequently claimed the calls the officials made were unfair, right?

A. Yes.

Q. Do you think that the umpires should have

changed their calls to satisfy him in order to provide a more caring environment for him?

ATTORNEY VEROFF: Objection.

THE WITNESS: I think they should have taken him out of a few tournaments and I feel like that would have nipped it in the bud. But with respect to a caring and task-involving climate, what you're trying to say is we are trying to treat everyone with kindness and respect and we're going to understand that officials are out there trying to do the best they can, and they're going to make mistakes just like all of us make mistakes. And so the goal would be for us to be respectful. And if we feel like bad calls are made we would deal with it in a respectful way, right, but we don't deal with it like Will Smith did, right, like when he --- we're trying to learn to control our emotions, right, and wow, it just makes sport a powerful arena when athletes can learn those terms.

BY ATTORNEY TRYON:

Q. Right. I understand that. And I'm just asking, so you got rules, you got calls by higher powers and you got to live by those rules. And if you think they're unfair then you should ask them to have them changed, right?

A. Yes.

Q. But it is still a caring environment and just because you think it is unfair to you in particular doesn't make it uncaring.

Is that a fair statement?

ATTORNEY VEROFF: Objection.

THE WITNESS: You know, the way research is done is you're asking every athlete on the team to fill out a survey, right. So it doesn't mean that there is a 100 percent agreement, right. I may feel like the coach isn't fair, hasn't given me a fair shot, right, and somebody else may not feel that way. But in general, there's sort of a consensus on most teams, you know, that people are seeing it more similarly.

BY ATTORNEY TRYON:

Q. Yes, I guess I'm just asking specifically about rules. Rules by their very nature, they are not caring, they don't care about individuals. They are just set there and you need to follow them, right?

ATTORNEY VEROFF: Objection.

THE WITNESS: Yeah. Hopefully they have been established in a caring way, thinking about what is best for athletes, but there is just so many things across sports that are not necessarily fair, right, and

so we just kind of have to keep the focus on the rules. I had an athlete tell me that his teammate has been diagnosed with MS and that doesn't seem very fair, right, that a young person has to go through that, but I'm glad that they are part of a caring and task-involving team where they want this athlete to continue to be part of the team, right. And in more of an ego involving team, we might just say, hey, sorry, you are really going to impair our ability to win. That's our focus, that's why we are here, so you know, have a good life, right. And I mean, what's happening is they are just working with this athlete to still be a vital part of the team.

BY ATTORNEY TRYON:

Q. Do you think you need to be an athlete to have a fulfilling life?

A. No.

Q. I'm glad to hear you say that because I'm not much of an athlete.

ATTORNEY TRYON: Well, if people want to break for lunch now, I'm okay with that. I can take a break now or we can keep on going. Whatever Dr. Fry --- Professor Fry, whatever your preference is and other counsel?

THE WITNESS: It might be nice to have a break at this point.

ATTORNEY TRYON: Okay. Do you want to go and get some lunch?

THE WITNESS: Yes, sounds good.

ATTORNEY TRYON: How long do you need? I don't know what your environment is around you, if you brought a lunch or there's a restaurant nearby. Is half an hour long enough? Do you need longer?

THE WITNESS: No, a half hour would be great.

ATTORNEY TRYON: Then why don't we take a break and come back at ten minutes after the hour?

THE WITNESS: Okay.

VIDEOGRAPHER: Going off the record. The current time reads 1:40 p.m. Eastern Standard Time.

OFF VIDEOTAPE

(WHEREUPON, A SHORT BREAK WAS TAKEN.)

ON VIDEOTAPE

VIDEOGRAPHER: We are back on the record. The current time reads 2:11:00 p.m. Eastern Standard Time.

BY ATTORNEY TRYON:

Q. Okay.

Let's go back to paragraph 30 of your report. It says athletes high in task orientation also report greater confidence and perceived ability and task orientation has been correlated with both self and team efficacy and greater perceived confidence --- competence, excuse me. You are saying greater confidence and perceived ability. Perceived ability is different than reality, isn't it?

A. Yes.

Q. Are you saying that is a good thing?

A. In the psychology world it is pretty well accepted that perceptions are very important. So yeah, you are right in identifying that this is athletes' perceptions of their ability. And so athletes who have a high task orientation in turn, you know, seem to have more confidence and believe that they have higher ability.

Q. And then in paragraph 31 you say, by contrast, ego orientation, i.e. the non-pejorative descriptive term for defining success based on ability and performance outcomes is not correlated with perceived ability in general confidence of athletes high in ego

orientation was more of based on their perception of ability and having a strong physical presence. But in that first sentence it indicates --- it suggests that ego orientation is based on actual reality --- excuse, actual ability rather than perceived ability. Do I understand that indication correctly?

A. Where do you see that it is on actual ability?

Q. Okay.

Let me start that over. So in the sentence it says, by contrast, ego orientation i.e. the non-pejorative descriptive term for defining success based on ability and performance outcomes is not correlated with perceived ability in general. Does that mean it's correlated with actual ability rather than perceived ability?

A. Okay. I understand. No. No, what it means is that if you're --- if you're somebody who's high in task orientation, then you're feeling successful when you give your best effort, when you see improvement, right. Those are things we have more control over. And so when you're focused that way you tend to have higher perceptions of ability, right, because that is your focus. If you are high in ego orientation, right, and so I'm feeling successful if I out perform others, if I

win, if I demonstrate competence, right, to a greater degree than other people, right, so if that doesn't happen but that is how I judge success, then chances are my perceptions of ability are going to be lower.

If I'm the star on the team and I judge success based on how I compare to others, then I probably get a lot of kudos and get reenforced for that. So that's why we will guess there is no correlation there in the way there is task, right. And that is why Nicholls was most concerned about people high in ego orientation who had lower perceptions of ability, because it makes us vulnerable. That's why I'm so focused and care about I'm not --- you know I'm not as good. Does that make sense?

Q. I'm processing it. I still want to understand it a little better. In paragraph 30, athletes high in task orientation also report greater confidence in perceived ability. Am I right that perceived ability is not actual ability?

A. Right, it's not. Items would just tap into I would be responding to a question like I'm really good at basketball or something, I'm very skilled in basketball or I'm not very skilled and I would be answering it on a quantitative scale, so it would be my

perception of it.

Q. Isn't it important that athletes understand their actual ability rather than just their perceived ability?

ATTORNEY VEROFF: Objection.

THE WITNESS: I think it's important for coaches to share with athletes where they are and what they can do to keep improving. I'm not sure it's super beneficial that we need to go around and tell athletes, hey, you're not very good, this person is better than you, right, those are just kind of distractions, but helping people see where they are and what they can do to improve, yeah, would seem valuable.

BY ATTORNEY TRYON:

Q. In order for an athlete to improve doesn't the athlete need to understand where he or she is rather than just where he or she perceives him or herself to be?

A. Yes, we get into kind of --- are we talking like morbid ability, right, or --- and so in that sense do I need to tell --- I've got five athletes here. Do I need to make sure they all know where they rank between one and five, right, in my mine who's the best? Or do I just need to take each athlete aside, right, and make

sure that they understand here's some areas you could really improve on, and I care less about even having a conversation about who's the best right now, right, that this person is better than this person, right, it's moot. And that's where Nicholls was coming from. What if we as coaches did more just to focus people on, right, on what they could do to keep improving?

Q. And athletics it is certainly obvious, though, what your athletic ability is at least as far things involving racing times, for example, you get your times so you know what your ability is as compared to yourself or as compared to other people, right?

A. Right. I think there is just a lot in sport that's giving us feedback of how we compare to others. And also when we see these times it's --- that's information that we can track how we're improving, right, and how we are doing.

Q. So why do we share with people --- well, strike that. I will move on.

Okay. Paragraph 32, please. Let me know when you see that.

A. I see it. Thanks.

Q. Athletes high in ego orientation report lower companionship and greater conflict with teammates. For

that phrase --- you can go ahead and read the whole sentence if you want, but I want to ask you a question about that phrase or that clause.

A. Okay.

Q. So for that clause you cite Balaguer in that study, right?

A. Yes, Balaguer (corrects pronunciation).

Q. Thank you for helping me pronounce that, Balaguer. And is there anything else on which you base that first clause?

A. Yes, there are other references. This paragraph in general is just referring to we have better relationships, right, when people are high in task orientation. They're really valuing that aspect of helping each other improve. And in an ego orientation, when, I'm just kind of zoned in on me and me wanting to show that I'm better than my teammates, right, it just sets things up to not having as good a relationship. This doesn't mean that every athlete out there that is high in orientation, it just means there's a tendency that this correlates --- that you're much more likely to see this when people have a high ego orientation.

Q. So I'm just --- my question is a little more precise. Thank you for that explanation. But the first

clause there you cite only to Balaguer. I'm asking if there are other sources for that contention that athletes high in ego orientation report lower companionship and greater conflict with teammates. And if there are other things, what are those other studies?

A. Like Smith and Small found that in youth sport athletes, you know, didn't like their coach as much, didn't think their coach knew as much about the sport, didn't like their teammates as much when they had like high ego orientation.

Q. Is there a reason why you didn't cite Smith and Small for that proposition?

A. Yes. Yeah, I think it crosses documents. We could have added another, you know, 150 references probably. Tried to keep it more manageable, which it's just consistent, that if that is something that you care about, the quality of relationships, then it doesn't come out often as --- you know, it comes out with the task orientation, not an ego.

Q. Well, the reason I'm asking this is I read that Balaguer report, and I did not see anything in there that supported this proposition of this first clause of this sentence. Are you confident that it's in there?

A. It would be good for me to review.

Q. If I showed you the article would you be able to locate it without too much difficulty?

A. I'm not sure. I'd probably just have to review it. But having ---.

ATTORNEY TRYON: Well, let's bring it up, and maybe I've just missed it. And so that would be --- the name of it is Motivational Climate and Goal Orientations as Predictors of Perceptions of Improvement Satisfaction in Coach Ratings Among Tennis Players. Educators. So Jake, if you could find that and pull that up.

VIDEOGRAPHER: Do you want it marked?

ATTORNEY TRYON: Yes. I think we are on 8 now, right?

VIDEOGRAPHER: I think it's 7, unless I missed something.

ATTORNEY TRYON: Well, I will take your word for that.

(Whereupon, Exhibit 7, Article, was marked for identification.)

ATTORNEY TRYON: You know what, I should ask you, Jake, go ahead and put that in the chat room so

that Professor Fry can download it and look at it real quick.

VIDEOGRAPHER: Already did.

ATTORNEY TRYON: Great.

BY ATTORNEY TRYON:

Q. So Professor Fry, you can either look at this with me or it might be best if you just double check in the chat room and then it should download it and you should be able to bring it up and look through there at your --- I don't want to say leisure but how you would prefer to do it.

A. Okay. I may have to get help here because it's not appearing on my end.

Q. Do you see it in the chat room?

A. Yeah, I can click on it, but then it takes me to some case view net thing and it says I need a code and password. I'm using their system, so I'm guessing it's related to that.

VIDEOGRAPHER: Not the link. There should be a PDF document you can just click open.

THE WITNESS: Okay.

VIDEOGRAPHER: I don't know how it is on an iPad, so I will admit I'm at a loss.

THE WITNESS: Okay.

BY ATTORNEY TRYON:

Q. Are you able to look at it now?

VIDEOGRAPHER: The document called 007 at the beginning?

THE WITNESS: When I click on the chat I'm just seeing one link listed.

BY ATTORNEY TRYON:

Q. Underneath the link there should be a PDF.

A. Okay. It's not showing up for me.

Q. Okay.

VIDEOGRAPHER: Alternatively, Counsel, I can give remote control of the document to her so that she can scroll on it herself.

ATTORNEY TRYON: Let's do that.

VIDEOGRAPHER: Okay.

THE WITNESS: Thank you.

VIDEOGRAPHER: You should have control if you just try to click on the screen and you just scroll it and move it. Perfect.

THE WITNESS: Okay.

So how do I move the document?

VIDEOGRAPHER: So if you would move the cursor like over here and drag it.

THE WITNESS: Sorry. Can you say that

again?

VIDEOGRAPHER: You can control the mouse cursor right now, so you would have to move it over here and just drag it down or click on this down arrow down here?

THE WITNESS: So I don't really have a mouse, right, with this. It's just using my finger on the screen.

VIDEOGRAPHER: Right. If it works like normal iPad things, then you would --- to click something you would double tap it and then hold, which sounds convoluted.

ATTORNEY TRYON: Well, if you have any difficulties with it, why don't we let Jake take control and scroll down with it?

THE WITNESS: Okay.

I think Dana is outside, if you want me to get her to help real quick to save time.

ATTORNEY TRYON: I'll tell you what, let's do this. This is not a critical point for me. I just wanted to try and understand this. So let's come back to this later. All right?

THE WITNESS: Okay.

ATTORNEY TRYON: We have time.

BY ATTORNEY TRYON:

Q. In paragraph 32, you talked several times about the climate, right?

A. Yes.

Q. And in the sentence it says despite the ego involving climates emphasis on the performance outcomes results across studies suggest the benefits of task involving climate may have a direct impact on athletic performance and ultimately improve performance outcomes. So that sentence is talking about the climate, not the individual's orientation, right?

A. That's correct.

Q. And you say it may have a direct impact. So by may that is not suggesting that it's probable, it is just saying that it might. Is that a fair statement?

A. Yes.

Q. Then let me move down to paragraph 33.

A. Can I just say on that point ---?

Q. Yes.

A. I think this is an area within our body of research that there is less support for, but the studies that are in place would suggest that perceptions of a task involving climate would lead to greater performance. So there is some evidence for that, but I

would agree it's not strong and that is why the wording is softer there, right, but there is no evidence suggesting that perceptions in an ego involving climate would lead to better performance. And so on the one hand people just might be thinking, wow, that's a no-brainer, right, if all you care about performance go with that ego involving climate, but for all these other reasons we would argue it makes sense, right. If people are having more fun and having better relationships and trying hard and so on, that it might lead to better performance.

Q. In paragraph 33 you talk about young athletes with a high ego orientation participating in a variety of sports have reported higher traits and state cognitive and somatic anxiety as well as greater concentration dysfunction, maladaptive perfectionism and concern over making mistakes. Now, my question is, isn't that true for basically any endeavor, that there's going to be --- you're going to have anxiety in trying to succeed?

ATTORNEY VEROFF: Objection.

THE WITNESS: You know, definitely anxiety and stress is part of sport. With these climates though what we're seeing consistently is that athletes report

that when they perform their best they were less bothered by stress and anxiety. In fact, the kind of epitome of being --- what we call being in flow, right, you just --- you feel high confidence, you're concentrating well, you're not worried about distractions, you 're not stressed, right. And so consistently people would report a higher ego orientation, they just --- no matter how it's measured all this kind of bad stuff that we'd rather take out, right, and not have people worried about, young athletes worried about, they just experience it more. So the cognitive anxiety is what's going on up here, right, worry and doubt, and the somatic anxiety is I can't get a grip on my heart rate, my muscles feel tense, I have butterflies and those kinds of things. So we see that more with athletes high in ego orientation.

Q. Well, when you were going through college and getting your Ph.D., you were striving to do your very best and you were striving to succeed and get As to get your Ph.D. All of those things are something that requires you to succeed and to convince other people how good you are, right?

A. To succeed and make the world better.

Q. Right, but to get a Ph.D. that's a tough --- is

that an easy thing to do?

A. No, it is not.

Q. And it is based on what other people think of you and your work, right?

A. Yeah. I mean, there's requirements to complete a Ph.D. for sure that involve other people.

Q. And they're judging your work, right?

A. Right.

Q. And that creates, I presume, for most people it creates a lot of anxiety. Did it for you?

ATTORNEY VEROFF: Objection.

THE WITNESS: You know, at times it was stressful, but I enjoyed every minute of it. And so some of this comes back to anxiety is pretty typical and we're going to experience that, but what I'm feeling about it is helping people develop strong coping skills so that they can deal with that stress and anxiety. And that is, you know, another study that we recently published that people who perceived a caring task involving climate reported greater coping skills, right.

BY ATTORNEY TRYON:

Q. And to develop those coping skills you need to sometimes follow the rules of others like those on the Ph.D. committee, if that's the right terminology, rather

than saying, hey, committee you're wrong, I'm right, you have to do what I say, right?

ATTORNEY VEROFF: Objection.

THE WITNESS: I'm not sure that's related to coping skills, but what you said is true, it does take place when you're working on a Ph.D.

BY ATTORNEY TRYON:

Q. And pretty much every part of life you can't just say I don't like your rules, do it my way and get your way, you have to cope with the world as it is, not as you want it to be all the time, right?

A. Right.

ATTORNEY VEROFF: Objection.

BY ATTORNEY TRYON:

Q. And that's a hard thing, right?

A. It is.

Q. But it builds character, doesn't it?

A. It sure can.

Q. So let me move on then. I think I understand what you're saying in this paragraph. Looking at paragraph 35, okay, let me see if we addressed some of these things. Have you studied depression and mental health with athletes?

A. No, it's not my area. Yes, I've read some, but

no, it's not an area that I studied in depth.

Q. So you haven't written on it?

A. We might have a study where we include some parameters of psychological well-being, like studies with kids, looking at how the climate relates to a caring climate relating to reporting greater hope and happiness and less depression and sadness, but studying like depression is not a primary area for me.

Q. Have you looked at the issue for athletes between injuries and mental health or depression?

A. No, no.

Q. Are you aware that there are studies and papers on that issue?

A. Yes.

Q. Okay.

Let me ask you to take a look at --- well, before we go, have you heard of the American College of Sports Medicine?

A. I have.

Q. And are they well regarded?

A. Yes.

Q. Have you heard of Andrew Wolanin?

A. I have not.

ATTORNEY TRYON: Okay.

Well, let's bring up this exhibit, which will be then Exhibit --- I think this will be --- well, I will just ask, Jake, help me out with numbers. The title is Depression and Athletes, Prevalence and Risk Factors.

VIDEOGRAPHER: I believe we're on Number 8 now.

ATTORNEY TRYON: Okay. Perfect.

VIDEOGRAPHER: Just give me one moment.

(Whereupon, Exhibit 8, Article, was marked for identification.)

BY ATTORNEY TRYON:

Q. Have you seen this document that I now marked as Exhibit-8 before?

A. No, I haven't. Jake, can you show the top again please?

VIDEOGRAPHER: That is as far up as it goes.

THE WITNESS: Okay.

BY ATTORNEY TRYON:

Q. Are you familiar with any of the three authors?

A. No.

Q. So I am going to ask you about several parts in here, so it might be helpful to have --- try one more time to see if you can --- give you access to it, to give you control over the screen so you can scroll down. And you should be able to treat it just like anything else on your iPad, with your fingers or however you do it.

A. So when I click on control it has like a keyboard and then it has a question mark.

ATTORNEY TRYON: Jake, any input?

VIDEOGRAPHER: It sounds like it's just bringing up the iPad keyboard and there should be something that looks like a keyboard and that minimizes the keyboard itself so you can just get back to the screen.

ATTORNEY VEROFF: I'm sorry, Dr. Fry.

THE WITNESS: No, go ahead.

ATTORNEY VEROFF: I was just going to ask, Dave, is there any way to get in touch with Dana. Maybe we could send her the PDF and have her print them so that the witness could have hard copies. That might make this all work a little bit easier for any --- for this or any other studies that you would want her to look at.

ATTORNEY TRYON: Yeah, except they're in a hotel room now. That's one of the --- is Dana outside the door did you say?

THE WITNESS: Yes, is it okay if I just check with her because I think she has a little business center set up maybe.

ATTORNEY VEROFF: If we can go off the record for a moment.

ATTORNEY TRYON: Great.

VIDEOGRAPHER: Going off the record. The current time reads 239 p.m. Eastern Standard Time.

OFF VIDEOTAPE

(WHEREUPON, A SHORT BREAK WAS TAKEN.)

ON VIDEOTAPE

VIDEOGRAPHER: We are back on the record. The current time reads 2:42 p.m. Eastern Standard Time.

ATTORNEY TRYON: Okay. If you can now look at --- give me a moment. Let's look at your original report on page 12, that would be Exhibit-1.

VIDEOGRAPHER: Did you say page 12 or paragraph 12?

ATTORNEY TRYON: Page 12.

VIDEOGRAPHER: Okay.
ATTORNEY TRYON: Okay, right there is great.
BY ATTORNEY TRYON:
Q. Okay.
Do you see that, Doctor Fry?
A. Yes.
Q. So the title you have here is Excluding Groups from Participating in High school Athletics would Deprive Them and Their Teammates of a Wide Range of Educational Benefits. Did you write that?
A. Yes.
Q. Okay.
Then I would like to compare that to the title that you have in your latest report, if you could bring that up, and that is on page ten. So here you change groups from to excluding transgender students. Why did you make that change?
A. I think just because it's specific to this case.
Q. Well, the specifics of this case were the same before as they are now, so do you have any better explanation?
ATTORNEY VEROFF: Objection.
THE WITNESS: You know, I edit everything

I write, and so if I see something that may clarify more or change a word, you know, that makes it better, then I would do that. I think that's what happened here.
BY ATTORNEY TRYON:
Q. Are you aware of any groups being excluded from participating in youth or adult athletics?
ATTORNEY VEROFF: Objection.
THE WITNESS: You know, I think a lot of times kids with disabilities are kept out. I think kids who have limited financial resources sometimes are limited. I think groups are --- so it may not be a rule that you cannot play, but you know, there are other groups who miss out on the opportunities to play.
BY ATTORNEY TRYON:
Q. Other than that, can you think of any groups that are excluded by any rule or requirements from any athletic activities?
ATTORNEY VEROFF: Objection.
THE WITNESS: Not that's coming to mind that are, you know, like obvious or stated in the rules, but I think there's personal different ethnic, minority groups, for example, that might have less exposure to sport, things like that.
BY ATTORNEY TRYON:

Q. Let me ask you about Special Olympics. Is the entrance into Special Olympics --- do you know anything about --- let me back up. You're aware of what Special Olympics is, right?
A. Yes, I'm aware of it.
Q. And do you know if there are specific requirements in order to be able to participate in Special Olympics?
A. I know there are. I couldn't tell you what they are across the different categories and all.
Q. Can able bodied athletes and able minded athletes participate in Special Olympics?
A. Special Olympics was created to give athletes --- okay. Dana said she hadn't received those. Just to double check, that it is Dana@midwestreporters.net. It's not .com.
VIDEOGRAPHER: I will double check it.
THE WITNESS: Thank you.
ATTORNEY TRYON: Sorry to interrupt your flow.
BY ATTORNEY TRYON:
Q. So my question was can able-bodied athletes and able-minded athletes participate in Special Olympics, and you started to say Special Olympics was created.

A. Right. The answer is no, they can't participate.
Q. So that is an exclusion, right?
A. Yes.
Q. And it's a categorical exclusion, right?
A. Yes.
Q. Do you think it's a fair exclusion?
ATTORNEY VEROFF: Objection.
THE WITNESS: Sorry. Yes, in this case.
BY ATTORNEY TRYON:
Q. And why?
A. Because those able-bodied athletes have another area where they can compete.
Q. And so Special Olympics is especially designated for certain athletes who are not able to compete against able-bodied and able-minded athletes, right?
A. Uh-huh (yes), yes.
Q. So it's essentially a protected category, right?
ATTORNEY VEROFF: Objection.
THE WITNESS: Yes. I don't know if it is protection so much, as just provide an opportunity.
BY ATTORNEY TRYON:
Q. And that exclusion is of --- with respect to Special Olympics, you wouldn't call that arbitrary,

would you?
ATTORNEY VEROFF: Objection.
THE WITNESS: No.
BY ATTORNEY TRYON:
Q. Now, if we go down in paragraph 37, the second sentence says, if transgender students are arbitrarily excluded from youth sports they are, in turn, deprived of those positive experiences and outcomes and their teammates are deprived of a genuinely optimal sports experience.
Do you see that?
A. I do.
Q. If that exclusion is based on safety concerns or performance concerns then it would not be arbitrary.
Correct?
ATTORNEY VEROFF: Objection.
THE WITNESS: If there were strong evidence for those.
BY ATTORNEY TRYON:
Q. And just --- I think we covered this, but I just want to make sure I'm correct, you are not an expert on safety issues, right?
A. That's right.
Q. And you are also not an expert on performance

issues, right?
A. That's right.
Q. What would you call strong evidence?
ATTORNEY VEROFF: Objection.
THE WITNESS: I call it data that the experts come to agree that --- you know, how they can guide the rules for sport, right, and balance inclusion and fairness.
BY ATTORNEY TRYON:
Q. Would you agree with me that not all experts agree on everything, even with their own field, right?
A. That's right.
Q. Is there a minimum number of experts that would have to agree before it's strong evidence or is that sort of a --- I don't know how to say it. What do you think?
ATTORNEY VEROFF: Objection.
THE WITNESS: I think with respect to this case, that organizations can, you know, weigh in on the evidence there to see --- I mean, there is just a lot of injury within sport that happens, right, it's just part of sport. So I think they would have to really consider the evidence to see if there are safety concerns for having transathletes participate.

BY ATTORNEY TRYON:
Q. Do you think in high school that every sport should have a different rule of when transgender girls can participate in those specific girls sports?
ATTORNEY VEROFF: Objection.
THE WITNESS: You know, I just come back to my expertise and why I've been asked to be on this case is just to address the benefits that athletes receive from participating in sport. So I wouldn't perceive that they are at the high school level. There is different rules for every sport, but I don't know where we will be down the road, right, as we just figure all this out and strive to include all athletes.
BY ATTORNEY TRYON:
Q. So you don't know what the rules should be?
ATTORNEY VEROFF: Objection.
THE WITNESS: Right, I'm not the best person to make those decisions. I think we need people who are studying these issues, and that is beyond my expertise.
BY ATTORNEY TRYON:
Q. Fair enough. I don't want you to go beyond your expertise. Well, let me ask you just some related questions. And you may say the same thing on this, but

I'm going to ask you and we will see if you have any thoughts. You may have already answered this, but let me ask you these. On what teams should student athletes participate on if they are transgender? If they are a transgender girl, should they participate on boys or girls teams?
ATTORNEY VEROFF: Objection.
THE WITNESS: I think it depends what the rules are, but, you know, over the last decade across organizations, organizations have found a way to allow transgender females to participate.
BY ATTORNEY TRYON:
Q. And those rules have changed over time, right?
A. They do.
Q. NCAA just changed its rules, right?
ATTORNEY VEROFF: Objection.
BY ATTORNEY TRYON:
Q. Did you answer?
A. You know, I'm not sure of the latest. I thought they were going to leave --- yeah, they're going to be looking at other options and getting feedback from the governing bodies is my understanding.
Q. Are you aware of what the Rugby Association says?

ATTORNEY VEROFF: Objection.
THE WITNESS: No.
BY ATTORNEY TRYON:
Q. Are you aware of USA Swimming, what their rules are?
ATTORNEY VEROFF: Objection.
THE WITNESS: I couldn't tell you all the details, but I know USA Swimming really is trying to find a way to be inclusive, and so I know at the youth levels that transgender youth are able to participate, right, and that they have allowed some rule changes for what swimsuit kids wear and things like that.
BY ATTORNEY TRYON:
Q. But those transgender girls have to --- or transgender women have to meet certain requirements before they can participate on a female team. Right?
ATTORNEY VEROFF: Objection.
THE WITNESS: Yes.
BY ATTORNEY TRYON:
Q. Are you aware of the specifics?
A. No. I've read some of this, but I'm not sure I've retained it and it's not something that I spent a long time on across sports.

Q. Okay.
Let me ask you then if you have ever heard of the term nonbinary?
A. I have heard of that term.
Q. Is this a fair definition, that it is people who do not describe themselves or their genders as fitting in the category of man or woman? Does that sound like a fair definition?
ATTORNEY VEROFF: Objection.
THE WITNESS: Yes.
BY ATTORNEY TRYON:
Q. Should a biological male who identifies as nonbinary who is an athlete participate in high school on the boys or girls team?
ATTORNEY VEROFF: Objection.
THE WITNESS: I think it depends on what the rules are. And I think the goal of the sport organizations seems to be how can we look at these issues and just still try to be as inclusive as possible.
BY ATTORNEY TRYON:
Q. What are the rules on that in high school?
ATTORNEY VEROFF: Objection.
THE WITNESS: Right, it seems to vary

across states.
BY ATTORNEY TRYON:
Q. Do you know of any rule --- do you know of any rule that specifically addresses nonbinary athletes?
ATTORNEY VEROFF: Objection.
THE WITNESS: No.
BY ATTORNEY TRYON:
Q. Have you heard the term bigender?
ATTORNEY VEROFF: Objection.
THE WITNESS: Yes.
BY ATTORNEY TRYON:
Q. The definition that I have read is a person who identifies as bigender has two genders. Is that your understanding as well?
ATTORNEY VEROFF: Objection.
THE WITNESS: Yes.
BY ATTORNEY TRYON:
Q. And in high school the biological male identifies as bigender and wants to participate on a girls sports team, should that be allowed?
ATTORNEY VEROFF: Objection.
THE WITNESS: I think greater context is needed. There's a --- you know, understand what's going on with that particular athlete. And again, I just want

to --- this is a little bit beyond my expertise and I'm here to just reenforce that there is a lot of benefits for all athletes to be able to participate.
BY ATTORNEY TRYON:
Q. What if a biological male wants to be on a girls team, even though he does not identify as a girl, should he be allowed to do so?
ATTORNEY VEROFF: Objection.
THE WITNESS: No.
BY ATTORNEY TRYON:
Q. And why not?
A. Because he's wanting to play on a --- on a female team and he doesn't --- hasn't transitioned and isn't identifying as a female.
Q. If a biological male wants to participate on a girls team and identifies as a female but has not transitioned in any way, should he be allowed to participate on the girls team?
ATTORNEY VEROFF: Objection.
THE WITNESS: In --- in general I would say no, but we're missing the context. What if this was --- yeah, I think we want that person to transition.
BY ATTORNEY TRYON:
Q. Okay.

What transitioning would be necessary?

ATTORNEY VEROFF: Objection.

THE WITNESS: I think that's out for debate, discussion, and to figure out at these different levels of sports what that criteria is going to be.

BY ATTORNEY TRYON:

Q. So in high school is it simply changing your name to a female name, would that --- for a male to change to a female name, would that be adequate to then be allowed to play on the girls team?

ATTORNEY VEROFF: Objection.

THE WITNESS: No, I'd say in general that wouldn't be the case.

BY ATTORNEY TRYON:

Q. Okay.

If that person, in addition to changing his name to a female name and says I want to be addressed using female pronouns, is that adequate?

ATTORNEY VEROFF: Objection.

THE WITNESS: I think that we've got this kind of continuum it sounds like, right, to what degree people are transitioning to know transitioning. And to just have a blanket statement that no one --- that no transathlete can ever participate in sport ever across

the universe is harmful for many athletes, right. And so these specifics of where we are going to go with what the criteria is for athletes, right, I think there's a lot of people studying these issues and weighing in and I'm not one of those individuals who's really studying this stuff in detail at that level, but I do know ---.

BY ATTORNEY TRYON:

Q. Sorry. Go ahead.

A. I do know that inclusion in sport has many benefits and that it would be a shame to not hold a category of athletes out to participate.

Q. So there would be nothing to stop a male athlete, a biological male athlete identifying as a female from participating on a boys team, right?

ATTORNEY VEROFF: Objection.

THE WITNESS: Right. I did not state that. I'm not sure what that criteria should be, but it helps us balance, being inclusive and also being fair.

BY ATTORNEY TRYON:

Q. So it's not excluding that person from participating in sports, it's just excluding that person from participating on the team that person wants to participate on, right?

ATTORNEY VEROFF: Objection.

THE WITNESS: If we understand that transathletes are identifying with a particular gender, so in this case transfemales, then no, that wouldn't be an option to go participate on a male team.

BY ATTORNEY TRYON:

Q. Well, why is that not an option?

A. Right, well, I just point to PBJ, right, who has identified as a girl for a long time and looks very much like a girl and is the --- I believe the principal said, you know, we're just creating problems. This little girl can be with her friends, can run cross-country, can reap all these benefits, right, and it's not an option to send her over to the boys team because she is a girl.

Q. Do you need to look like a girl to be on the girls team?

ATTORNEY VEROFF: Objection.

THE WITNESS: No, I'm not sure what that means.

BY ATTORNEY TRYON:

Q. Well, there are girls that look masculine that are girls and they, of course, want to be on the girls team. I would presume you would agree they should be on the girls team, right?

ATTORNEY VEROFF: Objection.

THE WITNESS: Right, there are --- you know, we may get into a debate about what is masculine or feminine if we're saying that --- you're describing somebody as more --- a female that's more masculine, but maybe other people see it that there's a feminine quality to whatever, being strong, yeah, having a solid build, those things.

BY ATTORNEY TRYON:

Q. Well, you're the one that pointed out that BPJ looks like a little girl and suggesting that that was one of the reasons that BPJ should be on the girls team. Did I understand that incorrectly?

A. What, I meant to emphasize is that she sees herself as a girl, and so we put her in a really uncomfortable spot to say you can't be with the girls and you have to go be with the boys even though in your heart of hearts you know you're a girl.

Q. Can that be uncomfortable for the biological girls on the girls team if biological boys who identify themselves as internally as being girls are allowed to participate on the girls team?

ATTORNEY VEROFF: Objection.

THE WITNESS: Could --- you know, could the fact that a transgender girl is participating in a

sport, on a team, could that make someone feel uncomfortable? Definitely it's possible.
BY ATTORNEY TRYON:
Q. Not only is it possible, but it happens, right?
ATTORNEY VEROFF: Objection.
THE WITNESS: Yes, I think it probably happens. It probably happens both ways, that there are also teammates that are very supportive.
BY ATTORNEY TRYON:
Q. But the feelings of the biological girls who are uncomfortable with a biological male identifying as a female or a transgender girl, as you have said, their feelings are important too, right?
ATTORNEY VEROFF: Objection.
THE WITNESS: You know, pulling from my expertise, if we're trying to create this caring task involving climate, then yes, it would be very important for a coach to sit down with those athletes and talk and encourage them. If the transfemale athlete is playing by the rules and has done everything that has been asked and they are part of a team, then coaches should really talk with the athletes than help them understand, help them not let this be a distraction, help them embrace all their teammates, right. There is so much in the

sport that any of us on a team might like to change, right, or wish our teammates did other things, right, wish they worked harder or wish they used less recreational drugs or anything, right, but we are a team and we come together and we just support each other and we keep the focus on being the best we can be every day.
BY ATTORNEY TRYON:
Q. So biological girls just need to knuckle under and accept things the way that you want them to be. Is that what you are saying?
ATTORNEY VEROFF: Objection.
THE WITNESS: I'm saying being part of a team is challenging, and for some people having a teammate that is transgender may be one of those challenges they have to deal with. But everyone is dealing with challenges with the teams, right. And if that transgender athlete is there playing by the rules, right, and is allowed to be there, then yeah, I guess the others have to deal with it.
BY ATTORNEY TRYON:
Q. So on the other hand, you can tell that transgender female to participate on the boys team and the coach on the boys team would sit down with the boys and say you will not make fun of this child, you accept

this child as one of our own even though this child is a transgender female, this transgender female will be on the boys team and you will treat this transgender female with respect and be a full part of the team, right, that coach could do that?
ATTORNEY VEROFF: Objection.
THE WITNESS: Yes, the problem is that the transgender athlete is a female, right, and has the right to participate with the female team.
BY ATTORNEY TRYON:
Q. Where is that right found? You just said she has that right. Where is that right?
ATTORNEY VEROFF: Objection.
THE WITNESS: I mean as it comes within the rules, right. I'm sorry, Julie. I mean, as it falls within the rules, right.
BY ATTORNEY TRYON:
Q. Well, right now the rule is HB-3293, which says that that transgender girl must participate on the boys team. And since that is the rule, following your --- your logic, you go to the boys team and the boys coach and you say this child is going to be participating in this team, you will welcome her with open arms onto our team just as we do on football, we open with --- welcome

with open arms girls who are playing on a boys football team, right?
ATTORNEY VEROFF: Objection.
THE WITNESS: My understanding in this case is that the judge is --- has kind of looked at the evidence and said right now I think there is potential discrimination and so we're going to let BPJ continue to compete and all through this so ---.
BY ATTORNEY TRYON:
Q. That's right, the Judge did say that for now, but he did not say that for everything. But I'm asking for a more general rule. Putting aside BPJ, as a general rule, why would you say coach of the boys team, you will allow these transgender girls to come and play on your team and you will welcome them with open arms just as we do with our football teams that allow girls to play on them?
ATTORNEY VEROFF: Objection.
BY ATTORNEY TRYON:
Q. Because after all, as you said, the transgender girl is a girl and so should be allowed to play on the boys team if she chooses?
ATTORNEY VEROFF: Objection.
THE WITNESS: I think football is a great

sport, and I wish they had male and female teams. Typically, it's just a male team, so a female who wants to play football doesn't have another option. But in this case BPJ and others who identify as a female and should be able to compete with other females, their friend group and --- so I see that as an indifference.

BY ATTORNEY TRYON:

Q. Their friend group? So girls can't have boy friends?

A. No. I meant it --- sorry, I meant in this case BPJ is saying her closest friends are on the girls team. She is a girl and she --- and so it would be harmful, not fair to not let her compete with that team.

Q. How do you define fair? You told me before you are not an expert on fairness. Are you now saying that you do know what is fair?

ATTORNEY VEROFF: Objection.

THE WITNESS: I'm just keeping focused on what the rules are and the Judge has ruled right now that BPJ should be able to compete with the girls because she is a girl, and so from my perspective, that's where it stands right now.

BY ATTORNEY TRYON:

Q. Okay.

That's just because that's what the Judge said then, right?

ATTORNEY VEROFF: Objection.

THE WITNESS: No. I think the core issue is BPJ identifies as a girl, has lived the majority of her life as a girl and wants to be able to participate in her school activities as a girl, including cross-country.

BY ATTORNEY TRYON:

Q. So how long do you think a transgender girl has to live as a girl before participating on the girls team?

ATTORNEY VEROFF: Objection.

THE WITNESS: Again, I think I'm not the best person for that line of inquiry. I'm not sure, but I know others are studying that, those kind of issues, and can add greater insight to it.

BY ATTORNEY TRYON:

Q. Okay.

A. I'm just someone who would hate to see BPJ not be allowed to participate in her school activities, just to be told no, I'm sorry.

Q. On the girls team?

A. Right.

Q. And of course, not all athletes compete on teams. Sometimes if they just love to run, if that is the key, they just love to run, they don't have to be on a team to run, right?

A. Right.

ATTORNEY TRYON: So we have gone for an hour. And I would like to get some documents printed since we're not able to easily look at them on your iPad. So why don't we go off the record to see if we can get that taken care of. Is that okay with you, Julie?

ATTORNEY VEROFF: That is great. Thank you.

VIDEOGRAPHER: Going off the record. The current time reads 3:15 p.m. Eastern Standard Time.

OFF VIDEOTAPE

(WHEREUPON, A SHORT BREAK WAS TAKEN.)

ON VIDEOTAPE

VIDEOGRAPHER: We are back on the record. The current time reads 3:37 p.m. Eastern Standard Time.

BY ATTORNEY TRYON:

Q. Professor Fry, thank you for helping us with

that technical issue.

A. No problem.

Q. I would like you to find the exhibit that says Depression in Athletes. It should be Exhibit-8, I believe.

A. I've got it.

Q. Okay.

I've lost you. There you are. Okay. Let me find the right page I'm outlining to. Okay. So Exhibit 8 is Depression in Athletes: Prevalence and Risk Factors by Andrew Wolanin and other authors, right?

A. Yes.

Q. So I wanted to ask you about a passage on the second page of this, which is page 57, under the title Sports Injuries and Depression at the bottom of the first column. So I will just read the passage that I have a question about and if you choose to read it, too, if you want to read it more --- in fact, did you already read the abstract on this earlier?

A. I just did.

Q. Okay.

So you've read the abstract. My question is on, as I said, under Sports Injuries and Depression. And I will just read into the record, Bruer and Petrie,

seven in parentheses, were among the first researchers to compare depression symptoms between athletes who had and had not experienced injuries. In this retrospective study it was found that athletes who experienced an injury during the previous year reported significantly higher depression symptom scores than those reported by non-injured athletes, as measured by the Validated Center for Epidemiological Studies Depression, parentheses, CES-D scale. Do you see that?

A. I do.

Q. And my question is do you have any reason to dispute this or contest this finding in this statement?

A. No.

Q. Would it be fair to say that you agree with it?

A. You know, it's retrospective, so they're going back in time and asking, hey, when you were injured what was going on, but no, I would accept this is --- could be a legitimate finding.

Q. Okay.

Then in the next column, first full paragraph, there has been a recent surge of evidence suggesting that sports concussions can lead to changes in emotional state, parentheses, 14, closed paren, period. Furthermore, there is recent evidence to suggest that

sports concussions can have long-lasting emotional impact. And my question is, do you have any reason to contest this statement? And feel free to look at it and make sure I'm not reading it out of context.

A. No, I don't contest this.

Q. Then in the beginning of the last full paragraph on the page it says, while the relationship between concussion and depression may be significant there is also evidence to suggest that a concussion may have the same effect as other injuries on mental health. For example, Main Wearing, et al., 18 in parentheses, conducted a study to examine the differences between emotional responses in athletes who had a concussion compared with anterior cruciate ligament, ACL, injury. They found that athletes with ACL injuries had more severe levels of depression and longer duration of depression compared to those athletes with concussion. Do you see that?

A. I do.

Q. And do you have any reason to contest that statement?

ATTORNEY VEROFF: I'll just object to the extent this statement relies on a study that is actually not before the witness.

BY ATTORNEY TRYON:

Q. Go ahead, you may answer.

A. Okay.

You know, there is probably just a lot of background to this, so I agree. I haven't read this one but I would jus say ACL injuries can be extensive and last over months, right, and take an athlete out of sports for months. Whereas a concussion, you know, it varies in severity and somebody might be back relatively quickly in comparison. But, you know, both of --- both of these injuries are not fun for athletes to deal with and, yeah, can cause stress and depression.

Q. Okay.

So I think you would agree that it's important for athletes to avoid injuries where possible, right?

A. Right, right, and --- yeah.

Q. And would you agree that it is important to have rules in place to avoid injuries where possible?

A. Yes, I would agree.

Q. And would you agree that we don't need to wait for actual harm before putting rules in place to prevent harm if it's reasonably foreseeable?

ATTORNEY VEROFF: Objection.

THE WITNESS: Yeah, the keyword is

reasonably.

BY ATTORNEY TRYON:

Q. Right. So you agree with that but focusing on the word reasonably, right?

ATTORNEY VEROFF: Objection.

THE WITNESS: Right.

BY ATTORNEY TRYON:

Q. Would you agree that segregation of male and female sports is at least in part to protect girls from injury, at least for some sports?

ATTORNEY VEROFF: Objection.

THE WITNESS: Possibly. I would just note that there is tremendous variability within each gender and if that were totally what was driving this then we really would be concerned about some, for example, not as strong males competing against bigger, stronger males and same with females. So the issue just transcend gender, you know, it's an issue within each gender.

BY ATTORNEY TRYON:

Q. Well, you said you had some familiarity with Title 9, right?

A. Yes.

Q. And Title 9 divides sports into boys --- male

and female sports in some instances, right?
ATTORNEY VEROFF: Objection.
THE WITNESS: Yes.
BY ATTORNEY TRYON:
Q. And in particular, with respect to contact sports, right?
ATTORNEY VEROFF: Objection.
THE WITNESS: Yes.
BY ATTORNEY TRYON:
Q. And would it be fair to say that those contact sports Title 9 does that specifically to --- for safety purposes?
ATTORNEY VEROFF: Objection.
THE WITNESS: I think it's fair to say that that is a --- is a concern, yeah.
BY ATTORNEY TRYON:
Q. You wouldn't say that Title 9, the regulations for Title 9 that regulate that, do you think those are unfair or should be determined to be illegal?
ATTORNEY VEROFF: Objection.
THE WITNESS: Right, no.
BY ATTORNEY TRYON:
Q. So let's go back to the study by --- I will say it wrong, in Balaguer?

A. Yes, Balaguer.
Q. Balaguer, thank you. Do you speak French?
A. No, but she is one of my favorite people in the world.
Q. Oh, okay.
VIDEOGRAPHER: Counsel help me out here, which exhibit number is that?
THE WITNESS: Maybe 2.
ATTORNEY TRYON: No, the Balaguer.
VIDEOGRAPHER: If you can tell me the title I can tell you the number.
ATTORNEY TRYON: I'm sorry.
VIDEOGRAPHER: I said if you can tell me the title I can tell you the number.
ATTORNEY TRYON: Here it is. I think it is number 7, Motivational Climate and Goal Orientation as predictors of Perceptions.
VIDEOGRAPHER: Correct, that would be Number 7.
BY ATTORNEY TRYON:
Q. And is that printed out for you, Professor Fry?
A. Yes.
Q. And going back in the report --- let me see if I can find the right paragraph. Here we go, paragraph 32

of your most recent report. Okay. So the first clause of that first sentence says athletes high in ego orientation report lower companionship and greater conflicts with teammates and you cite Balaguer for that proposition. I simply was not able to find that proposition in the Balaguer report. By the way, the University of Valencia, where is that? Is that in Spain?
A. It is.
Q. Then why does Elizabeth have a French name? I'm sorry. If you could just look through and tell me if you can see the language that supports your language in paragraph 32.
A. Yeah, yeah, just one more second. Yeah, okay. They give you this. I think this wasn't the best article. It was referring to the coach instead of the teammates with this one. But if you would look on --- or maybe --- 383, that paragraph in the middle of the first column. Yeah, just a little bit lower. But the wording in this paragraph on the left, yeah, if you can fit the whole thing in again. Right. So partway down it's just asking about --- to write your current coach or somebody that --- so one would be just doesn't coincide at all with the coach I would like to have

versus my ideal coach. So the lower rating on the coach is just --- that is not a good thing when you're going this is not the coach that I want, right, or all the way up to this is my ideal coach. So it supports the findings that relationships aren't that strong, but it is not the best study --- or you know, it shouldn't have been slotted there because it's just referring to the coach instead of the athletes. If you look at that table underneath where we're looking now, Table 2.
BY ATTORNEY TRYON:
Q. I'm looking at it.
A. Whoops, is that it. Under satisfaction and so the middle part on the left and the bottom one, satisfaction with the coach, you can just see that the more you perceive a task climate, the more you are thinking this is the ideal coach, I'd like to have, the more respect I have for the coach, or however you want to put that in your words and the more you perceive an ego climate the less and the more on the task orientation, you are more likely to just say this is a coach I'm glad I have. And with the ego orientation, it's just not significant --- so anyway, it supports the results for saying overall, but that was not the best reference there. It shouldn't have been used right

there.

Q. So just to make sure I understand then, the Balaguer report does not actually support the idea that athletes high in ego orientation report lower companionship and greater conflict with teammates, right?

ATTORNEY VEROFF: Objection.

THE WITNESS: Right.

BY ATTORNEY TRYON:

Q. Do you believe Smith and Small does?

A. Yeah. You know, a little while ago when we were looking at that passage, it just included like ten variables that were cognitive anxiety and worry and concentration disruption and I don't know, five other things, a lot of ways to measure stress. And so across these studies a lot of ways that these relationships with coaches and athletes, but it's not like everyone is using one uniform measure. Yeah, so there's probably more studies showing that you have better relationships when people perceive a task involving climate or have a task orientation and then it's kind of a mix on the ego side. So sometimes that comes out and sometimes it doesn't.

Q. Don't studies show that the best mix is a high

ego orientation and a high task orientation?

ATTORNEY VEROFF: Objection.

THE WITNESS: No, I wouldn't agree with that, that mixes --- it's not necessarily that that is harmful, right, having a high task and high ego. But to say it is the best, no, I wouldn't say that.

BY ATTORNEY TRYON:

Q. Is Smith and Small cited in the bibliography?

A. One of their articles by Grossbar is, but that is looking more at the orientations in climate. That one, I lost that page. I was just trying to see if there was another one. There is one by Cummings, 2007, Is Winning Everything, the Contributions of Climate and ---.

Q. And that is going to tell me that --- is going to support the statement that ego orientation creates more conflict?

A. No, no. I'm not sure. I think I'd have to step back and review to tell you for sure what those are, but I can certainly do that.

Q. All right.

Well, let's move on. I don't want to keep you here any longer than we need to be here.

A. Thank you. I appreciate that.

Q. You bet. So let me redirect your attention to paragraph 39. So in the last --- let's see, the sentence that says because these positive benefits are fostered in task involving environment, arbitrary exclusions can cause harm not only to the athletes who are excluded but also to the other athletes on the team. Can you tell me what harms it causes to other athletes on the team?

A. It could cause harm to athletes who aren't allowed to have their --- their friends participate, their friends who should be on the team, right, if --- BPJ was not allowed to participate and her friends really were looking forward to that being a part of the sport, right. The sport experience is to share that together. That could be harmful. It is also just, you know, it could be a missed opportunity to --- for kids to learn and to grow and to become more familiar and to become more accepting, right.

Q. So if that's the case, couldn't the coach just say to them I know you would like to have your friend on the team, but that's not the way it works and help them work through that, just as you told me the coach can counsel kids who disagree with the decisions --- some other decisions?

ATTORNEY VEROFF: Objection.

THE WITNESS: Okay.

Definitely a coach could do that, but that doesn't change the fact that --- that it could be harmful in the sense that knowing that other people you care about and evaluate are being excluded in an unfair way.

BY ATTORNEY TRYON:

Q. And that term, the unfair way, is something that you said that you are not an expert on what's fair and what's unfair, right?

A. Right. I said it's not a primary area of study, right.

Q. Yeah. Well, I want to ask you a question. I think you're referring to the Plaintiff as PBJ, with first letter being P.

Am I hearing you right?

A. I didn't think so. But it does --- but BPJ. Sorry.

Q. All right. I want to make sure we're all saying the correct initials.

VIDEOGRAPHER: Excuse me, Counsel. If I could interrupt for a second. If I could just ask the witness to kind of sit up. You're starting to slouch

down and your head is getting cut off in the video. Thank you.

THE WITNESS: All right. Sorry about that.

BY ATTORNEY TRYON:

Q. You're not saying that any West Virginia sports organization or educational education has adopted an ego-promoting philosophy, are you?

A. I'm not.

Q. And you don't know of any coaches in West Virginia that have either, right?

ATTORNEY VEROFF: Objection.

THE WITNESS: No.

BY ATTORNEY TRYON:

Q. And a team can build a task oriented climate with sports separated by sex, right?

A. That's right.

Q. Do you know if female teams are better at building task oriented climates than boys teams or vice versa?

A. Yeah. It's possible to build a strong task involving caring climate in both teams with males and females. There may be a slight tendency across some studies where those scores come out a little bit higher

for females than males, but it's not consistent, right, but females sometimes really value that --- those social aspects of the sport. Not that males don't, but maybe a slightly higher --- if we're looking at those bell curves again, they would be really close, but it's possible that for --- if we are looking at guys they might come out a little bit higher on the ego aspects of the climate and females the task.

BY ATTORNEY TRYON:

Q. Can we look at paragraph 41 of your report, please?

A. Yes.

Q. So you say the climate of youth sports must be geared to include all participants, so that teams are more likely to help every athlete maximize their potential. Now, the word must is a mandatory word, right?

A. Yeah. I think it means must in the sense that that's our aim, to maximize the potential of every athlete. If that's our aim, then it is pretty key to creating that climate.

Q. So who would be the --- what entity would be the one to enforce that?

ATTORNEY VEROFF: Objection.

THE WITNESS: Right, I think it comes down to a matter of administrators in sport leagues and having a desire to provide coaching education, try to help coaches understand this research and to help foster caring and task involving climate.

BY ATTORNEY TRYON:

Q. Are you suggesting there should be a statewide or nation-wide rule on this?

A. No.

ATTORNEY VEROFF: Objection.

THE WITNESS: No, I'm not suggesting. I'm sorry, Julie.

ATTORNEY VEROFF: That is quite okay. Go ahead.

THE WITNESS: No, I'm not suggesting that, although I would just note that Canada has a basic coaching education for anyone who is going to work with even very young athletes, right, and then they have these different levels that people need to go through this coaching education because they really value trying to help create inclusive environments that help kids focus on their effort and improvement and can be set up in a way to bring out the best in any child.

BY ATTORNEY TRYON:

Q. So what you said in Canada, they have this, who has this?

A. I believe it kind of trickled down from the government, that they just said --- you know, in the States, in the U.S., our model is if you have a heartbeat, right, and you're willing, let's put you with a team because we just want --- want to have as many teams and neighborhoods where kids can participate. But in Canada they just set the bar higher and they said if you're going to work with kids, we want you to have some basic coaching education. And so it's just a rule across their sort of sporting government.

BY ATTORNEY TRYON:

Q. You say sporting government. Are you saying the national government is doing this or some sporting organization? I don't know much --- anything about Canada as far as that is concerned.

A. Yeah. You know, I would have to look at that more closely. Definitely their sporting organizations, but I'm not sure that doesn't trickle down from some of their government rules, but I won't say that for the record. For the record, I'll just say that they do require any use for a coach to have a basic introduction to coaching education, which would include some of these

concepts.

Q. But you're not advocating that for the United States, are you?

A. No.

Q. Okay.

Let's see, so my next question is you say so that teams are more likely to help every athlete --- I'm sorry, strike that.

Still that first clause. The climate of youth sport must be geared to include all participants. So who gets to participate? When you say all participants what do you mean by that?

A. Hopefully, we have an avenue for all young people to gain some exposure to youth sport, so all athletes who want to.

Q. Okay.

So in some sports and high school athletes and in college you have tryouts. And if you don't make the tryouts, you don't make the team.

Right?

A. That's right.

Q. And do you think that's okay or do you think that we should do away with tryouts and everybody should be on the team if they want to be on the team?

ATTORNEY VEROFF: Objection.

THE WITNESS: I think there is a lot of benefits to looking at high school sports and including as many athletes as we can. But no, I wouldn't say that I'm against all --- everywhere we should have a no cut policy. But I think it's valuable to look and say, hey, are we including as many kids as we can. Because the evidence supports that kids feel more connected at school, you know, their attendance is better. There's a lot pluses when kids get that opportunity to participate.

BY ATTORNEY TRYON:

Q. Don't sports sometimes take kids away from their academics?

ATTORNEY VEROFF: Objection.

THE WITNESS: They sometimes do for some kids.

BY ATTORNEY TRYON:

Q. For a lot of kids, isn't it?

A. I'm not sure what the percentages are, but yeah, some kids may be less focused on academics.

Q. And that is why a lot of schools actually have rules on minimum academic scores that you are getting in order to be on a team, right?

A. Probably so, yes.

Q. So going back to cutting kids off teams, that's a thing where kids, if they don't perform at a certain level, they're cut from the team or never allowed onto the team, right?

A. Right.

Q. And so if somebody does better than you on that team, then you are at a disadvantage, right?

ATTORNEY VEROFF: Objection.

BY ATTORNEY TRYON:

Q. If you are cut from the team?

A. Yes.

Q. Now, you say from an educational standpoint it is optimal to encourage all athletes to do the best they can and to help all athletes enjoy the sport they love, right?

A. Uh-huh (yes). Yes.

Q. So when you say from an educational perspective let me just ask you --- do you feel like you are an expert on education or teaching methodology?

A. It depends. When I say an educational perspective I mean from the sports psychology literature. And you know, it's not what I study in --- sorry, I'm just going to think for a second.

Q. Take your time. I want to get an accurate answer from you. I'm not trying to fool you or anything.

A. Thank you. Yeah, I think this is building on achievement goal perspective theory that just as we should be helping all kids be the best that they can be, right, and if we're not doing that, then we're more likely setting it up to just focus on those kids who we think are going to be the best and the highest achievers, but to keep the focus on helping every athlete, every student, be the best that they can be I think is really a valuable aim.

Q. Do you know how many schools in West Virginia have sports programs?

A. I do not.

Q. Do you have any idea of what percentage of kids are in athletic programs in West Virginia schools?

A. I don't.

Q. Do you know about in any of the universities in West Virginia?

A. No, I don't know.

Q. Take a look at paragraph 42. Read that. I'm not going to read it all out loud, but I do have some questions for you about paragraph 42.

A. Okay. Okay.
Q. As far as I can tell, this paragraph has nothing to do with House Bill 3293, does it?
ATTORNEY VEROFF: Objection.
THE WITNESS: I think it takes a bigger picture perspective of just the youth sport world, and so what's true for parents, for this parent, Jim Thompson, who had a child who experienced so much negative, you know, interactions when he first signed up for sport, that Jim Thompson was like, wow, this is crazy, and he went on to start this organization to provide coaching education for --- you know, for coaches. He has materials for parents, for officials, but you know, reading it, it makes me think it would be healthy for all of us to step back and just say, hey, let's not get too, too over crazy about this, right. And in the case of BPJ, right, how cool if we can let her have the experience of running cross-country school and wouldn't it be a shame if we just had a blanket exclusion of kids based on their gender identity.
BY ATTORNEY TRYON:
Q. Okay.
But what does that have to do with HB-3293?
ATTORNEY VEROFF: Objection.

THE WITNESS: You know, it's probably just a matter of how we interpret this, but if we --- if we have legislators just making a blanket decision that across our state no child in secondary education, no athletes in universities who are transathletes can participate, it feels like we are really doing a disadvantage to those athletes and not allowing them to participate and reap the benefits. And I think Jim Thompson here is just saying there is just so many benefits and what if we were all united and saying how can we come in and just make sport be all it can be. Parents play a big role in that, but they're definitely not the only party that does.
BY ATTORNEY TRYON:
Q. Is it your position then that a child or youth, a young adult should be allowed to participate on whatever team that child identifies as being a gender associated with that team? That wasn't very artfully said, so let me try again. Is it your position that any child that identifies as a girl should be allowed to participate on a girls team or women's team as the case may be?
ATTORNEY VEROFF: Objection.
THE WITNESS: It's my position that when

I look at the sport organizations across this country and internationally that sport leaders are recognizing that we want to balance fairness with inclusion and that there has been success in that already and that that is something that we can do and that we don't have to just exclude all trans athletes from participating in sport.
BY ATTORNEY TRYON:
Q. So you have not answered my question directly. Is that because you don't want to or because you don't feel like you can?
ATTORNEY VEROFF: Objection.
THE WITNESS: I feel like it's more complex than what you're mapping it out. When we talk about transathletes and their gender identity and whether they may be transitioning and all these other factors, it's just a bigger picture than saying any male should be able to decide at any moment I want to compete as a female. No, we have to have guidelines in place that are fair and inclusive.
BY ATTORNEY TRYON:
Q. So if we just narrowed down the statute somewhat to imply with your views on that, then you think it would be okay to exclude some transgenders --- transgender girls from competing on girls teams but not

all?
ATTORNEY VEROFF: Objection.
BY ATTORNEY TRYON:
Q. Is that right?
A. Right. I think that's what's happening right now, right, there are like criteria within the NCAA, for example, and athletes have meet that criteria to participate as a transgender female.
Q. And so a statute that did that you would find okay?
ATTORNEY VEROFF: Objection.
THE WITNESS: I believe sport organizations and leaders are going to be able to find a way to balance inclusion and fairness, and what that may look like across sports or different levels, yeah, I'm not an expert on that and couldn't outline all that for you right now. I could just say it makes me sad when athletes are excluded and not given a chance to reap all these amazing benefits from being a part of sport.
BY ATTORNEY TRYON:
Q. I hear you, but I still want to know if you believe that there's a place for the State to pass laws to regulate that?
ATTORNEY VEROFF: Objection.

THE WITNESS: Yeah, I don't think the State legislators in my view are the best position. I feel like the sport organizations and sport leaders and people really invested and knowledgeable and involved in the sports at different levels should be making these calls.

BY ATTORNEY TRYON:

Q. So you don't believe that the State should pass any law whatsoever regulating participation of transgender girls in girls sports?

ATTORNEY VEROFF: Objection.

THE WITNESS: Yeah, I'm not speaking to every possible law that could ever be invented, but with regard to this House Bill, right, I think it's unfortunate to have just a blanket exclusion for transathletes, for transfemales.

BY ATTORNEY TRYON:

Q. Fair enough. What about maybe a --- well, let me just ask this question. When kids are competing, is it their identity that's competing or is it their body that's competing?

ATTORNEY VEROFF: Objection.

THE WITNESS: I'm sorry. I wouldn't even know where to begin to address that question or what

even ---.

BY ATTORNEY TRYON:

Q. Let me see, you're not an expert on puberty blockers therapy for boys or young men who want to be on the girls teams, right?

A. I am not.

Q. And you're not an expert on testosterone suppression for boys or young men who wanted to be on a girls team, right?

A. That is correct.

Q. And you are not an expert on hormone therapy for boys or young men who want to compete on girls teams, right?

A. That's correct.

Q. Let's take a look at Exhibit-11.

ATTORNEY TRYON: Jake, if you could bring that up. Excuse me, Exhibit-9. I beg your pardon. I have to relabel some of these.

(Whereupon, Exhibit 9, Article on Lia Thomas, was marked for identification.)

BY ATTORNEY TRYON:

Q. So I'm sure you expected that I was going to ask

you some questions about Lia Thomas, didn't you?

A. I didn't know what to expect, honestly.

ATTORNEY VEROFF: Objection.

THE WITNESS: I didn't know what to expect.

BY ATTORNEY TRYON:

Q. Of course, the whole issue with Lia Thomas has been in the news a lot, and so I want to ask you about --- this is an article in Fox News. It says Penn Swimmer Slams School's Handling of Lia Thomas Saga. They Don't Actually Care about Women at All. So have you seen this article?

A. No.

Q. But you are aware of the Lia Thomas what I will call controversy, right?

A. Yes.

Q. So the first paragraph says a swimmer on University of Pennsylvania Women's team says she feels the school's decision to allow transgender swimmer Lia Thomas to compete has created an unfair balance within a sport that prioritizes Thomas's rights over that of biological female student athletes. A student who spoke to Fox New Digital on the condition of anonymity out of fear of retribution said she was hopeful after learning

the NCAA's decision last week to update its policies of allowing transgender girls to compete based on hormone levels. And then skipping down it says stuff like that, it's not just the difference between two girls and how one may have slightly larger lungs that gives them a slight advantage. These are monumental advantages that biological males just develop through puberty and it's not something that a year of hormone treatments, in brackets, can suppress because they still have all the muscle mass that they had for the last 20 years, closed quote. Do you believe that this swimmer is justified in her feelings about this being unfair?

ATTORNEY VEROFF: Objection.

THE WITNESS: I believe this swimmer has the right to her opinion, for sure.

BY ATTORNEY TRYON:

Q. Do you agree that it was unfair for Lia Thomas to compete with the girls on the team?

ATTORNEY VEROFF: Objection.

THE WITNESS: The NCAA has set these standards in place and Lia Thomas followed everything, she has followed the rules and so it's really unfortunate to see how much hate and lack of respect and lack of kindness has been thrown her way. It's just

really hard stuff. I understand that athletes --- this is new and I think each sport will be just looking at the criteria they use and so, you know, they may tweak some things along the way. But I don't think we can take it out on Lia Thomas who has done everything that has been asked of her.

BY ATTORNEY TRYON:

Q. Is there anything that you are aware of --- this swimmer doesn't say I hate Lia Thomas. You just started out talking about hate. Where do you get that from?

ATTORNEY VEROFF: Objection.

THE WITNESS: From everything coming from social media. And so she fears retribution and wants to stay anonymous. Lia Thomas I feel has a lot of courage to put herself out there knowing that there is going to be a lot of people unhappy and a lot of pushback and, you know, kind of couple of things that she says is just referring to be who she is, ready to compete. And so I'm acknowledging this is a really difficult situation, right, for swimmers, for her teammates, but I think in this case we have to wait to see what the NCAA and what the USA Swim group decides to do and what they decide is fair. And they have ongoing studies about how to be inclusive and yet fair, and I'm confident that we can

keep pursuing that and there may be a learning curve for us, right, or it may be that this is determined with data over time that this is exactly what the criteria needs to be.

BY ATTORNEY TRYON:

Q. So let's turn to the third page underneath that picture, it says --- keep going down. I'm sorry. More please, below the next picture. There we go. And right --- so the paragraph, it says they are just proving, once again, that they don't actually care about women athletes, the swimmer said of the University of Pennsylvania. They said they care and that they're here for our emotions, but why do we have to be gracious losers? Who are you you to tell me that I shouldn't want to win because I do want to win. I'm swimming. I'm dedicating more than 20 hours a week to the sport. And obviously I want to win. You can't just tell me that I should be happy with second place. I'm not. And these people in Penn's administrative department who just think that women should just roll over, it's disturbing and it's reminiscent of the 1970s when the are fighting for Title 9 and stuff like that. They don't actually care about women at all. What would you say to this swimmer?

ATTORNEY VEROFF: Objection.

THE WITNESS: I'd say I just recognize that you're really frustrated with this and you don't agree with it and that we --- well, I think, you know when stuff is new and we don't have a lot of experience or exposure to it, you know, that is really hard. I just reflect back to my first semester at college and I was just having lunch at a long table with lots of women, and my roommate told me afterwards that every person that we had lunch with, which was a lot, that they were all gay. And I had no idea, never --- I grew up in Texas, never talked to anybody, never knew anybody that I knew was gay, was probably just naive.

And so down the road now, some people that I'm closest to and love in the world are gay and it is not anything that I give any thought to. It's like, you know, crazy that is what happens over time. And I see the same thing happening with transgender athletes. We're just going to --- who would want to have the courage to come out and just put your lives out there and your family and do everything that they have to do, too, and so I think we'll all just grow and we'll learn more about what this experience is and we'll be able to see, right, that here is just another athlete like me.

We have more in common than we don't. And I think over time a lot of views will change and we'll just keep working on trying to be as fair as we can on what the criteria should be. But with this athlete I would say nothing changes for you. What you are trying to do is be the absolute very best that you can be, right, and so let's keep working hard, let's keep seeing what you can do. In swimming, that's a nice sport to just be able to stay focused on your time and your performance and proving your technique.

BY ATTORNEY TRYON:

Q. And so you are saying that this girl should be a gracious loser, period, right?

ATTORNEY VEROFF: Objection.

THE WITNESS: No. I'm saying if that suggests that every transgender female that ever competes in sports is going to be every female, right, and that's just crazy, so --- and you know, I'm not following it that closely, but Lia Thomas has lost races as well. So just to say that she is here.

BY ATTORNEY TRYON:

Q. Right.

A. And I'm just a big loser for now because I can never, you know, beat her, no, you just go out there and

compete because that's what sports is about.

Q. And that --- sorry, go ahead. I thought you were finished.

A. Sorry. It's just out of, you know, some of these rules are things that are just out of her control so she needs to stay focused on what she can focus on.

Q. Is it your view that these girls that are objecting to Lia Thomas being on the team are doing it because they hate Lia Thomas?

ATTORNEY VEROFF: Objection.

THE WITNESS: No, no, I don't know any of these athletes.

BY ATTORNEY TRYON:

Q. Let me ask you to take a look at Exhibit-11. Let me know when you have it.

A. Okay, I have it.

Q. This is the opening paragraph and this says Virginia Tech, fifth year Reka Gyorgy has released a letter to NCAA addressing her opinion on the organization's controversial transgender policy which allowed Penn fifth year Lia Thomas to compete at the NCAA championships last week. And if we can turn to the page we can see the actual letter written by this swimmer. It is in italics. And let me start with the

second paragraph. My name is Reka Gyorgy of Hungary. I am a 2016 Rio Olympian, represented Virginia Tech for the past five years, a two-time ACC champion, two time all-American and three-time honorable mention all-American. And then skipping down one paragraph she says, Micka, if I'm saying her name right, says I'm writing this letter right now in hopes that the NCAA will open their eyes and change these rules in the future. It doesn't promote our sport in a good way and I think it's disrespectful against the biologically female swimmers who are competing in the NCAA.

And then I want to skip down --- well, let's just continue on the next paragraph. I don't want to skip too much. I swam the 500 free at NCAA on March 17th, 2022, where I got 17th which means I didn't make it back to the finals and first alternate. I am a fifth-year senior. I have been top 16 and top 8 and I know how much a privilege it is to make finals at a big --- at a meet this big. This is my last college meet ever and I feel frustrated. It feels like that final spot was taken away from me because of the NCAA's decision to let someone who is not a biological female compete. I know you can say I had the opportunity to swim faster, make the top 16, but this situation makes

it a bit different and I can't help but be angry or sad. It hurts me, my team and other women in the pool. One spot was taken away from a girl that got 9th in the 500 free and didn't make it back to the A final, preventing her from being an all-American. Every event that transgender athletes competed in was one spot taken away from biological females throughout the meet. Do you disagree with Reka Gyorgy?

ATTORNEY VEROFF: Objection.

THE WITNESS: I recognize that she is very frustrated and feels that this decision wasn't fair. You know, if we're looking at a bigger picture I think sport organizations at the Olympic level, international level, national level, are all invested in keeping this value of inclusion, right, and trying to balance that with fairness, and so I think it's something these organizations are really going to keep working on and that ---.

BY ATTORNEY TRYON:

Q. Sorry. Go ahead.

A. And that they are going to be able to find a good spot that is somewhere --- somewhere in a place that can be respectful, be it transfemale athletes and also the female athletes on these teams.

Q. So you talk about a good spot. You don't know what that good spot is.

Is that right?

ATTORNEY VEROFF: Objection.

THE WITNESS: No, I don't --- sorry, Julie, but I'm confident that there are many people looking --- spending a lot of time and trying to figure out how to answer some of these questions. In response to this athlete, she's probably knocked out a lot of other female athletes because maybe she had more advantages along the way, right. Maybe her parents were able to put her in good programs or good coaching and things like that. So you know, it's just never like a --- we like to just think what a sweet, perfect world it is where everyone has the same opportunities and, you know, there's just a lot that's not fair out there, right, across for athletes, but I think we do the best we can, which is what the NCAA has tried to do at this point. And like I said, things may be changing, yeah, but then --- but just to go back to the other side, for the answer to be a blanket exclusion of all transgender athletes at every level is not helping us move forward.

BY ATTORNEY TRYON:

Q. But you think even Lia Thomas should have been

allowed to participate in this swim meet, right?

ATTORNEY VEROFF: Objection.

THE WITNESS: Yeah, I don't think it matters what I think because I'm just not that emersed in the sport to know everything. So whether it's ten whatever it is nanomols per liter or whether, you know, that's going to change, I don't know, but I think she --- I respect her, she did everything the sport has asked her to do. And she says she gets in the pool every day and gives it her best effort. And those are the kind of teammates I like to have, right, that are that way. So I think everybody can --- her teammates can look at this as maybe they can make each other better and grow as human beings and make the world better.

BY ATTORNEY TRYON:

Q. So again you think Lia Thomas's teammates should just knuckle under and be happy about it and be complete, is that right?

ATTORNEY VEROFF: Objection.

THE WITNESS: I feel sympathy and empathy for so many athletes that are dealing with difficult challenges, right, including these athletes, right, and I just acknowledge, yeah, it must be tough, right,

you've just been doing your thing in your sport for a long time and then you happen to be at the center stage of some of this taking place, but, you know, it's just a lot of challenges that athletes are dealing with on many levels and so I don't think they are unique in, you know, it's not like they are the only athletes that have challenges to deal with.

BY ATTORNEY TRYON:

Q. Do you think that --- are you equating the fact that this swimmer might have had some advantages in her life to the fact that Lia Thomas had been --- had gone through puberty and was maybe as much as a foot taller than the other swimmers, those are just the same thing?

A. No.

ATTORNEY VEROFF: Objection.

THE WITNESS: I'm sorry. I'm not equating those. I'm just simply saying what I feel as the truth, that not everybody out there has all the same opportunities, right, and access and great coaching and facilities and everything else. So I think the NCAA is trying to do the best that they can and everybody is learning, right, so ---.

BY ATTORNEY TRYON:

Q. One of the things that we are learning that

these other girls, biological girls, are feeling very marginalized. Does that count for anything?

ATTORNEY VEROFF: Objection.

THE WITNESS: I think there is a lot that our field of sports psychology can offer here in terms of helping people work through these things. But I would just go back to if we think the answer is to exclude all transgender female athletes from competing, then that's not right, and so we're going to have to maneuver this, we are all going to have to be involved in helping figure out how to move forward.

BY ATTORNEY TRYON:

Q. Let me just be clear, HB-3293 does not exclude any athletes from competing in sports, does it?

ATTORNEY VEROFF: Objection.

THE WITNESS: Okay.

From my perception it does because BPJ is a female and wants to compete with her female peers.

BY ATTORNEY TRYON:

Q. Okay.

A. So I don't see that as a good option for her to compete with the males.

Q. What about Lia Thomas? I mean, Lia Thomas looks like a male?

ATTORNEY VEROFF: Objection.

BY ATTORNEY TRYON:

Q. And couldn't he compete on the male team as he had been for years and then the coach on that team simply say, yeah, Lia Thomas now goes by she, but Lia Thomas is going to compete on the boys teams and you guys just need to respect that?

ATTORNEY VEROFF: Objection.

THE WITNESS: As a cisgender female it's hard to fathom that you wake up and you just feel like you are in the wrong body, right. And the more I've read over the years and the more I've heard people share their stories, it must just be excruciatingly painful to go through life and feel like that's your situation, and so ---.

BY ATTORNEY TRYON:

Q. Right. And nobody is disagreeing with that, nobody is contesting that, just the question --- the right question is what's fair to everyone, not just to the transgender person, but also to the biological girls.

Isn't that the question?

ATTORNEY VEROFF: Objection.

THE WITNESS: Right. I think the

question is how do we balance that inclusion and fairness.

BY ATTORNEY TRYON:

Q. I'm almost finished. I'm going to read you a series of statements and please tell me if you agree or disagree. Either one is fine. I just want to understand your position. Or you may say I don't know. That's fine too. The first statement, there are physiological differences between natal males and natal females.

ATTORNEY VEROFF: Objection. Apologies, objection.

THE WITNESS: True.

ATTORNEY VEROFF: Sorry to --- Mr. Tryon, are these your documents or are these statements coming from a document somewhere.

ATTORNEY TRYON: No, these are my statements.

ATTORNEY VEROFF: Thank you for the clarification.

BY ATTORNEY TRYON:

Q. Second, there are physiological difference in natal males and natal females that result in males having a significant performance advantage over

similarly gifted age and trained females in nearly all athletic events after puberty?

ATTORNEY VEROFF: Objection.

BY ATTORNEY TRYON:

Q. Agree or disagree?

ATTORNEY VEROFF: Objection.

THE WITNESS: I think there is exceptions to this, but as a general rule that is true.

BY ATTORNEY TRYON:

Q. Number three, there are physiological differences between males and females that result in males having a significant performance advantage over similarly gifted aged and trained females in nearly all athletic events during puberty as opposed to after puberty. Do you agree or disagree?

ATTORNEY VEROFF: Objection.

THE WITNESS: Yeah, I think it --- I think that statement somewhat depends on what we define as significant.

BY ATTORNEY TRYON:

Q. Fair enough. Four, there are physiological differences between males and females that result in males having a significant performance advantage over similarly gifted aged and trained females in all

athletic events before puberty?

ATTORNEY VEROFF: Objection.

THE WITNESS: Disagree.

BY ATTORNEY TRYON:

Q. Okay.

Number five, there is not scientific evidence that any amount or duration of cross sex hormone therapy, puberty blockers, androgen inhibitors or cross sex hormones, eliminates all physiological advantages that result in males performing better than females in nearly all athletic events?

ATTORNEY VEROFF: Objection.

THE WITNESS: Okay.

And I'm just going to say that is beyond my expertise and knowledge of that literature.

BY ATTORNEY TRYON:

Q. Males who have recently --- excuse me, males who have received such therapy retain sufficient male physiological traits that enhance athletic performance vis-à-vis similarly aged females from a physiological perspective more accurately characterized as male --- agree or disagree?

COURT REPORTER: I'm sorry, Counsel. Can you restate that question? I missed it.

ATTORNEY TRYON: Sure.

BY ATTORNEY TRYON:

Q. Males who have received such therapy that I mentioned in question number five retain sufficient male physiological traits that enhance athletic performance vis-a-vis similarly aged females and are thus from a physiological perspective more accurately characterized as male and not female?

ATTORNEY VEROFF: Objection.

THE WITNESS: Again, I would say that exceeds my expertise.

ATTORNEY TRYON: Fair enough. Let me go off the record for just a few minutes. I think I've covered everything, but I just want to make sure, and then I will turn the time over to my co-Defendants if they have any questions. So just give me five minutes to go off the record. Is that all right with everyone?

ATTORNEY VEROFF: Thank you.

THE WITNESS: Yes.

VIDEOGRAPHER: Going off the record. The time reads 4:45 p.m. Eastern Standard Time.

OFF VIDEOTAPE

(WHEREUPON, A SHORT BREAK WAS TAKEN.)

ON VIDEOTAPE
VIDEOGRAPHER: We are back on the record. The current time is 4:53 p.m. Eastern Standard Time.
ATTORNEY VEROFF: Excellent. Thank you. Mr. Tryon, in our last exchange with Professor Fry you read a series of statements and I asked you if these statements were coming from any documents. You said, no, these are my statements. And I just want to put on the record that it appears that in some of those statements you were reading from portions of the report of Doctor Brown, one of Defendant's expert witnesses.
ATTORNEY TRYON: Well, in response, they were generated from that, but they are not his statements precisely, so --- and I think that I represented that correctly if you are suggesting that I misrepresented it.
ATTORNEY VEROFF: Thank you.
ATTORNEY TRYON: More over I don't think I need to reference the source of my questions, but I appreciate your statement.
ATTORNEY VEROFF: Thank you. I was just clarifying, I thought that the answer that you gave earlier was your statements and was inaccurate, and so I

just wanted to clarify that for the record.
ATTORNEY TRYON: Well, I believe it to be accurate, but we'll agree to disagree perhaps.
BY ATTORNEY TRYON:
Q. So back to my questions, Professor Fry, it seems that you have a specific view about transgender girls or women participating on girls or women's teams.
Is that a fair statement?
ATTORNEY VEROFF: Objection.
THE WITNESS: Can you be more specific?
BY ATTORNEY TRYON:
Q. So you indicated numerous times of your belief, generally, that trans --- that males who identify as females should be allowed to participate on girls teams. Right?
ATTORNEY VEROFF: Objection.
THE WITNESS: Again, I've stated that I'm opposed to having a blanket exclusion policy for all transfemale athletes.
BY ATTORNEY TRYON:
Q. When did you arrive at that position?
A. I'm not sure.
Q. Was it sometime in the past two years or somewhere before then?

A. I'd say before then, but I'm not sure.
Q. Okay.
Do you have any idea at all what timeframe?
ATTORNEY VEROFF: Objection. Asked and answered.
THE WITNESS: I'm really not sure. You know, things just kind of blur over time.
BY ATTORNEY TRYON:
Q. Sure.
A. But I'm a fan of trying to let athletes participate. So I'm not sure. I definitely learned more over the last few years and may come from a more knowledgeable position but I think it's one I felt for sometime.
Q. For more than ten years?
ATTORNEY VEROFF: Objection.
THE WITNESS: You know, it's just hard to say. I don't remember this being part of the conversation so much ten years ago, so if someone had asked, yeah, I'm really not sure how to put a timeframe on it.
BY ATTORNEY TRYON:
Q. Do you know when the first time is you heard of the idea of transgender women participating or

transgender females participating on girls sports?
A. Again, I don't know. You know, I've been attending sports psychology conferences for the last 30 years, and I don't remember the first time I sat in on a session, or you know, began to learn more.
Q. Okay.
A. I really don't.
Q. Very good. What's the total compensation that you received or that you've charged for in this case so far?
A. In this case?
Q. Yes, in this case.
A. Yeah, I haven't turned in a bill, so I haven't received anything.
Q. So how much have you incurred so far as fees in this case?
A. Yeah, I've --- I think it's in the ballpark of eight to ten hours probably prior to today.
Q. And what is your hourly rate?
A. $250.
Q. And how about in the other three cases combined, how much have you --- how many hours have you expended?
A. Probably eight to ten hours for the Connecticut and Idaho cases together.

Q. And Florida?
A. In Florida, four.
Q. So when you first ---?
A. Sorry.
Q. Sorry, go ahead.
A. Four to six, and I billed for four, though, so I received a thousand for Florida --- in the Florida case.
Q. Do I understand correctly then that the first report that you did was for Connecticut?
A. We started that one and then there was --- that's when COVID hit and the season was on hold. I would have to go back and look. But I think the first one that was filed ended up being Idaho even though we started on Connecticut --- or I was part of the Connecticut one.
Q. And you believe you are able to put this whole report together in eight to ten hours for Connecticut?
ATTORNEY VEROFF: Objection.
THE WITNESS: Yes.
BY ATTORNEY TRYON:
Q. And your billing rate is the same for all of them?
A. That's correct.
ATTORNEY TRYON: I don't have any further

questions. And so thank you for your time. It is always stressful and so I appreciate it. I recognize that it was stressful and that I do appreciate your patience and your time. Thanks?
THE WITNESS: Thank you. Thanks very much.
ATTORNEY SCRUGGS: I guess I will jump in since none of the other Defendants want to.
ATTORNEY TRYON: Go ahead.
ATTORNEY SCRUGGS: Okay.

EXAMINATION

BY ATTORNEY SCRUGGS:
Q. Hello, Doctor Fry. How are you doing? Can you hear me okay?
A. I can. Doing well. Thank you.
Q. So my name is Johnathan Scruggs. I'm an attorney for the intervening Defendant, Lainey Armistead, in this case. So I'm just going to ask you a few questions. The good news is I won't ask many questions as the prior testimony, and I can't since we are limited in time. So I will try to go quick. But the most important question actually I have for you is

what is your favorite barbecue place in Memphis? That's the real question.
A. I guess I'd have to go with the Rendezvous. My husband and I had our first date there. That was kind of special.
Q. Well, I'm from there originally, so that's why I asked.
A. Where are you from?
Q. I'm from Memphis, the Memphis area originally.
A. Okay.
Q. I'm more partial to central barbecue places, but they're all good. So anyway, I want to turn a little bit to paragraph 38 of your expert report. It is Exhibit 2 there. And I want to turn you more toward the end of that paragraph where it says when athletes are excluded from participating in the sport or in a climate where they do not feel accepted or respected, they do not have the opportunity to reap these benefits. Now, what benefits are you talking about there?
A. The benefits of participating in sport and to --- yeah, sorry, let me read this one more time, this paragraph, please.
Q. Absolutely.
A. Yeah, so I was referring to the benefits

highlighted throughout this statement that come from having a chance to participate in a really positive climate. But in this particular paragraph saying that there's some advantages to females who are able to participate, right, and might be more likely to go on to college and those things.
Q. Let's just talk generally real quick. Can you outline, kind of, just as general benefit beyond that one specific one you mentioned?
ATTORNEY VEROFF: Objection. Asked and answered.
BY ATTORNEY SCRUGGS:
Q. You can answer the question.
A. Okay. Well, throughout the statement these benefits of being able to participate in sport, you know, in a caring climate that, you know, people can have fun, can have good experiences and good relationships with coaches and athletes. They can have --- just reap the physical benefits of being in better health and --- both psychologically and physically. They can express greater empathy for others, and you know, better sportspersonship, right, really evaluate being a respectful competitor and things like that.
Q. Now, in your last sentence in paragraph 38, you

don't have a timeframe mentioned in terms of when athletes are excluded from participating in sports they don't have the opportunity to reap these benefits. Do you mean when they don't have an opportunity for a substantial period of time or any type of loss of participation for any period of time?

A. So when athletes are excluded from sport --- I'm not sure I'm following you, but if they were excluded for a day or two, are you saying would that be a big deal or are they excluded for a whole season or they ---?

Q. Sure. Sure. I'm just wondering if you can put that in a timeframe?

A. No, but I would grant that if they're excluded for a day or something like that, we wouldn't be here talking about it probably, but yeah, on a bigger scale.

Q. But you would agree that if students were excluded from participating in high school sports for four years, they would miss out on the opportunities for participating in youth sports?

A. Yes.

Q. And I assume the same is for a year. Correct?

A. Yes.

Q. Let's say there's a policy as far as males with female gender identities to undergo testosterone suppression for a year before they can participate on the girl's team, would that policy force at least some athletes to miss out on some opportunities associated with youth sports?

ATTORNEY VEROFF: Objection.

THE WITNESS: It could.

BY ATTORNEY SCRUGGS:

Q. Well, could you envision where it wouldn't?

ATTORNEY VEROFF: Objection.

THE WITNESS: I'm just thinking they might have other options or could play on a co-gender team that's maybe not part of their school, what they really wanted to do was on their school, but there could be another possibility.

BY ATTORNEY SCRUGGS:

Q. Yeah, so being a situation where they only wanted to be on their school and had to undergo testosterone suppression for a year to do so, they would lose out on those benefits for that year. Correct?

ATTORNEY VEROFF: Objection.

THE WITNESS: Uh-huh (yes).

BY ATTORNEY SCRUGGS:

Q. Now, earlier we discussed HB-3293 the law that is at issue in the case. Now, I don't want to retread a lot of old ground, but I just want to put it in your words. So what is the problem, in your opinion, with this law?

ATTORNEY VEROFF: Objection as to scope.

THE WITNESS: I think it's --- you know, provides a blanket of exclusion of transgender female athletes from participating in the secondary and college level, and that is unfortunate and harmful.

BY ATTORNEY SCRUGGS:

Q. Ma'am, I'm sorry your answer broke up there. I think my internet connection was a bit faulty. Can I ask the court reporter to read back that answer?

(WHEREUPON, COURT REPORTER READS BACK PREVIOUS ANSWER)

BY ATTORNEY SCRUGGS:

Q. And how harmful exactly?

ATTORNEY VEROFF: Objection.

THE WITNESS: It is harmful, because I think what school districts are trying to do is help every child reach their own potential and bring out

their best and but we have these activities available but we are telling a particular group of kids that you can't participate in these activities and these maybe very important to them and be extremely valuable part of their educational experience through the secondary schools.

BY ATTORNEY SCRUGGS:

Q. Got it. Got it. And now earlier in your testimony you mentioned you didn't think it's a problem if a male --- that would be a male that was excluded from, for example, the women's girl track team. Do you remember that?

ATTORNEY VEROFF: Objection.

THE WITNESS: I'm sorry, did you say a male who identifies as a male?

BY ATTORNEY SCRUGGS:

Q. Yes, yes. From the women's sports team?

A. Right. The team for the females is for the females, right, so I would agree.

Q. So you don't think HB-3293 is not problematic in that situation?

ATTORNEY VEROFF: Objection.

THE WITNESS: Right.

BY ATTORNEY SCRUGGS:

Q. And that's true even if that male loses out on an opportunity from participating on the girl's track team?

ATTORNEY VEROFF: Objection.

THE WITNESS: Right. Right. But they're identifying as a male and can perform on a --- can participate on the male's team.

BY ATTORNEY SCRUGGS:

Q. So they can participate on the male's team and that is why they talk about it?

ATTORNEY VEROFF: Objection.

THE WITNESS: Right.

BY ATTORNEY SCRUGGS:

Q. What if that male athlete is not fast enough to run on the male team?

ATTORNEY VEROFF: Objection.

THE WITNESS: In say cross-country or ---?

BY ATTORNEY SCRUGGS:

Q. Yes. On cross country is not fast enough for the male team, cannot run on the male team, should that male at least be able to participate on the female track team?

ATTORNEY VEROFF: Objection.

THE WITNESS: Right, no, no. No people at tryouts do not make teams. But he is a male, identifying as a male then he should stick with that team.

BY ATTORNEY SCRUGGS:

Q. So in that situation, it doesn't matter, that male athlete doesn't have another option?

ATTORNEY VEROFF: Objection.

THE WITNESS: Right.

BY ATTORNEY SCRUGGS:

Q. Okay.

Wouldn't it be more inclusive to allow the man to participate on the female track team?

ATTORNEY VEROFF: Objection.

THE WITNESS: I don't see it like that, right. There's a male track team and a male can try out for the that. And the good news is with cross-country they can handle a lot of athletes so often there is not a cut policy in cross-country.

BY ATTORNEY SCRUGGS:

Q. Well, I think I can easily give a scenario where the male can't make the male track team, but there is an open slot on the female track team, so that males who identify as males, should that person be able to participate on the female track team?

ATTORNEY VEROFF: Objection.

THE WITNESS: No. Sorry. No. No, I don't think so.

BY ATTORNEY SCRUGGS:

Q. Well, why doesn't --- why shouldn't we value their participation on an athletic team?

ATTORNEY VEROFF: Objection.

THE WITNESS: I don't think we're saying we wouldn't value that, right. That happens all the time.

BY ATTORNEY SCRUGGS:

Q. Yeah. I'm saying why don't we value --- why don't we promote their participation in athletics and allow them to participate on the female track team?

ATTORNEY VEROFF: Objection. And please let the witness finish her answer.

THE WITNESS: I think there's a team for this male athlete to at least try out for and go for and so I don't see the issue that we're not being inclusive and giving this athlete an opportunity to try out for that team. Across teams and across schools, many athletes try out for sports and don't make the team.

BY ATTORNEY SCRUGGS:

Q. Well, BPJ can try out for the male track team. Correct?

ATTORNEY VEROFF: Objection.

THE WITNESS: That doesn't seem to be a viable option since BPJ is a female.

BY ATTORNEY SCRUGGS:

Q. Gotcha. Okay. Let me turn you toward paragraph 37 in your expert report, again I'm going to ask you about the second question --- the second -- or the last sentence, excuse me, there, where it says if transgender students are arbitrarily excluded from these sports they are in turn deprived of this positive experience as an outcome and their teammates are deprived of a generally optimal sport experience. Did I read that correctly?

A. Yes, I think so.

Q. Now, would you agree that if we just said any student is excluded from youth sports, they are deprived of those positive experiences and outcomes and their teammates are deprived of a generally optimal sports experience?

A. Yeah, I'm not thinking of a situation where that is not the case right now.

Q. So would you agree that if it said if any

student, no matter their gender identity, were arbitrarily excluded from youth sports, they are deprived of those positive experiences and outcomes?

A. I would just add that based on their gender identity, right. So you could have a trans female athlete who tries out for a team and doesn't make it, right, we're not including that in the same ballpark here with just having a blanket statement that transfemale athletes may not participate.

Q. I guess I'm not really following you. But again, you would agree that if any students are arbitrarily excluded, they reap the benefits from youth sports?

ATTORNEY VEROFF: Objection. Asked and answered.

THE WITNESS: No, I wouldn't agree with that. I would need the context of that because the example I'm giving is transgender female athlete tries out for a female team and doesn't make it, right, and so would be excluded for that reason, that they're --- this team is limited in how many positions they have and they --- particular, you know, some kids try and don't make the team.

BY ATTORNEY SCRUGGS:

Q. Let me turn you to your Declaration, your initial expert Declaration, I think it's Exhibit 1, and then let me turn you to paragraph 44 and just read the second sentence, which says, if athletes are arbitrarily excluded from youth sports, they are, in turn, deprived of those positive experiences and outcomes and their teammates are deprived of a generally task involving and caring sports climate. Do you see that?

A. I do.

Q. And are you referring to all athletes there?

A. I think the point is arbitrarily there.

Q. Uh-huh (yes).

A. Right, then --- so if we're just saying we should have a cut policy because that's not fair, right, that's not what I'm insinuating here, right, just saying but to have this --- make this decision that as a blanket statement that certain group of athletes can't participate, can't try out, can't participate, then, yes, I think the statement is true.

Q. Yes, I think we are saying the same thing. Let me ask it another way. Again, focusing on the arbitrarily, if all athletes --- if any athlete is arbitrarily excluded, that creates a problem in your mind?

ATTORNEY VEROFF: Objection. Asked and answered.

THE WITNESS: Yes, I think it changes the meaning to say if any athletes, any athlete under any circumstances, but I just mean --- athletes here.

BY ATTORNEY SCRUGGS:

Q. Yeah, I'm not saying under any circumstances. I guess what I'm trying to figure out is what role does an athlete's gender identity play in that sentence. It says if athletes were arbitrarily excluded, so I assume there could be a male athlete who identifies as male. If that athlete is arbitrarily excluded, that creates a problem that you identify in that paragraph?

A. I'm not familiar with --- sorry, Julie.

ATTORNEY VEROFF: Objection.

THE WITNESS: I'm not familiar with that case where the male athlete is arbitrarily prevented from participating. I'm not sure what you're referring to there.

BY ATTORNEY SCRUGGS:

Q. Well, let's think about a situation on the sports team where a coach cuts an athlete, a female athlete who identifies as female and instead it favors the coach's own daughter, for example. You would

consider that an arbitrary exclusion, right?

ATTORNEY VEROFF: Objection.

THE WITNESS: No. We'd have to know a whole lot more about that situation.

BY ATTORNEY SCRUGGS:

Q. Okay.

A. Maybe the coach's daughter deserves to be on the team and if the team can only handle so many maybe that's how it had to be. But to make the assumption that because it was the coach's daughter that it wasn't a fair process ---.

Q. I'm assuming that was the only reason that the athletes have been chosen and someone else is excluded?

A. In other words, if a coach just says I don't like you, I don't want you on my team.

Q. Exactly.

A. It seems like there would be guidelines in place for someone to appeal that to the Athletic Director and so on, and yeah, that doesn't sound like it'd be very fair to not give someone a chance.

Q. Exactly. And that kind of principle applies regardless of someone's gender identity?

ATTORNEY VEROFF: Objection.

THE WITNESS: Okay. Yeah. If I'm

following you, yes, I think.
BY ATTORNEY SCRUGGS:
Q. Yeah. Now, switching gears slightly, you mentioned --- to go back --- let's go back actually to your expert report, paragraph 37. And again, that last sentence that transgender students are arbitrarily excluded, what is the situation when a transgender student is not arbitrarily excluded from youth sports --- or let me strike that. Let me rephrase.
What is a situation, to use your term, transgender student doesn't make the sports team and that's not arbitrary? Did you hear that question?
A. Sorry, I thought the court reporter was asking for it to be repeated or something.
Q. No. I'm sorry.
A. No, that's okay. I lost something, okay. So you're saying, for example, a transfemale athlete tries out for a female athletic team and doesn't make it?.
Q. I'm asking is that an example of a non-arbitrary exclusion?
A. Yes. In general, I would say, yes, without having more details, all right, but it doesn't --- transathletes, right, would just have the right to try out, the right to, you know, potentially participate,

but it doesn't mean that everyone would make the team.
Q. Got it. So that situation where you have the male athlete who identifies as female, right, and just doesn't make the team, do they lose out on the experiences and opportunities associated with participating in sports?
ATTORNEY VEROFF: Objection.
THE WITNESS: Yeah, it depends. You know, some might participate in another sport, right, or find another avenue, but the potential is there for that, yeah.
BY ATTORNEY SCRUGGS:
Q. So in a situation where there is no other opportunity or avenue, but we are saying that athlete just can't make that team because they just don't have that athletic skill, in that situation they would lose out on the opportunity outcomes associated with participating on that team?
ATTORNEY VEROFF: Objection.
BY ATTORNEY SCRUGGS
Q. So the word arbitrary doesn't really determine whether someone benefits from the experience and outcomes of participating in youth sports?
ATTORNEY VEROFF: Objection.

THE WITNESS: Right. Inherent within sports, unfortunately, particularly at the secondary level, is that not all schools are in a position to let every child participant who wants to, right, and so there is a cut policy. Personally, because of everything I've outlined today, I wish every school district was doing everything possible to include as many kids, as many athletes as they could, right, but that's not the reality. Boys and girls try out for teams and they get --- you know, they don't make it. I just saw this clip this weekend, Billy Mills, Olympic gold medalist, right, he was cut from his track team as a freshman, right. So that happens. And I'm distinguishing that from just arbitrarily saying this whole group of athletes, you don't have the right to even try out for the team.
BY ATTORNEY SCRUGGS:
Q. But in terms of taking advantage of the benefits associated with sports, it's not so much why someone is excluded but just the fact that they are excluded?
ATTORNEY VEROFF: Objection, asked and answered.
THE WITNESS: I would say it's important to consider why they are excluded.

BY ATTORNEY SCRUGGS:
Q. Okay.
And why is that important?
A. Because I believe it's harmful to just have a blanket exclusion of a group of athletes like transathletes to say you don't have the right to participate in your school activities, to try out, right, and to be part of these teams and activities.
Q. Well, I'm asking with respect to your expertise about benefiting from the outcome and advantages of participating in sports. It seems to me that any type of exclusion from sports was by definition maybe cannot take advantage of this opportunity to benefit. Isn't that correct?
ATTORNEY VEROFF: Objection. Asked and answered.
THE WITNESS: No. I'm speaking specifically about sport because that's what's on the table in this case, but you know, somebody else might really experience a caring task involving climate and have great opportunities in other activities of school that they're passionate about, like school or music, right. But if like BPJ, if her passion is sport, wanting to run track, right, then --- and there's just a

blanket statement saying you're not --- you can't, you can't try out for the women's track team, right, then that would prevent her from the potential benefits that she could be reaping, right, and just enhancing her school experience.

Q. Got it. Like the male that identifies as male and can't participate on either the males sports team or the female sports team?

ATTORNEY VEROFF: Objection.

THE WITNESS: Right. The distinction is that he can participate on the male team. He can try out, right, just like the transgender female can try out for the women's team, but there's no guarantee that the athletes make the team.

BY ATTORNEY SCRUGGS:

Q. Exactly. So I mentioned to you that I represent Lainey Armistead. And I will represent to you that she is a female soccer player on the West Virginia State University soccer team. Now, I think earlier you mentioned that you reviewed some documents in the case. Did you happen to run across any documents mentioning Ms. Armistead?

A. Yes, I read her statement. It's been a little bit of time, so I might need to be refreshed on it, but

I did take a look at that.

Q. Okay.

Well, let me go to Exhibit --- paragraph 41 of your expert report.

VIDEOGRAPHER: What number did you say, Counsel?

ATTORNEY SCRUGGS: Paragraph 41.

VIDEOGRAPHER: Thank you.

BY ATTORNEY SCRUGGS:

Q. And it says the climate of youth sport must be geared to include all participants so the teams are more likely to help every athlete maximize their potential. From an educational perspective it is optimal to encourage all athletes to do the best they can and to help all athletes enjoy the sport that they love.

Did I read that correctly?

A. Yes.

Q. So I assume that would include Ms. Armistead in your opinion.

Correct?

ATTORNEY VEROFF: Objection.

THE WITNESS: I think some of the ideas hold, but you know, we were referring here to the climate of youth sport. Typically in our field we

consider youth sport through high school and we would separate that from collegiate sport.

BY ATTORNEY SCRUGGS:

Q. Do you think it would be wrong to say that we should not --- you know, strike that.

Do you think that we shouldn't gear athletic or college sports to include all participants?

ATTORNEY VEROFF: Objection.

THE WITNESS: You know, at a place like the University of Kansas where I am, we have different levels and so you have the D-1 sport, right, and then you have club sport where people who don't have the skill level or the experience to play a D-1 sport can try out for the club sport those --- I think there's like 40 teams or maybe more we have, and the skill level among those sport club teams really varies, right. You got some, that are not hit and giggle, you know, just everyone's welcome and they don't have --- you know, a cut policy. Others are pretty competitive and maybe competing at national levels.

But you have another level of intermurals that is open to every student on campus can sign up, because they want to play whatever it is basketball or indoor soccer or something. So I think ideally, you

know, universities should offer lots of opportunities for people to participate in sport.

It is not realistic that every student on campus could participate in you know D-1 sport or whatever the level, you know, a school might have.

BY ATTORNEY SCRUGGS:

Q. So Doctor, if we had a male that identifies as female, it wouldn't be problematic to exclude that person from the female collegiate track team?

ATTORNEY VEROFF: Objection.

THE WITNESS: I think it depends on what the rules are in place, but if this transgender female meets the criteria and participates, right, that that is great.

BY ATTORNEY SCRUGGS:

Q. Well, again, assuming the rules are --- the rules of West Virginia are in place and says we now require all natal males to participate on the male team rather than on the female team, why can't we just tell the male college athletes to identify as females, they can go play on the club sports club team?

ATTORNEY VEROFF: Objection.

THE WITNESS: I think the transgender female athlete should have the right to participate on

whichever of those levels that they want to participate on. Right. The female D-1 team the sports team, the intermural team, they should have the right to try out as long as they meet the criteria that's in place.

BY ATTORNEY SCRUGGS:

Q. Do you feel that Ms. Armistead should have the right to participate on the female women's soccer team?

ATTORNEY VEROFF: Objection.

THE WITNESS: Yes.

BY ATTORNEY SCRUGGS:

Q. Doctor Fry, you would agree that if Ms. Armistead lost her spot on the soccer team to a male soccer play who identifies as female, Ms. Armistead would be deprived of the positive experiences associated with participating on that soccer team?

ATTORNEY VEROFF: Objection.

THE WITNESS: Right. If the transgender female is meeting the criteria that's in place by the NCAA, right, and then --- and makes the team and someone else doesn't make the team, right, I would say that's --- that's part of sport just like Ms. Armistead, I think, right, if she tried out and she didn't make the team because there's other cisfemale athletes that had a better performance or made the team, but either way she

would be missing out on the benefits if she didn't make the team.

BY ATTORNEY SCRUGGS:

Q. And that's not my point. I understand your argument. I understand that, as a matter of fact, she would lose out on the benefits and opportunities for participating on the sports team.

ATTORNEY VEROFF: I'm going to object to Counsel testifying.

BY ATTORNEY SCRUGGS:

Q. I'm asking if you agree with that?

ATTORNEY VEROFF: Objection to the question.

THE WITNESS: Yeah, I'm agreeing that athletes try out for teams, and when they don't make it, it's hard for them to reap the benefits of being part of their team if they, you know, don't participate and aren't part of that.

ATTORNEY SCRUGGS: I understand. I have no further questions. Thank you, Dr. Fry.

ATTORNEY CROPP: This is Jeffrey Cropp, Counsel for Defendant Harrison County Board of Education, and Superintendant Dora Stutler. I have no questions.

ATTORNEY GREEN: This is Roberta Green on behalf of West Virginia Secondary School Activities Commission. I have no questions.

ATTORNEY MORGAN: This is Kelly Morgan on behalf of the West Virginia Board of Education and Superintendant Burch. I have no questions.

ATTORNEY TRYON: And this is Dave Tryon. I have no further questions, unless the Defense Counsel does. Excuse me, Plaintiff's Counsel.

ATTORNEY VEROFF: No, we don't have any further questions. The witness will read and sign later.

VIDEOGRAPHER: Okay.

If there's no further questions that concludes this deposition. The current time reads 5:38 p.m. Eastern Standard Time.

* * * * * * *

VIDEOTAPED DEPOSITION CONCLUDED AT 5:38 P.M.

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COMMONWEALTH OF PENNSYLVANIA)
COUNTY OF PHILADELPHIA)

CERTIFICATE

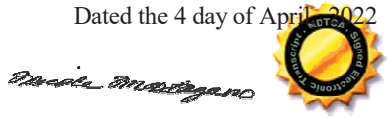
I, Nicole Montagano, a Notary Public in and for the Commonwealth of Pennsylvania, do hereby certify:

That the foregoing proceedings, deposition of Mary D. Fry, Ph.D., was reported by me on March 29, 2022 and that I, Nicole Montagano, read this transcript, and that I attest that this transcript is a true and accurate record of the proceeding.

That the witness was first duly sworn to testify to the truth, the whole truth, and nothing but the truth and that the foregoing deposition was taken at the time and place stated herein.

I further certify that I am not a relative, employee or attorney of any of the parties, nor a relative or employee of counsel, and that I am in no way interested directly or indirectly in this action.

Dated the 4 day of April, 2022



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IN THE UNITED STATES DISTRICT COURT

FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA

* * * * * *

B.P.J., by her next friend and mother, HEATHER JACKSON,

Plaintiffs

vs.

WEST VIRGINIA STATE BOARD OF EDUCATION, HARRISON COUNTY BOARD OF EDUCATION, WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION, W. CLAYTON BURCH in his official capacity as State Superintendent, and DORA STUTLER in her official capacity as Harrison County Superintendent, PATRICK MORRISEY in

* Case No. 2:21-CV-00316

VIDEOTAPED DEPOSITION OF

JOSHUA SAFER, M.D.

March 24, 2022

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his official capacity as Attorney * General, and THE STATE OF WEST VIRGINIA, *
Defendants *
* * * * * *

VIDEOTAPED DEPOSITION OF
JOSHUA SAFER, M.D.
March 24, 2022

VIDEOTAPED DEPOSITION
OF

JOSHUA SAFER, M.D., taken on behalf of the Intervenor herein, pursuant to the Rules of Civil Procedure, taken before me, the undersigned, Nicole Montagano, a Court Reporter and Notary Public in and for the Commonwealth of Pennsylvania, taken via videoconference, on Wednesday, March 24, 2022 at 9:30 a.m.

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STIPULATION

(It is hereby stipulated and agreed by and between counsel for the respective parties that reading, signing, sealing, certification and filing are not not waived.)

PROCEEDINGS

MR. BABWAH: My name is Brandon Babwah. I'm a notary public out of the State of New York.

VIDEOGRAPHER: We are now on the record. My name is Jacob Stock. I'm a Certified Legal Video Specialist employed by Sargent's Court Reporting Services. The date today is March 24th, 2022. The current time on the video monitor reads 9:17 a.m. Eastern Standard Time. This deposition is taken remotely by videoconference. The caption of this case is the United States District Court for the Southern District of West Virginia at Charleston, BPJ, et al. versus West Virginia State of Board of Education, et al., Civil Action No. 2:21-cv-00316. The name of the witness is Joshua Safer. Will the attorneys present state their names and the parties they represent?

ATTORNEY BROOKS: Roger Brooks for the Intervenor, Lainey Armistead, in the room --- in the conference room with the witness. With me is my colleague, Lawrence Wilkerson.

ATTORNEY HOLCOMB: Christiana Holcomb for the Intervenor.

ATTORNEY TRYON: This is David Tryon representing the State of West Virginia. I'm with the Attorney General's Office.

ATTORNEY MORGAN: This is Kelly Morgan on behalf of the West Virginia Board of Education and Superintendent Burch.

ATTORNEY DENIKER: Good morning. Susan Deniker representing Harrison County Board of Education and Superintendent Dora Stutler.

ATTORNEY GREEN: Roberta Green here on behalf of West Virginia Secondary School Activities Commission.

ATTORNEY BLOCK: For the Plaintiff in the room is Josh Block from the ACLU.

ATTORNEY SWAMINATHAN: And you have Sruti Swaminathan from Lambda Legal.

ATTORNEY HARTNETT: Good morning. This is Kathleen Hartnett from Cooley for the Plaintiff.

ATTORNEY BARR: This is Andrew Barr from Coley for Plaintiff.

ATTORNEY KANG: Good morning. This is Katelyn Kang from Cooley for the Plaintiff.

ATTORNEY HELSTROM: Hello. This is Zoe Helstrom from Cooley for Plaintiff.

VIDEOGRAPHER: And if that's everyone, may I ask the notary to swear in the witness?

JOSHUA SAFER, M.D.,

CALLED AS A WITNESS IN THE FOLLOWING PROCEEDING, AND HAVING FIRST BEEN DULY SWORN BY A NOTARY PUBLIC, TESTIFIED AND SAID AS FOLLOWS:

VIDEOGRAPHER: May I also ask the notary to identify himself for the record as well?

NOTARY: My name is Brandon Babwah.

VIDEOGRAPHER: And at this time the notary may be dismissed and we can begin.

ATTORNEY BROOKS: Thank you. And thank you all for making all this complicated stuff work.

EXAMINATION

BY ATTORNEY BROOKS:

Q. Doctor Safer, good morning. I want to first put in front of you your expert report and your rebuttal report so that you have those if at any point you want to refer to them. It looks --- for convenience let's mark those as Exhibit 1 and 2 for the deposition.

ATTORNEY TRYON: Roger, one moment. I'm looking at the realtime, and it's recording you as Attorney Capehart. So I don't know if that needs to be corrected now. And it's showing me as Attorney Hartnett.

ATTORNEY BROOKS: She will get that fixed and the record will be correct.

ATTORNEY TRYON: Okay.

(Whereupon, Exhibit 1, Report of Dr. Safer, was marked for identification.)

(Whereupon, Exhibit 2, Rebuttal Report of Dr. Safer, was marked for identification.)

ATTORNEY BROOKS: And at the moment I'm handing copies to the witness. And I would like to mark as Safer Exhibit 3 a short article entitled Fairness for Transgender People in Sport by Joshua Safer.

ATTORNEY WILKINSON: Tab 82.

(Whereupon, Exhibit 3, Fairness for Transgender People in Sports Article, was marked for identification.)

ATTORNEY BROOKS: And the court reporter will hand the stamped copy to the witness; am I correct?

BY ATTORNEY BROOKS:

Q. And Doctor Safer, I will ask you questions if you go about your expert reports but let me ask you now to focus your attention on Exhibit Number 3. Am I right that this is an article that you have just very recently published?

A. Yes.

Q. When did this come out?

A. This came out within the past few weeks I think.

Q. And this is not a recording of the original research. This is a two page piece simply explaining current issues to the readership of this journal?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So this is not original research, that's correct.

ATTORNEY BROOKS: Thank you.

BY ATTORNEY BROOKS:

Q. How would you describe the purpose of this article?

A. The purpose of this article is to educate endocrinologists, frame the issues and also serves a bit as a charge to endocrinologists in terms of work that needs to be done.

Q. Thank you. If you look at the first column of the first page, in the third paragraph you will see it begins a possible tension exists because of the observation that on average cisgender boys and men have better performance outcomes in athletics than do cisgender girls and women. Do you see that language?

A. I do.

Q. And you are referring there to the general observation that natal males have better average athletic performance than natal females in a variety of measures.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So I guess I need to be more specific or I can clarify.

BY ATTORNEY BROOKS:

Q. If you would be more specific.

A. So cisgender men at a certain age have better sports outcomes than cisgender women.

Q. But you wrote in this just published article that cisgender boys and men have better performance outcomes than the cisgender girls and women.

Correct?

A. That is correct.

Q. And what did you mean in that statement by your reference to boys and girls?

A. Boys and girls who are basically --- it depends, it's context I guess. So boys and girls who are developed to that point.

Q. So those --- what you had in mind are boys and girls, once the puberty process begins in males in particular?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Yes, I guess I would say that what we know is what is towards the end of puberty and subsequent development beyond puberty.

BY ATTORNEY BROOKS:

Q. You say in the next sentence --- well, let me just clarify, you accept as a scientific fact the general observation that, on average, boys and men, defining boys as you just did, have significantly

stronger athletic performance in a variety of metrics than girls and women as you just defined girls; correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So I guess how I would say that is I accept as fact that men and boys who are appropriately developed have, yeah, have bad performance outcomes in certain sports than do cisgender women and cisgender girls again appropriately developed.

BY ATTORNEY BROOKS:

Q. And the next sentence reads the performance difference has resulted in the establishment of female only divisions for sport participation for girls and women and safely compete in the live events, closed quote. Do you see that language?

A. I do.

Q. And there you were, am I correct, explaining the relationship of your observation about male performance with the existence in our society of sex-separated sports.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So I guess --- I would think the way I would say it myself is this is a --- this is the reason why we have the carve-out for the

female category.

BY ATTORNEY BROOKS:

Q. And one reason is to give cisgender girls and women an opportunity to, quote, reliably win events.

Correct?

ATTORNEY BLOCK: Objection.

COURT REPORTER: I'm sorry, Counsel, I can't hear you.

BY ATTORNEY BROOKS:

Q. One reason, according to what you've written in this article, that there have been a carve-out in a separate female division is to provide girls and women with opportunities to, quote, reliably win events, closed quote.

Correct?

A. So I guess the way I would say it is if we are going to be really careful with the language here that it would be on average to reliably win events, that is --- yeah, I will leave it at that.

Q. Certainly not every girl and women is going to win events, as I know as a male who never won an event?

A. Exactly.

Q. And another reason, according to this sentence that you wrote, for having a separate category for girls

and women is so that they can, quote, safely compete.

Correct?

A. The word safely in that context is kind of --- accentuates reliably.

Q. And you wrote in the next sentence that, quote, the female-only divisions are a major factor to encourage greater participation of girls and women in sports with a goal of equal participation rates.

Do you see that language?

A. I do.

Q. And can you explain to me what you understand or what you were trying to explain as the relationship between having a separate female category on the one hand and encouraging greater participation by women and girls on the other?

A. Some of the goals of the people who are in sport who organize sport are to get as high fractions of the population to participate as can be encouraged to do so for sheer health of those individuals and then of everybody. And so the purpose of the carve-out then in these circumstances is to encourage girls and women to participate in larger numbers than they might otherwise.

Q. And do you have an opinion, do you have an expert opinion as to whether the existence of separate

categories for female sports has in fact been a, quote, major factor in encouraging greater participation by women and girls in sport?

A. I don't have an expert opinion.

Q. You don't know whether that is objectively true or not?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I don't --- right, I can't state as an expert on the details of that subject, that's right.

BY ATTORNEY BROOKS:

Q. On the second column, in the --- the first full sentence begins many hormone related. Do you see that?

A. Yes, I do.

Q. Let me read that sentence into the record. Quote, many hormone-related physical characteristics acquired during puberty are not reversed if hormone levels are changed later in life. Can you tell us what physical characteristics associated with typical male development are in your opinion not reversed if hormone levels are changed later in life?

A. Again, so I don't know that I would off the top of my head give an exhaustive list but a classic would be height.

Q. Would you --- I understand your list may not be exhaustive, but let me ask you to tell us all the examples as you're able to sit here thinking today of physical characteristics acquired during male puberty that are not reversed if hormone levels are changed later in life.

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I don't know that I could --- I don't know that I would want to accidentally go down that path and conjecture too much, but if I'm expanding a bit on height and thinking about bone characteristics, especially there might be modest change but significant residual bone would be the biggest example. And some other elements --- I can't even say I was about to say a bit proportional, but it's more complicated than that, so other --- other tissues partly influenced by that fact.

BY ATTORNEY BROOKS:

Q. If we jump down to the next paragraph it begins, quote, the questions arise most with transgender women who began hormone treatment after puberty. And then it continues, quote, the situation includes most transfeminine people because it is most common to undergo endogenous puberty prior to seeking medical interventions appropriate to gender identity. Have I read that correctly?

A. Yes.

Q. And is it consistent with your experience that most natal males who seek what you refer to as gender confirming treatment do so after experiencing at least most of the ordinary male puberty?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Yes. So just terminology, just to be clear, so people who are recorded male at birth who are looking for gender affirming is the term but gender confirming is fine. And sorry, the question there?

BY ATTORNEY BROOKS:

Q. I will ask it again. Is it consistent with your personal experience that most natal males who seek gender affirming treatment present after undergoing at least most of a natural male puberty?

ATTORNEY BLOCK: Same objection to terminology.

THE WITNESS: Yes. So most transgender women who come seeking medical treatment have gone through a typical male puberty, that is correct, right now.

BY ATTORNEY BROOKS:

Q. And in your clinic most of them have gone through what you would consider to be a complete male puberty process?

A. I can't answer that completely because we define puberty in this narrow way with the Tanner stages, but then people continue to have development even beyond that to a significant degree.

Q. But they have experienced, in your professional experience, at least the bulk of the pubertal changes?

A. Yes, I mean the --- I guess --- the way I would say it is, is that most of the transgender women who are coming or even girls who are coming for medical attention have gone through the classic Tanner stages of puberty through Tanner five, which is the last one, by the time they have determined that they're interested in gender-affirming treatment, yes.

Q. And let's go back to the very first paragraph of your article in which you mention about five lines down, quote, concern for possible residual athletic advantages from a history of typical male puberty, closed quote. Do you see that language?

A. Let me find it. Where is it?

Q. It's about five lines down on the very first

paragraph of the article.

A. Oh, the middle of the sentence, exactly.

Q. And so in your opinion, it is concern for possible residual athletic advantages from a history of typical male puberty that drives a great deal of concern about how to address inclusion of natal males who experience a female gender identity in female athletics.

Am I correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So the concern about the residual impact of testosterone during puberty for transgender women who went through a typical male puberty is the source of --- right, is a source of tension at a medical sensitive level, yes.

BY ATTORNEY BROOKS:

Q. And that's an issue that, for instance, you engage in extensive discussions about in connection with your service on the committee for the IAAF.

Am I correct?

A. So the --- right, the conversation at World Athletics now, but formerly IAAF, has dealt and I'm sure will continue to deal with that which is the question of to what degree are some of those characteristics, a cause for relevant athletic advantage.

Q. And in your opinion, concern about possible residual athletic advantages resulting from a history of typical male puberty is legitimate concern.

Right?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Right. I don't know that I'm as an expert commenting on its legitimacy. My role on the committee is talking about what is.

BY ATTORNEY BROOKS:

Q. Do you have any expert opinion as to whether concern for possible residual athletic advantages from a history of typical male puberty is a legitimate concern?

A. I'm sorry. Say that again.

Q. Do you have any expert opinion as to whether concern for possible residual athletic advantage from a history of a typical male puberty is a legitimate concern?

A. I don't know that I would --- again, I don't know that I'm an expert on what is legitimate or not. I come into the room as the scientist talking about what is true and what is not true, what do we know and what do we not know.

Q. So on the question then after the science has been put on the table as to how to balance that with

other considerations of fairness, of inclusion, that is not your expertise is what you are telling me?

A. That is right, that is not my expertise.

Q. If we go to page two, in the first column, the second full paragraph begins because testosterone. Do you see that paragraph?

A. I do.

Q. And you discuss there World Athletic requirements, that is the former IAAF I believe you just testified?

A. Yes.

Q. And the World Athletics has adopted a requirement to suppress testerone (sic) to five nanomolar per liter testosterone.

Correct?

A. World Athletics threshold is five nanomolar per liter for those sports where they have a threshold. That's right, yes.

Q. And at least formally the International Olympic Committee had a ten nanomolar threshold as part of what you would call out in this paragraph.

Is that correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Yes. So it was the case

that the International Olympic Committee Medical Group was trying to form a unified approach just for purposes of organization. And at that time a ten nanomolar per liter suggestion was put out. And that is about as far as it got because it then was shifted to all of the individual international federations.

BY ATTORNEY BROOKS:

Q. You say in the final sentence of that paragraph, quote, such thresholds are considered to be fair to transgender women because they are well above the 1.7 nanomolar per liter target testosterone threshold in medical treatment guidelines, closed quote.

Do you see that language?

A. Yes.

Q. Am I correct that in your professional understanding the 1.7 nanomolar per liter target is set because that's generally believed to be at the upper range of testosterone levels in normal, healthy females?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So the 1.7 nanomolar per liter target is the upper level for adults cisgender women.

BY ATTORNEY BROOKS:

Q. And with that clarified, can you explain to me

what you meant by the sentence that I just read, what the point is there?

A. The point of the sentence is to --- I guess there are a couple of considerations in terms of determining these numbers, but --- so part of the point is to identify numbers that are feasible for transgender women on their medical treatment.

Q. Is there some other point to this sentence in your understanding as it is offered?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So the sentence references that piece, but there is the additional context of having a number that is fair to the greater female committee cisgender and transgender too.

BY ATTORNEY BROOKS:

Q. So it's fair in your judgment to transgender women because the threshold that is being set gives, what should we say, plenty of buffer above what is considered to be the upper range of normal female testosterone levels?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Right. So I'm not taking a position on what is fair to be clear.

BY ATTORNEY BROOKS:

Q. Thank you.

A. But the concept of those in the room making that distinction felt that this cutoff would be fair because there would be, indeed, create some buffer and, therefore, people who weren't perfectly at goal would still be included.

Q. So because this may be important, let me clarify, when you wrote such thresholds are considered to be fair, you were not offering a personal opinion about fairness but explaining the judgment that had been made by this committee about fairness?

A. That's correct.

Q. Thank you. And did it cause you personally any concern that the threshold --- that because the threshold that was set was more than three times higher than the upper bounds of testosterone concentrations in normal healthy women, that that might be unfair to the broader population of cisgender women?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So to be clear, I'm not rendering an opinion as an expert on what is fair, but I can interpret the considerations of people having these conversations. And so while it is true that the laboratory range for testosterone for healthy cisgender

women has an upper limit of 1.7 nanomolar per liter, there are cisgender women who, for a variety of reasons, have numbers higher than that and so that and --- so that is part of the consideration.

BY ATTORNEY BROOKS:

Q. Let me take you to the two paragraphs below that to the paragraph that begins the societal priorities. Do you see that paragraph?

A. I do.

Q. The last sentence of that paragraph reads if advantage from testosterone is demonstrated, does society want to implement rules that may indirectly coerce transgender children to begin medical regimens prior to their being ready and that they might never actually choose otherwise, closed quote.

Do you see that language?

A. I do.

Q. Would you explain to me the concern that you are expressing there?

A. If a societal goal --- and again here recognize I'm not acting as an expert in this space, but I'm trying to explain to my colleagues what people are discussing. And if our concern is increased participation in sport by various people, then you can

envision a circumstance where some girls farther along in puberty have a testosterone advantage that could be demonstrated. Again, not that we even have at this point. And then we would be faced with that question, which is that competing goal of making those transgender girls participate in sports and a recognition if they are sufficiently far along in their development that they may have an advantage if we demonstrate such an advantage.

Q. Let me see if I can break that out. Were you talking here about a concern about a hypothetical rule that says to a natal male who identifies as female that you may play if you have suppressed testosterone --- you may play if you have taken puberty blockers at an early age but you may not play if you have not taken puberty blockers from an early stage? Is that the hypothetical structure that you were addressing in this sentence?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So the --- it is a hypothetical and it would be that if we make a specific testosterone lowering rule at a scholastic level, might we run into a circumstance where we are encouraging somebody to make medication who might not otherwise take that medication.

BY ATTORNEY BROOKS:

Q. And staying away from questions of fairness and speaking from what I think is a medical ethics perspective, would you think it raises ethical problems if society were to adopt a rule that permitted certain individuals to compete in female athletics if they had taken puberty blockers but did not permit them to compete with the athletic if they had not taken puberty blockers?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I think that's beyond where I'm commenting as an expert witness. Some of that decision is a society decision or for other experts.

BY ATTORNEY BROOKS:

Q. Do you consider yourself to have some expertise on medical ethics?

A. Not as an expert.

Q. And you don't feel able --- you don't have any opinion as you sit here today as to whether a policy that created incentives for children to begin medical regimes relating to gender transition could raise medical ethical concerns?

A. Not as a medical expert, that's right.

Q. In the next paragraph --- and I think we said

this is just out in the last couple of weeks, this publication.

Right?

A. It's very fresh. Number five, so yes.

Q. I'm not playing memory games. It says at the top advance access publication 17 March 2022?

A. Good.

Q. So very recent?

A. Yes.

Q. And you believe you are reasonably current in the science of this area?

A. I am reasonably current, indeed.

Q. I didn't ask if you know it all because nobody knows it all, but you say at the beginning of this paragraph much remains unknown scientifically. And you continue, quote, for example, at what point in puberty is advantage from testosterone significant. Is there a point where such advantage would outweigh a priority to outweigh all participants --- all to participate in sport of some sort, closed quote.

Do you see that language?

A. I do.

Q. And actually the point in writing the second sentence there --- strike that.

Let me just ask this in general. Do you have an opinion as to how much of a performance advantage would count for those --- for natal males versus natal females, how much of a performance advantage would be, quote, significant?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I do not have an opinion.

BY ATTORNEY BROOKS:

Q. And in your view, is that even a scientific question?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Let me think. No, that isn't a scientific question.

BY ATTORNEY BROOKS:

Q. And you --- and the next sentence is there a point where an advantage, such an advantage would outweigh a priority to motivate all to participate. Am I correct that you also don't consider that to be a scientific question?

A. That is correct.

Q. That is a value judgment?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So it's not a scientific question. I can go a little more in --- I can expand a

little bit there which is to say that we have various advantages and degrees of unfairness. So what could be a scientific question, if we knew the answers, would include the degree of advantage for some circumstance versus another circumstance where we are able to measure those things.

BY ATTORNEY BROOKS:

Q. But the question of whether an advantage on the one hand outweighs a desire to be inclusive on the other hand is a value question, not a scientific question?

ATTORNEY BLOCK: Objection to form.

BY ATTORNEY BROOKS:

Q. In your opinion.

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So I guess I would just go back to saying how I said it, which is the scientific question in there would be to provide that degree of difference and show, for example, that this would be --- this is small advantages versus someone that we are already do in society as big advantage and that would be how --- that would be the role of the scientist.

BY ATTORNEY BROOKS:

Q. I understand that's what you would like to say, but my question for you is, in your opinion, is the next

step of deciding of whether that advantage which has now been scientifically detailed outweighs a priority to motivate all to participate is a value decision.

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Yeah, I don't --- I guess I can't as an expert say for certain that in all circumstances that is a value to consider.

BY ATTORNEY BROOKS:

Q. You continue among your lists of things that are, quote, unknown scientifically, quote, for those who have completed puberty, what duration of testosterone-lowering treatment is sufficient to create a level playing field in a given sport, closed quote.

Do you see that?

A. Yes.

Q. And in your view, the question of what duration of testosterone lowering treatment, if any, can be sufficient to create a level playing field in a given sport is currently unknown scientifically?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: It's unknown scientifically across virtually all sports. What duration of testosterone lowering raises what degree of advantage. It's just at that level. To go to the level playing

field is a whole further tier.

BY ATTORNEY BROOKS:

Q. And in your final paragraph I think you said at the beginning that, in part, this was a call to the field of endocrinology for needed research. In the final paragraph you say, quote, we in the endocrine healthcare community have much work to do to create an evidence base to help guide decision makers so the choices for transgender women in sport are data driven, closed quote.

Have I read that language correctly?

A. Yes.

Q. So it's your view as of 2002 that the data that we have available today are insufficient to enable data driven choices about transgender participation in female athletics.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I would say that in 2022 we have insufficient data to --- how would I say this, we have insufficient data to make rules for, let's say, transgender women, mostly talking about older more developed people, that would address these concerns for participation.

BY ATTORNEY BROOKS:

Q. Let me ask you to find your initial expert report, which is Exhibit-1, and there I will ask you to turn to paragraph 58. At the beginning of paragraph 58 you wrote in this report executed on January 21, 2022, which is two months prior to the publication date of the article we just looked at --- and actually, let me pause and ask you, when did you write the article that we just looked at? And the process always grinds on for a little while. When do you think you substantially completed the task?

A. I honestly don't remember.

Q. Sorry. The question was when do you think you substantially wrote the text in the article that you just looked at?

A. I honestly don't remember the details. We can talk in years, so it would be 2022 and back into 2021.

Q. Okay.

So about the same time that you were preparing this expert report?

A. There certainly would be some overlap.

Q. You wrote in paragraph 58, quote, even if evidence were eventually to show that on average transgender women have some level of advantage compared

to average non-transgender women, closed quote.

Do you see that language?

A. I do.

Q. Now, in fact, you are aware of substantial evidence that, on average, transgender women do have some level of advantage compared to advantage non-transgender women.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: No, I'm not. So that isn't my statement.

BY ATTORNEY BROOKS:

Q. And is the question --- so you served on the IAAF Committee discussing questions of testosterone levels. And in that context you did not become acquainted with data showing that on average transgender women have some level of advantage compared to average non-transgender women?

A. Not in --- so, no. In the context of specific sports, no.

Q. Do you consider the question of how much advantage natal males have over natal females in particular sports to be within your professional expertise?

ATTORNEY BLOCK: Objection to form.
THE WITNESS: So sorry --- so cisgender men versus cisgender women, that difference at an adult level, is at my expertise to know that degree of difference? Is that the question?
BY ATTORNEY BROOKS:
Q. It is.
A. No, that is not my expertise.
Q. And is it within your expertise to know the level of advantage enjoyed by natal males who have transitioned to female gender identity over cisgender women in any particular sport?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: So in the --- so if we are talking cisgender women versus transgender women, it would be in my expertise to know what data we have on this subject, which is different from knowing the degree of difference because we don't have those data.
BY ATTORNEY BROOKS:
Q. You say in paragraph 60, let me find this, quote, there is no inherent reason why transgender women physiological characteristics related to athletic performance should be treated as any more of an unfair advantage than the advantages that already exist among

different women athletes. Do you see that language?
A. I do.
Q. Now, earlier you told me rather emphatically that the question of fairness is outside your professional expertise.
Correct?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: It is outside my expertise.
BY ATTORNEY BROOKS:
Q. So why did you offer here an opinion about what is fair or unfair?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: Right. So I'm not determining the fairness per se as an expert, but I'm simply talking about the inputs where somebody who is determining what is fair --- where somebody is determining what is fair would consider.
ATTORNEY BROOKS: Let me mark as Safer Exhibit 4 an article by Professor Handelsman entitled Circulating Testosterone on a Hormonal Basis of Sex Differences in Athletic Performance.

(Whereupon, Exhibit 4, Professor Handelsman Article, was marked for identification.)

ATTORNEY WILKINSON: Tab 18.
VIDEOGRAPHER: I'm sorry, what tab is it?
ATTORNEY BROOKS: Tab 18.
BY ATTORNEY BROOKS:
Q. And Doctor Safer, am I correct this is an article that you read with some care?
A. This is an article that I read with some care.
Q. You cited in your expert report.
Correct?
A. I think so.
Q. I think so, too. It's not a memory test. I retract the question. We will come to it shortly.
Let me ask you to turn in --- and let me ask you, do you know Professor Handelsman personally?
A. I do not.
Q. Have you encountered him in any other actions?
A. I have.
Q. Once, more than once?
A. That is also a trick question for me. For sure once.
Q. Okay.
Do you consider him to have a high reputation in the field?

A. If that question is as an expert I can't --- I won't comment, but he certainly has published widely and we quote him.
Q. What do you mean by we in that answer?
A. The rest of us in the field and I certainly quote him in an expert opinion.
Q. All right.
And this article in particular we note you widely reference?
A. This article is --- yeah, I think that is actually a fair thing to say. It is as widely referenced as anything in a relatively small field.
Q. Let me ask you to turn to the second page of this article where Professor Handelsman in the first full paragraph --- the second full paragraph begins nevertheless. He says, quote, fairness is an elusive subjective concept with malleable boundaries that may change over time as social concepts of fairness evolve.
Do you see that?
A. I do.
Q. Do you agree with that statement?
A. As an expert I can't comment.
Q. You don't purport to be able to give any definition of fairness?

ATTORNEY BLOCK: Objection to form.
THE WITNESS: Yes, not as an expert.
BY ATTORNEY BROOKS:
Q. And you don't have any opinion as to whether standards of fairness can change over time?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: I'm aware of the conversation on the subject, of course, but if you are asking me to comment as an expert, then no.
BY ATTORNEY BROOKS:
Q. If the actual evidence shows that the actual scientific data were to show that, quote, on average transgender women have, closed quote, a very large advantage compared to average non-transgender women, would you then have any view as to whether permitting non-transgender women to compete in female categories is fair?
ATTORNEY BLOCK: Objection to form. I'm sorry, what's the quotation?
BY ATTORNEY BROOKS:
Q. If actual data were to show that on average transgender women have a very large advantage compared to non-transgender women, then would you have any opinion as to whether it is fair to permit the

transgender women to compete in the female category?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: No, that would not change. I would simply as an expert I would talk about those degrees of difference as information.
BY ATTORNEY BROOKS:
Q. But you would offer no opinion as to whether permitting the participation in the female category was or was not appropriate?
A. I would not offer an expert opinion. That's right.
Q. Now, you say in paragraph 60 of your expert record that there is, quote, no inherent why transgender women's physiological characteristics related to athletic performance should be treated as any more of an unfair advantage than the advantages that already exist among different women athletes, close quote. We have looked at that language.
Correct?
A. You are reading that correctly.
Q. Thank you.
A. Whatever the question is.
Q. No question beyond that so far. And your point I take it is that for any given sport some women just

have substantially more favorable physiques than others?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: Right. So for any given sport some women have advantages relatively to others, yes.
BY ATTORNEY BROOKS:
Q. And in basketball some are simply genetically going to be substantially taller than others?
A. In basketball some are taller than others, yes.
Q. I'm not speaking for you, I, at 5'8", in my shoes for instance was --- am just physiologically disadvantaged for basketball compared to a man who is 6'10"?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: So as an expert I actually wouldn't go there because there are other characteristics in basketball per se.
BY ATTORNEY BROOKS:
Q. That's true, although I have none of them. But is it, in your view, equally true that there is no inherent reason why cisgender men's physiological characteristics related to athletic performance should be treated as any more of an unfair advantage for competing in the women's category than the advantages

that already exist among different women athletes?
A. So yeah, let's go through this more slowly a second so I'm clear.
Q. All I did was substitute cisgender men for transgender women in that sentence. And my question is doesn't your argument as stated there apply exactly with equal force to cisgender male?
A. No.
Q. Why is that?
A. When we talk about --- when we're talking about a range of characteristics among a range of people versus something that might be systematically true or not and so it just --- so the answer just ends up being more complex.
Q. Well, you have testified that most natal women --- pardon me, you testified that most natal males with female gender identity have undergone at least the majority of male puberty before they present for gender affirming treatment.
Correct?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: So most cisgender women when they come to medical attention have gone through a significant puberty, the five Tanner stages.

BY ATTORNEY BROOKS:

Q. And just to clarify, to use your terms, in giving that answer you said cisgender women. That is not what you meant.

Correct?

A. That is not what I meant, thank you. Transgender women.

Q. And therefore, they systematically have gone through --- systematically gone through physiologic changes associated with male puberty?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So the --- so they --- they have gone through male puberty. And there is something on average that may be true there, but whether that relates to an advantage in a specific sport I can't go there.

BY ATTORNEY BROOKS:

Q. Well, the example that you gave earlier of a systematic difference resulting from male puberty that these transgender women enjoy is height, that is you mentioned that earlier.

Correct?

A. Uh-huh (yes).

Q. So again, let me ask, given that according to

your testimony and experience the substantial majority of transgender women have undergone most of male puberty, why is it not equally true that there is no inherent reason why cisgender men's physiological characteristics related to athletic performance should be treated as any more of an unfair advantages than the advantages that already exist among different women athletes?

A. So if I'm following this correctly then it's --- then the answer to the question why are cisgender men different than transgender women?

Q. Why does this logic apply differently to the cisgender men than to the transgender women?

A. So let's see. It actually doesn't. So if you have a sport where that --- where the advantage or --- for the --- where a known advantage for cisgender men versus cisgender women was sufficiently modest, and again, I wouldn't be the judge of that, but you could envision that becoming a coed sport.

Q. Are you offering an opinion that either government or leagues have an obligation to do an individual by individual assessment as to whether a particular natal male who experiences a female gender identity does or does not enjoy a physiological

advantage in the sport they wish to play in as a result of typical male development that they had gone through?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Right, I'm not offering an opinion. It was a long question.

BY ATTORNEY BROOKS:

Q. Would you like to hear the question back?

A. Sure, but I'm not offering an opinion on several aspects.

ATTORNEY BROOKS: Would you read that question back, please?

(COURT REPORTER READS BACK PREVIOUS QUESTION.)

BY ATTORNEY BROOKS:

Q. And your answer is?

A. So I'm not offering an opinion. I should expand a bit because how that question was phrased as an individual by individual person and most of these rules are across a group of sports.

Q. And my question was about an individual person.

A. Your question was an individual person, but ---.

Q. Right. Looking at your paragraph 60, again, do you believe there is --- are you offering an opinion ---

let me start that again. Are you able to identify for me any inherent reason why a relatively weak or small or slow male --- strike that.

You referenced in your report and also the article we just looked at the IAAF regulations that excluded from the female category any individual who has circulating testosterone higher than five nanomolar per liter. Do you recall that?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So just to clarify, it is not --- that rule for five nanomolars is not across all sports.

BY ATTORNEY BROOKS:

Q. And which sports in your recollection did that apply to?

A. Yeah, that's --- I don't remember off the top of my head.

Q. At the very least it applied to track events.

Correct?

A. It does. But if you start to quiz me on the specific distances, I won't get that.

Q. And nor will I so quiz you. And that requirement as applied to track competition was, in fact, the subject of a major international arbitration,

as you're aware.
Correct?
A. If we're referencing the Caster Semenya case, yes.
Q. Did you yourself have any participation in that arbitration?
A. I did not.
Q. Do you know whether Doctor Handelsman had any participation in that?
ATTORNEY BLOCK: Objection.
THE WITNESS: I don't know off the top off of my head.
BY ATTORNEY BROOKS:
Q. Have you ever read the arbitrarial decision in that case?
A. I'm certain I read excerpts, but that is as much as I could say.
Q. Okay.
You participated in developing on the --- a member of the committee that developed the regulation that you've referenced, the 7.5 nanomolar threshold?
A. I was on the committee that helped determine that particular threshold conceptual, yes.
Q. And you're aware that in addition to individuals

such as Caster Semenya, who suffered of a disorder of sexual development, that that rule would exclude some transgender women from female athletics that were subject to that IAAF rule.
Correct?
ATTORNEY BLOCK: Objection to the terminology.
THE WITNESS: So I was aware that by setting a threshold that there --- and even that threshold in particular, that there would be transgender women who would not achieve that threshold for whatever reason.
BY ATTORNEY BROOKS:
Q. And did you nevertheless consider the regulation to be reasonable?
A. If you are asking me as an expert, then again I can't comment.
Q. Well, let me just ask you as Doctor Safer.
A. Am I allowed to ---?
ATTORNEY BLOCK: Objection to form.
BY ATTORNEY BROOKS:
Q. You are allowed.
A. Okay. So having a rule does make sense to me, yes.

Q. And you thought that that rule was reasonable?
A. As with the data we have currently, yes, personally.
Q. And what, in your opinion, is the inherent reason that advantages conferred by testosterone levels far outside the normal female range should be treated as any more of an unfair advantage than the advantages that already exist among different women athletes?
ATTORNEY BLOCK: Objection. I'm sorry. Can you clarify as an expert or as an individual just because you shifted back and forth?
BY ATTORNEY BROOKS:
Q. First as an expert.
A. So yes --- give me the question again. I'm sorry.
Q. What, in your opinion, is the inherent reason that advantages conferred by testosterone levels outside the normal female range should be treated as any more of an unfair advantage than the advantages that already exist among different women athletes?
A. So to clarify we --- so, okay, let me go back. Let me answer in pieces I guess or ask you to say it in pieces. So what is different between typical male levels of testosterone in an individual and some other

characteristics that are across the range of characteristics of cisgender women? Is that the question? Am I rephrasing that correctly?
Q. I'm actually referencing paragraph 60 of your expert report, but my question --- and let's take for instance, a natal male who has press testosterone but only achieved six nanomolar per liter concentration, do you have that concentration, do you have that in mind?
A. A transgender woman whose testosterone level is six.
Q. Right. What in your opinion is the inherent reason that advantages conferred by testosterone levels above a threshold such as five nanomolars should be treated as any more of an unfair advantage than the advantages that already exist among different women athletes?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: So a couple of things. First of all, I don't know that a testosterone level of six is from a scientific perspective demonstratively different than a testosterone level of five. It's just a matter of affecting it overall. So I want to clarify that. It's not that --- that that small degree is necessarily relevant. And I can't even say that we

demonstrated advantage. It's still a theoretical with regard to some of those higher testosterone levels. Let me think about those for a second. Yes, so some of the logic pattern for having a threshold is in order to be able to limit the entire conversation to dealing with transgender women or women with --- or intersex women or women who for any reason have have elevated testosterone levels and not to open the door at the elite level for a participation by cisgender men posing as cisgender women if that makes sense.

BY ATTORNEY BROOKS:

Q. Is there, in your judgment, any inherent reason that advantages conferred by testosterone levels well outside normal female ranges should be treated as any more of an unfair advantage than the advantages that already exist among different women athletes?

A. So I have to go back to that one. Is it my opinion that male level testosterone levels ---?

Q. Let me --- my question is testosterone levels significantly above normal female ranges?

A. Are --- then no, sorry. It took me a little while to get there, but no.

Q. Because the question was complicated and the answer was broken up I will ask you again, not to insult you but so we have a clear record. I think I understood your answer but is there, in your opinion, any reason why advantages provided by testosterone level well outside normal female ranges should be treated as any more of an unfair advantage than the advantages that already exist among different women athletes?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: And as an expert I'm not rendering an opinion there, that's right.

BY ATTORNEY BROOKS:

Q. Okay.

In paragraph 55 of your ---.

ATTORNEY BLOCK: Would now be a good time for a break?

ATTORNEY BROOKS: Let me just ask this one question and then yes.

BY ATTORNEY BROOKS:

Q. In paragraph 55 you cite a 2015 article by Joanna Harper?

A. I do, yes.

Q. Have you ever met Joanna Harper?

A. I have.

Q. And have you collaborated with Joanna Harper in any way?

ATTORNEY BLOCK: Objection to the form.

THE WITNESS: Yeah, I don't, but I guess --- it's a complicated answer, so I need to know what you mean by that.

BY ATTORNEY BROOKS:

Q. I mean it broadly. Have you worked with her on any sorts of projects or committees?

A. Well, we were both in the working group for World Athletics that helped develop this threshold.

Q. And do you consider Doctor Harper to be knowledgeable in the field of sports physiology?

A. I do.

Q. And do you consider Doctor Harper to be knowledgeable with regard to the impact of testosterone suppression on athletic capabilities in male?

A. So do I consider her to be knowledgeable in the field? I certainly do. For what it's worth, she is still Ms. Harper. She's actually in the Ph.D. program now.

Q. Oh, okay. I just gave her an honorary degree.

A. She occupies a prominent place in the field.

ATTORNEY BROOKS: Let's take that break.

VIDEOGRAPHER: Going off the record. The current time is 10:25 a.m. Eastern Standard Time.

OFF VIDEOTAPE

(WHEREUPON, A SHORT BREAK WAS TAKEN.)

ON VIDEOTAPE

VIDEOGRAPHER: We are back on the record. Current time reads 10:39 a.m. Eastern Standard Time.

BY ATTORNEY BROOKS:

Q. Dr. Safer, let me ask you to go back to Exhibit 4 Professor Handelsman's article. And if you would turn in that article to page 805, the first paragraph begins the strongest classification in a league sport is that after puberty men 20 times more testosterone than women.

Do you see that language?

A. I do.

Q. And he discusses a number of results and ends his paragraph by saying in concert --- quote, in concert these render women on average unable to compete effectively against men in power based or endurance based sports.

Do you see that?

A. I do.

Q. And do you consider yourself qualified to evaluate Professor Handelman's assertion that women are

on average unable to compete effectively against men in power based or endurance based sports?

A. No.

Q. Not qualified?

A. Not qualified, correct.

Q. Do you believe you have an understanding --- well, let me ask you this. Do you consider yourself qualified to offer any opinion as to why sports have been separated by sex historically?

A. I guess I would say I'm aware of the history.

Q. And in your understanding what is the reason that sports have been separated by sex historically?

A. The history is that at a certain point where sufficient development has taken place there is a differential in at least some sports between men and women --- between cisgender men and cisgender women such that in order for women to win those events reliably there needs to be a carve-out.

Q. And as you sit here today can you identify for me any sport in which you believe that cisgender men after puberty do not enjoy a significant performance advantage over cisgender women?

A. Yes.

Q. Please do.

A. Examples include --- well, I guess I better not get too far and be the expert here, but I believe riflery and others in the category of hand/eye coordination. I think some of the equestrian sports are examples.

Q. Okay.

You are not offering any opinion, are you, that the reason for separation of sports by sex is to affirm sex specific social roles or identities?

A. I'm not aware of that. I'm not an expert on those pieces, but I'm not aware personally.

Q. And it is not your opinion, is it, that separation of sport by sex is in general unfair?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So again, as an expert I'm not commenting on fairness.

ATTORNEY BROOKS: I'm going to mark as Safer Exhibit 5, a Decision in the arbitral award delivered in the Court of Arbitration for Sport in connection with the arbitration between Athletic South Africa and the IAAF, a bulky document, unfortunately.

(Whereupon, Exhibit 5, Court of Arbitration for Sport Decision, was marked for identification.)

BY ATTORNEY BROOKS:

Q. And Doctor Safer, now that you have --- I asked you earlier about whether you had seen the arbitration decision and I think you said you might have read excerpts of it. Looking at it today, do you believe that you have ever seen a copy of the whole Decision?

A. I do not think I've read through the whole Decision.

Q. Do you think you've ever held this whole document in your hand before?

A. This is the first time that I held the whole document.

Q. I'm going to ask you about a few quotations in it, not to ask your opinions about the judgment but to elicit your opinions about the science. So if you would turn --- and the structure of the document is that everything in it has a paragraph number which, thank goodness, makes it easy to find things. So if you would turn to paragraph 556. The first sentence of paragraph 556 of this Decision reads there is no dispute that ensuring fair competition in the female category of elite competitive athletics is a legitimate objective

for the IAAF to pursue, closed quote. As a member of the IAAF Committee that established the policy that was challenged in this arbitration, do you agree or disagree that there is no dispute that ensuring fair competition in the female category is a legitimate objective for the IAAF to pursue?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: As an expert I do not have an opinion.

BY ATTORNEY BROOKS:

Q. Okay.

Let me ask you to turn to paragraph 456. And this arbitration, as you noted, deals with the case of Caster Semenya and therefore with track events, not with riflery or with equestrian events. So I will ask your reaction to that context. In the middle of paragraph 456, beginning halfway through the sixth line the panel wrote, quote, suffice to say that post puberty generally speaking males outperform female athletes --- I'm sorry, male athletes outperform female athletes at an elite level. This difference is insurmountable, closed quote.

Do you see that?

A. I do.

Q. And do you believe it to be true, false or outside of your expertise that male athletes outperform female athletes at the elite level at a difference that is insurmountable?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: As a blanket statement, no, I would say that is not my expertise.

BY ATTORNEY BROOKS:

Q. Let me ask you to turn to 576. I said 576. I meant 577. I apologize. At the end of 577 the panel has written, quote, ---.

ATTORNEY BROOKS: We just had static here, so let me ask whether people outside the conference room are hearing us? If somebody could unmute.

ATTORNEY TRYON: I can hear you.

ATTORNEY BROOKS: We just had some static that caused me concern.

BY ATTORNEY BROOKS:

Q. At the end of paragraph 577 the panel wrote, quote, male athletes do not have to be elite to surpass even the very best female athletes. Dr. Berman pointed out that in a race such as the 800 meter, a 1.6 percent advantage, as calculated in BG17, was sufficient to

determine first place by the region of nine meters, closed quote.

Do you see that language?

A. Yes.

Q. And do you consider it to be true, false or outside your expertise that male athletes do not even have to be elite to surpass the very best female athletes?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: In a --- as a blanket statement it is outside my expertise.

BY ATTORNEY BROOKS:

Q. And do you have an opinion as to whether a 1.6 percent advantage is a significant advantage or insignificant advantage?

A. I think that's too complicated as phrased for me to answer.

Q. That's actually one of the simpler questions that I've asked today. Let me ask it again and ask you to think. Do you have an opinion, and if you --- one answer of course is I don't have an opinion or it is outside of my expertise, but do you have an opinion as to whether a 1.6 percent advantage in a track event is a significant advantage?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So it depends on the event.

BY ATTORNEY BROOKS:

Q. Why does it depend on the event?

A. Well, there are events where we see --- as an elite Olympic event where the runners are virtually tied. And 1.6 percent then will be significant in the moment because that will be described in that field. And yet there are other events where people are far more spread out and there's greater --- in every element, then 1.6 percent advantage becomes lost in that noise.

Q. And --- well, let's take competitive high school athletics, competitive high school track. Do you have an opinion as to 1.6 percent advantage in that context is significant or insignificant?

A. I do not have an opinion.

Q. So if I understand correctly, your point in some context you know that 1.6 percent is significant but that in other context you don't know one way or the other?

ATTORNEY BLOCK: Objection to the form.

THE WITNESS: Yes, I guess I would say that in some context I can see that 1.6 percent is significant and then in other context I can see that 1.6

percent does not appear to be significant. And actually even if you're asking as an expert, what even is significant is outside my purview, but with that understood I can still see that someone would say it one way and not say it the other way.

BY ATTORNEY BROOKS:

Q. Let me ask you to turn to paragraph 357. And first I will ask you to turn to page 88, paragraph 351, just so you can see we're in a section summarizing the testimony of Professor David Handelsman. That begins at paragraph 351. And then I'm going to call your attention to paragraph 357 and it puts you to the statement there.

357 includes a number of bullet points. The third bullet point, which is on page 91, reads --- and again this is --- the paragraph begins, quote, Professor Handelsman went on to explain in greater detail why the sex difference in circulating testosterone is the cause of the difference in athletic performance between men and women, and then there are bullet points. The third bullet point reads, on average, women have 50 to 60 percent of men's upper arm muscle cross-sectional area, 65 to 70 percent of men's thigh muscle cross-sectional area, 50 to 60 percent of men's limb

strength and 60 to 80 of men's leg strength. Do you see that language?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I do.

BY ATTORNEY BROOKS:

Q. Do you have any knowledge as to whether those statistics are on correct as given by Dr. Handelsman?

A. I do not.

Q. And do you have any expert knowledge as to how those statistics do or do not change under the influence of testosterone suppression in natal males who experience a female gender identity?

ATTORNEY BLOCK: Objection to terminology.

THE WITNESS: So I guess the --- I have no expert knowledge about these numbers, per se, but I do know as an expert that when testosterone levels are suppressed in transgender women and actually in cisgender men, anyone, that these numbers are decreased. And I can say that with confidence as an expert.

BY ATTORNEY BROOKS:

Q. But you're not able to quantify that decrease. Is that correct?

A. I cannot quantify that decrease. The data gets

murky when we start to get there.

Q. Have you ever met Professor Coleman at Duke University?

A. Doriane Coleman?

Q. Yes.

A. I have.

Q. And in what context have you interacted with Professor Coleman?

A. The --- a professional context.

Q. Can you describe the context?

A. We have served on some of these --- two of the same committees --- committee task force, whatever you call it, for World Athletics together.

Q. Was she, in fact, on the committee which you participated that set the five nanomolar standard for the IAAF?

A. I don't recall for sure but I think not.

Q. Then can you identify for me the two committees that you recall that you did sit on with Professor Coleman?

A. Subsequent to the initial group, and I don't know that it's two committees, it may be the same committee, they get renamed. Things like that happen. So it is --- I'm thinking forward to assisting other

international federations with their rule making.

Q. And do you consider Professor Coleman to be knowledgeable about the relative athletic capabilities and records of male and female athletes?

A. To me that's too vague a question. She's a lawyer.

Q. Are you aware also of her athletic background as a competitive athlete?

A. I am.

Q. And are you aware of her research and publications having to do with athletic records and capabilities of male and female athletes?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I'm aware of some of her publications where she has co-authored, but she's not usually the physiology expert in the group.

BY ATTORNEY BROOKS:

Q. Let me ask you to turn to paragraph 393. And if you look at the page you will see that this is within the tribunal summary of testimony of Professor Coleman. Let me ask you since you dealt personally with the professor, because I want the record to be respectful, does she in general use --- prefer to be referred to as Professor Lambelet-Coleman or simply Professor Coleman?

A. I don't know the answer.

Q. Okay.

A. I prefer to her on a first name basis.

Q. All right.

I will stick with the shorter version. In paragraph 393 the panel describing Professor Coleman's submission states, quote, Professor Lambelet-Coleman's report compared the lifetime best performance of three elite female athletes in the 400-meter event with the performance of male athletes in the same event during a single year, 2017, period. This showed not only that the elite females would have lost to the best men by a margin of about 12 percent but also that even at their absolute best the elite females would have lost to thousands of other boys and men by a much smaller margin, closed quote. Do you see that language?

A. I do.

Q. And do you have any reason to doubt the accuracy of that summary of athletic performance statistics?

A. I can't render an expert opinion there.

Q. Do you as you sit here today have any reason to doubt the accuracy of those statistics?

A. Again, I cannot comment as an expert. I guess that's the bottom line.

Q. If it is true that the most elite female athletes performing at their absolute best would lose to thousands of others boys and men. It is also true, would you not agree, that the very best female college athletes would lose to even a larger number of collegiate boys and men?

A. If I'm speaking as an expert, then I'm not rendering an opinion there.

Q. How about as a highly educated and intelligent professor?

A. Simply in that context, it would be true that --- that it would least be true at some level in the elite levels of college.

Q. And the very best female high school athletes would lose to an even larger number of high school boys. Correct?

A. So now I can render a little bit of an expert comment, which is that as you move down that line, the degree of difference falls because the degree of testosterone impact on body is evolving across those ages.

Q. If it's true that the world fastest female athletes would lose to thousands of boys and men then it is inevitably true, is it not, Doctor Safer, to say that

the very best female high school athletes would lose to even larger numbers of high school boys?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So the --- it is the coils here. So it would be larger numbers of cisgender men in general, including people who are older than they are, but I'm not sure where that would be going.

BY ATTORNEY BROOKS:

Q. Let me take you back to your expert report, Exhibit 1, and take you to paragraph 48. Actually, let me have the Declaration, which is Tab 50.

ATTORNEY BROOKS: Let me mark as Safer Exhibit 6 a Declaration of Dr. Safer executed in May 10th, 2021.

(Whereupon, Exhibit 6, 5/10/21 Declaration of Dr. Safer, was marked for identification.)

BY ATTORNEY BROOKS:

Q. And I apologize, it's paragraph 50. Dr. Safer, did you, in fact, prepare and execute this Declaration in the time leading up to May 26, 2021?

A. Yes.

Q. And you state in paragraph 48 that, quote, age, grade competitive sports records show minimal or no difference in athletic performance between non-transgender boys and non-transgender girls before puberty, and you cite Handelsman, the article that we have been looking at.

Correct?

A. Yes.

Q. And what research did you do to arrive at the conclusion that age grade competitive sports records show minimal or no difference in athletic performance between non-transgender boys and non-transgender girls?

A. Is the question of original research on my part?

Q. No, what steps did you take to arrive at that conclusion?

A. Reading relevant literature.

Q. You cited only Professor Handelman's 2018 article. Did you read other literature that gave you comfort that is a true statement?

A. I have read other literature, but I would suggest that Doctor Handelsman gave --- Doctor Handelsman's paper is the best summary of the point.

Q. And again, in making this statement, what did you consider to be a minimal difference?

A. When I'm thinking about this as a scientist it is a difference where I'm not sure if it is true or whether it is significant when defining the word minimum.

Q. You just defined minimal by using the work significant. You force me to ask you what do you mean by significant?

A. Sorry. So as a scientist --- well, there are two definitions of significant. So the one is that it is relevant for those --- for decision makers. And that actually gets outside of my expertise. And then we do use it as a term of art in science as well.

Q. You meant statistically significant?

A. The second would be statistically significant, that's right.

Q. Dr. Safer, you deleted that sentence from your expert report.

Is that correct?

A. I have to look.

Q. I don't mean it to be a trick question. Let me ask you this. Do you recall removing that sentence as you revised your Declaration to create your expert report?

A. No.

Q. All right.
A. I don't recall.
Q. We will just move on to the science and not ask you deleted the question. Let me take you to paragraph 44 of your expert report, Exhibit 1. And just to be sure, you are on the expert report now and not the Declaration? They are so similar that it is easy to get confused.
A. Yes.
Q. Paragraph 44 you say in the second sentence, increased testosterone begins to affect athletic performance at the beginning of puberty, but those effects continue to increase each year of puberty until about 18, with the full impact of puberty resulting from the cumulative effect of each year. Do you see that language?
A. I do.
Q. And just to clarify, in making this statement what do you refer to as, quote, the beginning of puberty? And we're talking about male typical puberty in this discussion so as to clarify. So what do you have in mind as the beginning of male puberty?
A. So the answer is complex. The typical male puberty is defined as beginning with what we label as

Tanner 2. And in terms of when you would see impact on athletic performance, per se, is not well established.
Q. And now stretching that in both directions, on the one hand Tanner Stage 2, if I'm correct, is essentially defined as certain first observable physical changes in a boy's body.
Right?
A. Tanner 2 is specifically defined as specific observable changes in a person's body, yes.
Q. And therefore, testosterone levels have begun to increase even before the first observable changes that result.
Correct?
A. The way it's understood in medicine is it is reflective of existing reality. So it is not necessarily --- you know, only in the absolute.
Q. Well, as a medical doctor, you would agree with me or would you not that testosterone levels must increase in the body before observable changes in the body caused by testosterone can be --- can come about?
ATTORNEY BLOCK: Objection to the form.
THE WITNESS: So it must be the case that the testosterone levels would have to rise prior to their having a noticeable effect, that is true.

BY ATTORNEY BROOKS:
Q. Cause has to precede effect?
A. Cause in this case has to precede effect, exactly. But I caution that it is not clear that that's something that we could parse out medically in a given person in a reasonable way. That is I don't know that I could do a blood test and catch it as it were.
Q. Okay.
Can you explain to me what you were referring to when you mentioned the cumulative effect of pubertal changes at the end of that sentence?
A. Where are we now?
Q. We are in the second sentence of paragraph 44 of Exhibit-1. And you say at the end with a full impact of puberty resulting from the cumulative effect of each year, and if you would explain for the Court what you meant by cumulative effect that would be helpful.
ATTORNEY BLOCK: Objection to form.
THE WITNESS: So the testosterone has impact on certain tissues, and then it continues to have impact on tissues. And I don't know that I have any greater explanation for the right cumulative impact.
BY ATTORNEY BROOKS:
Q. So your point is that by the age of 18 whatever

advantages in athletic performance a particular male has is due to body changes that have happened each year since puberty began, not due simply to the testosterone level of that individual at age 18?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: The meaning isn't as --- I guess I would be careful about overstating it, so there can --- there might be some impact earlier and then there might be additional impact over time, but --- and so in the absolute it would be true to say that all of the effect doesn't occur at Tanner 5, which is the defined end.
BY ATTORNEY BROOKS:
Q. Okay.
The cumulative physiological changes that you are referring to here result from a multi-year history of male typical levels of testosterone by age 18.
Correct?
A. Yes. Well, even that is --- there's complexity but yes.
Q. You say --- sorry, we are jumping back and forth.
A. Actually, just continuing a little bit further, it's also about age 18 is not a trivial word.

Q. Understood. And I simply used that as a representative end marker and for some individuals it would be earlier and for some individuals it would be later.

Correct?

A. That's right, even with the college athletes.

Q. You state at the beginning of paragraph 44 that, quote, the concerns that animated the World Athletics and prior IOC policies are even more attenuated for students in the middle of high school where athletes typically range from 11 to 18.

Do you see that?

A. I do. Was this paragraph 44?

Q. It is. And by attenuated you mean the same in nature but smaller in scale.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Yeah, I can't even say that so --- yeah, I can't ---.

BY ATTORNEY BROOKS:

Q. Isn't that what attenuated means?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Attenuated is both in scale and type in this case.

BY ATTORNEY BROOKS:

Q. All right.

You are not here or anywhere denying that the same type of concern, that is physiological advantages, exist at for instance age 15?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So sorry, say that again.

BY ATTORNEY BROOKS:

Q. You are not in this paragraph or anywhere offering an opinion that the same type of concerns, that is physiologic or in performance advantages, exist to some degree at, for instance, age 15?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I'm not offering an opinion there, that's right.

BY ATTORNEY BROOKS:

Q. And the same is true at age 13?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I'm not --- so I guess as we --- as you move along to the continuum, then ---.

BY ATTORNEY BROOKS:

Q. It gets more attenuated?

A. The opinion --- right, the opinion shifts because it depends on context.

Q. In paragraph 49 of your expert report you write in the third full sentence, quote, West Virginia categorically prevents girls who are transgender from participating on girls teams regardless of whether they are prepubertal, receiving puberty blockers, or receiving gender-affirming hormone therapy, closed quoted. Do you see that?

A. I do.

Q. What in your opinion is the significance of that statement? What is your point?

ATTORNEY BLOCK: Objection. Could you just give him some time to read the context?

BY ATTORNEY BROOKS:

Q. Yes.

A. So I guess I maybe make the --- help me with where you're going with that question. I'm --- the rule as written includes all transgender girls.

Q. Are you --- did you mean to suggest that medical science would dictate that the West Virginia law should make an exception for natal males who have suppressed puberty?

ATTORNEY BLOCK: Object to form.

THE WITNESS: The context for the --- the context of different transgender girls with different

degrees of treatment and different stages of puberty are different. I guess that's as much I would say. I'm not expressing an opinion about what the --- I'm serving here just as a scientist in terms of what the --- what the --- what we know about athleticism.

BY ATTORNEY BROOKS:

Q. You are not offering an opinion that either science or reasonableness requires that West Virginia's laws make an exception for natal males who have suppressed puberty?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I'm not offering an opinion that that would be --- that would be a logical law for transgender girls in that circumstance.

BY ATTORNEY BROOKS:

Q. And in the article that we began today looking at you expressed concern about policies that would create incentives for children to begin puberty blockers, would you not?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So earlier in my --- I reference that as a concern. I want to be clear that as an expert I'm not suggesting that --- I'm not suggesting an expert opinion that these needs to be concerns. I'm

raising the issues that we are considering.
BY ATTORNEY BROOKS:
Q. Well, what you wrote to educate your colleagues as an endocrinologist, you, Professor Safer, raise that as a concern?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: To be clear, I raised it as a concern of the community. I did not take an opinion in that article that it was a concern that I was offering as an expert.
BY ATTORNEY BROOKS:
Q. Well, let me ask you as a medical doctor sitting here today, an endocrinologist, it would cause you concern, would it not, that policies are adopted that created incentives for children to start puberty blockers when they might otherwise not choose to do so?
ATTORNEY BLOCK: Objection to form and to scope.
THE WITNESS: It's too broad of a question as you're asking it because there is certainly --- in medicine it is certainly the case that we fear coercing people to certain treatments and certain circumstances but they are certainly alternate examples where we very much coerce people to have certain medical

interventions. And so as an expert I have no opinion, as we said already. And simply as somebody trying to be logical and thoughtful I can come up with examples in both certain circumstances.
BY ATTORNEY BROOKS:
Q. I'm going to ask you to take Exhibit-6 --- no, Exhibit 4, the Handelsman article if you would.
A. Yes.
ATTORNEY TRYON: Roger, would you speak up a little more, please? And Josh, when you shuffle your papers, it really garbles the testimony. If you'd be a little more careful about that, I'd appreciate it.
ATTORNEY BLOCK: Sorry.
ATTORNEY BROOKS: It's a crowded table and we have papers bumping up against the mic. So just call out if we do that wrong.
BY ATTORNEY BROOKS:
Q. So Dr. Safer, you pointed to the Handelsman article as the best source on the proposition --- on the question to what extent if any natal male has physiological or I should say athletic performance advantages over natal females before puberty. Correct?
ATTORNEY BLOCK: Objection to

terminology?
THE WITNESS: And if I said the word best maybe that's not the best way of saying it, but it's a very clean, well-written summary of the circumstance.
BY ATTORNEY BROOKS:
Q. At any rate, it's the one that you chose to cite?
A. And it is the one that I chose to cite.
Q. I'm going to give you a three by five card to help read a chart that doesn't have grid lines on it so you have a straight edge. And I want to take you in Handelsman's 2018 article, Exhibit 4, to page 813 and figure one. And you've familiar with this figure and these curves, are you not?
A. I am, yes.
Q. When you studied this article carefully this is part of what you studied. Right?
A. It is.
Q. And these charts show percentage performance advantage of males over females and just to simplify terminology I believe there's nothing in here about dealing with transgender individuals in these charts. So with your permission I'll simply use male and female

to be the dare I say simple biological designations as we had previous discussions. Is that acceptable?
A. I think so.
Q. If it's something that comes up ---.
A. I will mention it, yes.
Q. I don't think it will in this discussion. First of all, would you agree with me that, generally speaking, junior high contemplates grades 7 through 9 and commonly ages in the range of 12 to 15?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: Junior high is grades 7 through 9. It used to be. Now there is Middle School.
BY ATTORNEY BROOKS:
Q. I know?
A. Exactly.
Q. Let's just work with you and I are of general age. So Junior High is 7 to 9?
A. Okay.
Q. And in your general understanding, this is layman's stuff, not expert stuff, that is ages 12 to 15-ish?
A. Let's see, seven --- let me think about this. Right, 15 at about the max, right, because there is about 14.

Q. And high school is 14, 15 through age 18-ish. Some people graduate at age 17?

A. Yes. As a non-expert I would believe, yes.

Q. All right.

And this chart charts the percentage advantage enjoyed --- on average enjoyed by males over females in three different events at over --- on a year by year basis from ages 10 up to 19.

Am I describing it correctly?

ATTORNEY BLOCK: Objection to form. Just for the record, it's percentage differences, not percentage advantages.

BY ATTORNEY BROOKS:

Q. Correct, it says --- it says gender difference percentage to read the Y axis.

A. Clear, yes.

Q. Okay.

So let's look at running and you have your straight edge if it is helpful to you. At age 12, what, according to Dr. Handelsman, is the gender difference in running performance?

A. So in this paper there is a range. But just to help you get to your point faster I guess we can --- it is about five percent of tab over.

Q. And for reasons best known to Professor Handelsman, his arrow bars extend only upwards, correct, in this chart?

A. Right. I will have to attribute that to cleanliness of the figure.

Q. Or if he has chosen to fit his curve to the bottom end of this error range possibly?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Yeah, I can't comment there, but that wouldn't be usual.

BY ATTORNEY BROOKS:

Q. That would not be usual, I agree. And what advantage --- what gender difference between male and female does Professor Handelsman report at age ten approximately?

A. At age ten in the particular figure that we are referencing it is --- the average is --- well, actually, so here it ranges from about two percent because that is probably how the air bars are meant to be up to just a little north to three percent.

Q. And going back to age 12, do you consider a five percent difference between male and female performance to be minimal?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So the problem here with going right to this figure is it's including a range of inputs, and so this is --- so these are what are called cross-sectional studies, and so the --- if your question is just in the narrow point of this five percent minimal, well, even there I don't know that I can comment because it depends on how broad the variation is among the group.

BY ATTORNEY BROOKS:

Q. And what gender difference did Dr. Handelsman report in running at age 15?

A. At age 15, a range that is hovering about 9 to 10 percent.

Q. And by age 15, according to his sample, the gender difference is approached --- begins to level off. In other words, it has --- most of the gender difference has been achieved at age 15.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Among this data in this study set, yes, I will agree with you it does level off.

BY ATTORNEY BROOKS:

Q. So let me ask you this. Do you have an understanding of the physiological basis of what you

described as a two to three percent male advantage at age ten in running?

ATTORNEY BLOCK: Objection to form.

BY ATTORNEY BROOKS:

Q. If any?

A. So speaking as an expert, there's no --- there is no physiological --- there is no expectation of a physiological explanation. And there is awareness of other confounders in terms of experience, exposure to sport and things like that.

Q. Let me ask you to look at jumping, at age ten. And this is --- at age ten what performance of gender difference advantage did Dr. Handelsman report for boys in jumping?

A. So at age ten it would go on --- so at age ten then the range ---.

Q. This by the way tells us that he cannot be inclined in arrow bar --- a symmetrical arrow bar below.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So he can't. In fact, the range that he's showing there goes from an advantage for girls --- that is it goes below to an advantage --- for boys. The range is included and it just --- for both

sexes.
BY ATTORNEY BROOKS:
Q. So what is the average advantage that he reports at age ten for boys?
A. So in this dataset the average is about a six percent average for boys, but it is important to understand the data. And the data that --- the point being that if we were to repeat the study you would anticipate that that average would fall across those entire --- the entire range shown so that in a different day it might show a bigger advantage for boys, but a different day it might also show an advantage for girls about higher.
Q. Are you aware of any dataset that shows a smaller advantage in jumping for girls at age ten?
A. Off the top of my head I cannot guide --- lead you to a dataset.
Q. At age 12 what advantage in jumping --- well, let me start over. At age 12 what advantage in jumping does Dr. Handelsman report for boys?
A. So in this dataset at age 12 he shows the advantage --- the average advantage to be of the less than the average advantage for age ten, but this exactly points to the caution that I was referencing, which is

that the range of possibilities that you might anticipate based on this particular dataset at age 12 has a range of four to six percent advantage for boys.
Q. The arrow bar has tightened up a lot?
A. The arrow bar in that age range is tighter.
Q. And do you consider a six percent advantage to be minimal?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: As an expert I can't answer that because it depends on context on the heterogeneity of all these events.
BY ATTORNEY BROOKS:
Q. And at age 15 what average advantage in jumping did Dr. Handelsman report for boys?
A. For age 15 he has a range or the average sits at 15 percent and the range runs from about 14 percent to maybe 17 percent.
Q. Is there any context in your opinion, any athletic endeavor that involves jumping in which a 15 percent advantage is in your view minimal?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: Yes, I think as an expert I can't answer that. If you're thinking at the scholastic level where there is a wide range of --- where there's a

quite wide range of heterogeneity in development, body type, et cetera, I certainly could envision a situation, yes.
BY ATTORNEY BROOKS:
Q. Dr. Safer, in your Declaration filed in May you stated that before puberty athletic advantage by boys was minimal. Do you recall that language?
A. The way I would say it is the difference between boys and girls before puberty is minimal or non-existent. I don't know if I could be wiser than that.
Q. All right. But now you are telling me when I asked you questions about minimal that you as an expert are not able to define minimal. How do you reconcile those two?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: So the definition of minimal is in context. And so as we discussed it was not a significant difference using both those definitions that we already used were no different at all.
BY ATTORNEY BROOKS:
Q. Your statement in your Declaration simply asserted categorically in almost no context that the

difference in athletic capability of boys to girls were both minimal. My question for you is using whatever definition you had in mind when you wrote that do you consider a --- I will look at jumping, a five percent difference in capability to be minimum?
ATTORNEY BLOCK: Objection to form and characterization of the report.
THE WITNESS: So it's a context. So in the report the reference is to prepubertal children. And there it is easier to be more categorical. Where now we're moving into an area where there is --- where things are more complex and so it is a harder context to make that statement.
BY ATTORNEY BROOKS:
Q. That is a sample of ten-year old boys includes some who are no longer prepubertal.
Correct?
A. No. I'm saying it more the other way, which is a sample of ten-year-old boys would overwhelmingly be prepubertal but a sample of 15-year-old boys would have more of a range and have more heterogeneity. And there's more to it even than that, which is the definition of minimal also includes the context of the entire population who participated in the sport.

Q. So focusing on ten-year-old boys and jumping you said at age ten the large majority of boys are, according to your definition, prepubertal. Referring back to Declaration and the meaning that you ascribed to the word minimal there, in your view, is a six-percent difference in capability minimal or not minimal?

ATTORNEY BLOCK: Objection to form and to talking about his Declaration without it being in front of him.

ATTORNEY BROOKS: He has it in front of him and we already looked at the language.

BY ATTORNEY BROOKS:

Q. You may answer.

A. So the graph that we are looking at includes arrow bars that include the possibility that boys would have --- that the girls would have a superior outcome, and so the answer then becomes, yes. Where the data are either small or are suspect or not significant, then all of that collectively certainly is --- would be included as minimal to non-existent.

ATTORNEY BROOKS: Let me mark as Exhibit Safer 7 a paper by Emma Colton and Tommy Lundsburg entitled Transgender Women in a Female Category of Sport, from 2021, previously marked as Exhibit 13 at Dr.

Adkins's deposition.

(Whereupon, Exhibit 7, Transgender Women In a Female Category of Sport, was marked for identification.)

BY ATTORNEY BROOKS:

Q. And first, Professor Safer, let me ask whether you're familiar with this paper published last year?

A. I am familiar.

Q. And have you interacted professionally with either Dr. Colton or --- and I don't know his degree, Mr. Lundsburg in any context?

A. Here I don't remember.

Q. Okay.

Do you believe that you became aware of this paper soon after it was published?

A. I don't know if I can answer that cleanly either, but I certainly have became aware of it somewhere between then and now.

Q. And have you read it with some care?

A. I have read it with some care, yes.

Q. Let me ask you --- well, let me ask you this first. Would you describe this paper as reporting

original research or as more of a literature review paper?

A. I don't recall them reporting on their original research, but I would have to look. It's mostly a review paper.

Q. That is also my impression. I just didn't want to create a different impression. Let me ask you to turn to page 201, and there in the first column beginning six lines down there is a sentence that begins an extensive review. Let me ask you to find that.

A. I have it.

Q. And that --- I'll read it into the record. Quote, an extensive review of fitness data from over 85,000 Australian children age 9 to 17 years old showed that compared with nine-year-old females, nine-year-old males were faster over short sprints, 9.8 percent, and one mile, 16.6 percent, could jump 9.5 percent farther from a standing start, which tested explosive power, could complete 33 more push-ups in 30 seconds and have 13.8 percent stronger grip. Male advantage of a similar magnitude was detected in a group study of children where compared to a six-year old females six-year old males competed 16.6 percent more shuttle runs in a given time and could jump 9.7 percent further from a standing

position. Do you see that language?

A. I do.

Q. And on the Australian study, if you follow the footnote you will see that it references a study by Kaitlin Thompkinson. That's footnote 22. And my first question is have you read the reference study by Kaitlin Thompkinson?

A. I don't recall. I'm guessing yes.

Q. All right. All right.

Do you have any reason to doubt the accuracy of this summary of the findings of Kaitlin Thompkinson based on data from over 85,000 Australian children?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I think the important thing to recognize when you look at these sorts of data are recognizing the multiple inputs. So the larger these groups --- these cross-sectional studies get the more confounded they get by access and other social explanations why there are boys participating in sports to a greater degree.

BY ATTORNEY BROOKS:

Q. So putting aside causation, which might be physiological and might be cultural, as you said there could be various causes, do you have any reason to doubt

the accuracy of the findings of performance advantage summarized here in the passage that I've just read?

ATTORNEY BLOCK: Objection to form and terminology.

THE WITNESS: Putting aside causation, I have no --- I can't offer an expert opinion I guess if that's the bottom line. But if you're asking me just as an individual, I'm not expecting that they're fabricating that data. I am not expecting that.

BY ATTORNEY BROOKS:

Q. And you agree that advantages on a scale of 9 percent, 16 percent could provide a significant advantage in athletic competition, do you not?

ATTORNEY BLOCK: Objection to terminology.

THE WITNESS: So say that question again.

BY ATTORNEY BROOKS:

Q. You agree that advantages on the scale of 9.8 percent or 16.6 percent would provide a large advantage in athletic competition, do you not?

ATTORNEY BLOCK: Same objection to terminology.

THE WITNESS: In elite athletic competition, yes.

BY ATTORNEY BROOKS:

Q. Did you play any sport in high school?

A. At a sophisticated level I did not.

Q. Your general knowledge permits you to say, does it not, that at the high school level also a 9.8 percent or a 16.6 percent advantage is a very large advantage?

ATTORNEY BLOCK: Objection to form and terminology?

THE WITNESS: So there it gets more diffuse, therefore, and I can't answer as an expert.

BY ATTORNEY BROOKS:

Q. Can you answer as an informed adult citizen?

ATTORNEY BLOCK: Same objection.

THE WITNESS: So as an expert for sure not. As an informed adult, it falls back to the same situation. When there is a wide range of athletes in a certain context, then it is going to seem less relevant. And obviously with the example I gave before with an elite circumstance where that --- it describes the entire field is more significant.

BY ATTORNEY BROOKS:

Q. Let me ask you to find your rebuttal report.

A. And actually --- do others need a break?

Q. Any time --- your concentration is most important. So if you need a break, we'll take a break.

A. So I'm good.

ATTORNEY BROOKS: Well, obviously, if anybody wants a break, we can take a break.

ATTORNEY BLOCK: Do you need a break?

ATTORNEY SWAMINATHAN: No.

ATTORNEY BLOCK: We are good.

THE WITNESS: So my rebuttal.

BY ATTORNEY BROOKS:

Q. Your rebuttal, which is Exhibit 2, so it's probably at the bottom. And in that I'm going to draw your attention to paragraph 11. And there you wrote there is also no basis to confidently predict the patterns about the athletic performance of prepubertal cisgender boys will be the same for prepubertal transgender girls, closed quote. Do you see that?

A. I do.

Q. And let me attempt to see if I understand the point of this paragraph. And indeed, if you would like to read the whole paragraph you should. But my understanding of the point is that you're saying that even if prepubertal boys have some performance, some statistically significant performance advantage over prepubertal girls, that you are not confident that the athletic performance capabilities of natal males who identify as females before puberty will be the same as those of natal males who identified as male before puberty?

ATTORNEY BLOCK: Objection to the terminology.

THE WITNESS: So to the extent --- so were differences to be determined between cisgender boys and cisgender girls, it is correct to say that that won't conclusively demonstrate that the same applies for transgender girls. That's right.

BY ATTORNEY BROOKS:

Q. Now, elsewhere in your writings you have said that it is well known that the majority of prepubertal children who experience gender dysphoria do not persist in that dysphoria into pubertal adolescence. Correct?

ATTORNEY BLOCK: Objection.

THE WITNESS: No.

BY ATTORNEY BROOKS:

Q. Not correct?

A. Not correct.

Q. Then we will come back to that. In this paragraph 11, you speculate a little farther down that,

quote, the experience of transgender girls might be more similar to the experience of cisgender girls?

ATTORNEY BLOCK: Objection to the characterization and speculative.

BY ATTORNEY BROOKS:

Q. Well, by using the word might you meant to indicate, did you not, Dr. Safer, this is a hypothesis, this is not a documented fact?

A. That if the question is do I know that the experience of transgender girls is definitely in this circumstance the same as cisgender girls, that's right, I don't know that. It only might be true.

Q. And towards the end, in the last line, you refer to potential biological underpinnings of gender identity. Again, the word potential signaling that no such specific underpinnings have yet been identified.

Correct?

A. Say that question again.

Q. In the last line, your reference to, quote, potential biological underpinnings of gender identify, by the word potential you are indicating that no specific biological underpinning has yet been identified.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So it's --- so no, potential in this context does reference that most of this biology is unknown, so that part is true, but it doesn't mean that there is nothing known.

BY ATTORNEY BROOKS:

Q. You do not propose to offer any opinion that natal males --- let me strike that and start again.

You do not propose to offer any opinion, do you, that prior to puberty natal males who identify as female are less athletic capable on average than natal males who identify as male?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I'm not offering an opinion with regard to cisgender --- excuse me --- cisgender boys versus transgender girls and their athleticism when they are prepubertal. If that's what you are asking, then yes, I'm not offering an opinion between those two groups. I'm simply raising the possibility that something like biology associated with transgender could have influence into it.

BY ATTORNEY BROOKS:

Q. Let me ask you to turn to paragraph 22 of your rebuttal report. And there you write Doctor Brown also

refers to widely publicized anecdotes about isolated cases of transgender girls and women state championships in high school sports or NCAA championships in college. Do you see that?

A. I do.

Q. And you go on to write but transgender athletes of women have been competing in NCAA and secondary school athletics for many years at this point, closed quote. Do you see that language?

A. I do.

Q. Let me ask you to name all instances of male males known to you who have competed in women's division varsity athletics in any athletic endeavor for any NCAA member school?

ATTORNEY BLOCK: Objection to form and scope.

THE WITNESS: Right, so I certainly can't do that usefully off the top of my head, name transgender women and all these context in such an exhaustive way like that.

BY ATTORNEY BROOKS:

Q. Well, I asked you accused Doctor Brown of citing isolated cases. Do you have any basis to assert that he has done anything other than cite all cases in which

natal males have competed in NCAA athletics in the female category?

A. So the --- if our focus is on the word isolated then per se they are all --- these are all isolated cases. These aren't systematic analyses of any cohort of people.

Q. You are not accusing Doctor Brown of picking and choosing?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So let me think about that. By simply choosing individual cases that are in the press then it is by its nature picking and choosing.

BY ATTORNEY BROOKS:

Q. What do you mean by that?

A. Well, these are simply individual cases that have --- that have come to public attention, and so I --- so --- and that's the basis of my statement as opposed to some exhaustive attempt to identify transgender people in a systematic fashion.

Q. As you sit here today, Dr. Safer, are you aware of a single case not mentioned by Doctor Brown in his report of a natal male who has competed in NCAA athletics in the women's category?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Can I name somebody off the top of my head? I cannot.
BY ATTORNEY BROOKS:
Q. Do you have any concrete --- leaving aside whether you remember a precise name, do you have any factual basis to know that Doctor Brown has omitted any case of a natal male who has competed in the female division of NCAA athletics?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: So I guess if the question is what can I do off the top of my head, then I cannot.
BY ATTORNEY BROOKS:
Q. Off the top of your head, you recall the case of June Eastwood, do you not?
A. You have to remind me what that is.
Q. A runner in Montana?
A. I actually would need to be reminded of those details.
Q. All right. Certainly you recall Lia Thomas because none of us can mis Lia Thomas these days?
A. Lia Thomas is still in the news.
Q. Do you recall the case of CeCe Telfer?
A. Names are not my strength.
Q. All right. No more on that.

You say at the end of this paragraph, quote, the occasional championship that has been widely publicized do not come close to constituting the rates one would expect if they, that is transgender athletes, wanted rates that are proportional to their overall percentage of the population, which is approximately one percent. Do you see that language?
A. I do.
Q. Do you have any knowledge as to what --- first of all, let me ask, what is your basis for believing that the current student population in college and high school level is approximately one percent transgender?
A. The statistic for the percentage of the population who are transgender comes from surveys.
Q. And do you have any knowledge at all as to what percentage of varsity athletes in America today at the NCAA --- among NCAA member schools in the women's division are transgender?
A. If the question is that a survey in that population, I'm not aware of a survey that's been done.
Q. So you don't know whether the number of victories of championships that have been taken in the women's division by transgender competitors is higher or lower than the percentage of athletes in those divisions who are transgender?

ATTORNEY BLOCK: Objection to form.
THE WITNESS: That is correct. I do not know the percentage that --- what we know is the percentage of transgender people and then we know the percentage of identified athletes winning competitions. And even then we don't know that absolutely. We only know the ones that are publicized. But, right, in the in between, we don't have statistics. That's right.
ATTORNEY BROOKS: Counsel, I'm going to suggest --- in my experience, if we break for lunch at noon, it makes it a little long afternoon. So I would suggest that we take a short break now and then keep going until like 12:45 or something. It's seven hours on the clock and I'm here just to tell you that the afternoon gets long. So unless you are starving I'd recommend ---?
THE WITNESS: No, I think that's a great idea.
ATTORNEY BROOKS: Take a short break now.
THE WITNESS: So you don't know who is on the phone so give them a break.
ATTORNEY BROOKS: Let's go off the record.

VIDEOGRAPHER: Going off the record. The current time reads 12:01:00 p.m. Eastern Standard Time.
OFF VIDEOTAPE

(WHEREUPON, A SHORT BREAK WAS TAKEN.)

ON VIDEOTAPE
VIDEOGRAPHER: Back on the record. Current time reads 12:14 p.m. Eastern Standard Time.
ATTORNEY BROOKS: Let me mark as Safer Exhibit 8 the Endocrine --- Treatment of Gender Dysphoric Gender Incongruent Persons, an Endocrine Society Clinical Practice Guidelines from 2017 previously marked as Adkins Exhibit 4.
ATTORNEY WILKINSON: Tab 5.

(Whereupon, Exhibit 8, Endocrine Society Guidelines, was marked for identification.)

BY ATTORNEY BROOKS:
Q. And Doctor Safer, am I correct you served the committee that created this revised version of the Endocrine Society's Guidelines?
A. Yes.

Q. And is it reasonable for me to assume therefore that you are familiar with it in some detail?
A. I am familiar with it in some detail.
Q. They also pertain to your practice? Am I correct.
A. And they do pertain to my practice, yes.
Q. Let me ask you to turn in Exhibit-5 to Page 3879 --- Exhibit 8, 3879. And there I will call your attention to the specific recommendation that's numbered 1.4. And it says there we recommend against puberty blocking and gender-affirming hormone treatment in prepubertal children with GD/gender incongruence. Do you see that?
A. I do.
Q. And then there is a section headed evidence, right?
A. Yes.
Q. And the first statement in the sentence that is --- in the section headed evidence is, quote, in most children diagnosed with GD/gender incongruence it did not persist into adolescence, closed quote. Do you see that?
A. I do.
Q. Do you believe that to be a false statement?

A. I wouldn't --- I guess it depends on context here too. So as of when this was written, the literature being referenced had a broader diagnosis for gender dysphoria and gender incongruence or really gender dysphoria is the label that was being used and still is. Gender incongruence is where we are headed. And so with that broader definition, that included gender expansive children who were not necessarily transgender.
Q. The statement is I think fairly specific. And as you are aware, the discussion cites various references, but the introductory sentence states in most children diagnosed with GD a gender dysphoria or gender incongruence did not persist into adolescence. Do you believe to be a true statement or false statement?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: The problem is I can't answer that quite that cleanly. The statement references a circumstance that I just referenced where children receiving that label have to --- for the most part were not transgender. The only caution I want to make is that as we grow more refined in our understanding of gender identity and also in our labeling, that we are more specific in identifying

transgender kids with these sorts of labels.
BY ATTORNEY BROOKS:
Q. Well, recommendation 1.4 says we recommend against puberty blocking and a gender hormone treatment in prepubertal children with gender dysphoria or gender incongruence. Do you have an understanding of why these Endocrine Society guidelines of which you're a co-author recommended against puberty blocking in prepubertal children?
A. Yes.
Q. Why?
A. They have no impact.
Q. Can you point me to anywhere in the evidence discussion that suggests that is the reason for this recommendation?
A. I don't know. Let me look.
Q. The evidence discussion is just two paragraphs.
ATTORNEY BLOCK: I just want to object to the extent you're limiting his review to the evidence section.
BY ATTORNEY BROOKS:
Q. My question pertains to the evidence section.
A. So those two paragraphs are both primarily referencing 1.3 and not 1.4.

Q. Well, let me ask you to turn to page 3881. And at the top of that first column on 3881 it reads we, therefore, advise starting suppression in early puberty to prevent irreversible development of undesirable secondary sex characteristics. However, comma, adolescents with gender dysphoria, slash, gender incongruence should experience the first changes of their endogenous puberty because their emotional reaction to these first physical changes has diagnostic value in establishing the persistence of gender dysphoria/gender incongruence. Do you see that language?
A. I do.
Q. And as a scientist and practitioner do you agree with that statement?
A. I would say that the validity of that statement is in evolution.
Q. In your practice, over time --- well, let me ask you this. When this was drafted did you raise an objection to the proposition that the child's emotional reaction to the first physical changes of puberty had important diagnostic value?
A. I cannot recall our specific conversations, but if you're asking if my view has shifted since let's say

2015, 2016, 2017, no, the recognition that there is an evolution was already part of my opinion.

Q. What do you mean the recognition that there is an evolution about?

A. So the evolution is that whether there is a need to start puberty as a diagnostic --- as a necessary diagnostic circumstance.

Q. In your practice today do you prescribe puberty blockers prior to Tanner Stage 2?

A. I --- so two things. My practice is with adults. And although I will see older kids because I don't have a hard threshold of age 18, but I don't prescribe puberty blockers because I don't --- my practice does not include those age children. But two, it is still the guidance and so the pediatricians who are part of my program do not prescribe puberty blockers prior to Tanner 2 for the reason I stated initially.

Q. And according to these guidelines, by the time you reach Tanner Stage 2 there have been sufficient first pubertal --- stages of pubertal development to give a chance to observe the child's reaction to pubertal changes for diagnostic purposes.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So the --- so I guess there are kind of two pieces. The sentence is --- that sentence is written, but that is the sentence that I'm suggesting is an opinion that is in evolution, like I'm saying, to whether that need really exists or not. The reason why we still don't prescribe puberty blockers before Tanner 2 is that there is no point, there is no preventive element to puberty blockers and so there is no point to give them before puberty begins and there is no way to know that until there is an observable objective finding.

Q. Has your own practice ever involved to a significant extent treating prepubertal or early pubertal stage children for gender dysphoria or gender incongruence incongruence?

A. Have I personally cared for prepubertal children who are transgender or otherwise? Actually, in the subjects, no.

Q. And do physicians who do treat prepubertal children report to you in connection with your position at the clinic or the Mount Sinai Medical Hospital?

A. Yes.

Q. And do you know whether your clinic makes use of children's emotional reactions to the first physical

changes of puberty as part of their process of determining whether transgender hormonal therapies of any sort are appropriate for that child?

A. Yeah, I can't give you give you an answer. I would actually have to go survey my psychologists.

Q. Let me direct you to paragraph 17 of your rebuttal report. And there you say in the second sentence under current standards of care transgender adolescents are eligible to receive puberty blockers when they reach Tanner 2, not Tanner 3, which is early enough to prevent endogenous puberty from taking place, closed quote.

Do you see that?

A. I do.

Q. Now, just for context, you testified previously that the large majority of minors I'll say who present with gender incongruence or gender dysphoria are, in fact, considerably older and have gone through at least most of the Tanner stages.

Correct?

ATTORNEY BLOCK: Objection to characterization.

THE WITNESS: Most of the people we are seeing in clinical practice are coming to us at later

stages of development, yes.

BY ATTORNEY BROOKS:

Q. And so when we talk about prepubertal children, we're talking about a small minority of the patients coming in to ---?

A. I can't define small, but it is the minority, that's correct.

Q. And do you believe that what your clinic is seeing in that regard is typical of what's being seen across the country these days?

A. So if I'm sitting here as an expert, I don't have an expert survey to point to, to give you an answer there.

Q. But you read the literature and you talk to colleagues at other institutions.

Am I correct?

A. I certainly both read the literature and talk to colleagues.

Q. And is it your current belief that what you are seeing in terms of the breakdown of patient population is similar to or quite different from what other major gender clinics are experiencing?

A. So kind of separating, I'm living in my expert role, I really want to point to data where I have any

confidence at all, and I have none. If you are asking me in a more informal way among our conversations, then I can answer that our experience seems similar to others' experience.

Q. All right.

So in talking about prepubertal children --- well, strike that. We've been through that.

In your rebuttal report when you said beginning puberty blockers at Tanner stage 2 is early enough to prevent endogenous puberty from taking place, let me ask you, in consideration, do you believe it is accurate as stated?

A. So Tanner 2 early enough to prevent endogenous puberty from taking place, yes, that is accurate.

Q. You would agree with me, would you not, that the endocrine guidelines of which you are a co-author recommend to treat beginning puberty blockers at Tanner Stage 2?

A. So to clarify, under the cited guidelines what they say the recommendation is do not use puberty blockers prior to puberty beginning, prior to Tanner 2.

Q. Let me direct you to recommendation 2.2 on page 3880. Recommendation 2.2 reads we suggest the clinicians begin pubertal hormone suppression after

girls and boys first exhibit physical changes of puberty.

Do you see that?

A. I do.

Q. And then it says, paren, Tanner stages G2/B2 which is to say the girls Tanner 2 or boys Tanner 2, correct?

A. That is what that means, yes.

Q. So the official recommendation from the Endocrine Society is begin at or after Tanner Stage 2, right?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: That is a correct.

BY ATTORNEY BROOKS:

Q. And it says that Tanner Stage 2 is defined as girls and boys first exhibiting physical changes of puberty.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: The definition of Tanner 2, is where there is any objective evidence when puberty has begun.

BY ATTORNEY BROOKS:

Q. So in fact, beginning puberty blockers at Tanner

Stage 2 does not categorically prevent endogenous puberty from taking place but instead prevents a substantial portion of endogenous puberty from taking place.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So let me ---.

BY ATTORNEY BROOKS:

Q. It is in paragraph 17.

A. So the --- I guess the way this is understood is --- I guess it depends on how extreme you want to take things. It is back to our original conversation of that cause has to take place before effect. So it's parsing it to that degree.

In a biological context it really is the case that we need some objective evidence before we begin things so that we don't make the mistake of using a medication prior to its having any impact. And then it's also true that some of the hormone mediated changes that we see do actually regress to that prepubertal state when we --- when you use puberty blockers at Tanner 2. So the statement as written --- as I wrote it is accurate in the way we think of these things in biology.

Q. Although the guidelines specifically state that adolescents should --- before puberty blockers, quote, should experience the first changes of their endogenous, spontaneous puberty. And the recommendation calls for beginning puberty blockers, quote, after girls and boys first exhibit physical changes at puberty, paren, Tanner stages 2, closed paren. I'm not misreading anything, am I?

ATTORNEY BLOCK: Objection to just reading an excerpt.

THE WITNESS: Right. I don't know --- I don't know if those were are all direct quotes or not so I won't comment on whether you're misreading or not, but the first statement that you reference, as I've said, is one where there is an evolving understanding of its veracity or its applicability.

The statement 2.2 is simply using alternate phrasing for saying Tanner 2, that is we need to have objective evidence that puberty is genuinely beginning. The focus and the purpose of these statements is to avoid people using puberty blockers on non-pubertal kids.

BY ATTORNEY BROOKS:

Q. Well, you would agree with me, would you not,

that if one administer puberty blockers in accordance with Endocrine Society guidelines, then some stages of endogenous male puberty will have occurred in natal male patients?

ATTORNEY BLOCK: Objection the form.

THE WITNESS: So when we are --- specifically we're referencing transgender girls here. And although pre-pubertis gender boys, when we see Tanner 2, then some --- some degree of development has taken place. That part is true. So in the absolute sense, then yes. But in a biological sense, like I said already, the --- some interesting reality is that some of that does regress.

BY ATTORNEY BROOKS:

Q. By the way, you, yourself, do not have any knowledge as to what developments of endogenous male puberty BPJ underwent prior to initiating puberty blockers, do you?

A. I have had no physical contact with BPJ.

Q. Nor have you studied BPJ's chart sufficiently to be feel that you know the answer to that question?

A. Right, I'm not expressing any opinion to the specific medical terms, that's right.

Q. Have you, yourself, ever supervised any

research, clinical research, concerning treatment of prepubertal children for gender dysphoria or gender incongruence?

A. Have I supervised research on treatment of prepubertal transgender girls? Let me think about that. Nothing is coming to mind, but our program does do research across an age span.

Q. Well, some of your colleagues might have done such research, but my question is whether you have been personally supervised or involved in such research?

A. I'm pretty involved actually, especially in our research program, but I'm having a difficult time coming up with an example.

Q. All right.

I just want to make sure I know about it if it exists.

A. Yes.

ATTORNEY BROOKS: Let me mark as Safer Exhibit 9 an article entitled --- an article or a chapter or something entitled Care of the Transgender Patient dated 2019 by Dr. Safer and by Doctor Vin Tangpricha.

(Whereupon, Exhibit 9, Care of the Transgender Patient Article, was marked for identification.)

BY ATTORNEY BROOKS:

Q. Am I correct that this is --- well, you tell me, is this an article or book chapter? How would you describe this document?

A. This is a review article from the Annals of Internal Medicine.

Q. And by review you mean it's not reporting on original research but rather summarizing the state of knowledge in a particular area?

A. That is correct.

Q. Okay.

And the pages may have ITC and a number, but I'll just refer to the number if I may. On page three, column two, is a statement that I think is just repeating what you told me, that is most --- quote, most transgender persons present to clinicians in late adolescence or adulthood, closed quote. That is consistent with what you testified earlier.

Correct?

A. That is, yes.

Q. And if you turn then to page five, column two,

you write in the first full sentence in column two, prior effects of androgens on the skeleton height and size and shape of the hands, feet, jaw and pelvis and voice, including visibly --- visible laryngeal prominence, will not be altered if treatment is initiated after puberty.

Do you see that language?

A. I do.

Q. And is it consistent with your understanding that at this stage also changes to the size of the heart and the lungs will not be altered if testosterone is commenced after the initiation of puberty?

A. Not quite.

Q. Explain that to me, please.

A. So transgender women, if they have gone through a typical male puberty, are going to remain larger, but the testosterone has action on certain tissues, so specifically muscle, and that --- when those testosterone levels shrink, then that muscle shrinks and the heart muscle is --- well, the heart is a muscle, so it will be --- there will be an impact from body size, but there will also be impact from the lower level of testosterone. So it will be kind of a mix of those two.

Q. The heart is a muscle but it has in it cavities

of a certain size in which blood flows, out of which blood is pumped, correct? Do you have any knowledge, are you aware or any literature that documents that testosterone suppression reduces the heart's pumping capacity?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So the --- so there is a gap there of transgender research --- so no, that is something that's not been studied.

BY ATTORNEY BROOKS:

Q. And the lungs are not muscle tissue. Are you aware of any science that indicates or even suggests to you as an expert that an individual who has gone through typical male puberty, that individual's lungs reduce in size if testosterone is suppressed?

A. So the answer with regard to lungs is going to have some of those same inputs as heart or other tissues actually where overall size of the individual is not --- well, certainly height at least is not decreasing, and so this person is larger. And so lung size matches that to some degree. And testosterone has some impact on surrounding muscle. And so to the degree that that shrinks there might be lung shrinking too. And so you hear that --- that is going to be a complex answer. And

in terms of interpreting it even, you then would also have to interpret it in the context of the size of the body if you want to consider function, and none of this has been studied.

Q. Certainly you don't believe, do you, that an individual who has been --- let me start that again. It is not your opinion, is it, that testosterone suppression by an individual who has been through a typical male puberty reduces that individuals VO2 mass to typical female levels?

A. So the more we get into some of the subtler physiology, I will take a step back and give you an expert opinion, but I will --- in addition to that point out that we don't even have studies on this. We're just at a stage of beginning to look at that sort f thing.

ATTORNEY BLOCK: Roger, are you able to speak up a little?

ATTORNEY BROOKS: I will try.

BY ATTORNEY BROOKS:

Q. You state that in paragraph 55 of your expert report, Exhibit 1?

A. So paragraph 55.

Q. Fifty-five (55). You state that there are, quote, only two studies examining the effect of

gender-affirming hormone therapy on athletic performance, closed quote. Do you see that?

A. Yes.

Q. You are aware, are you not, that there are a substantially larger number of studies that examine the effect of testosterone suppression on strength or muscle mass in natal males?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: There are --- there are a handful of studies on the impact of testosterone lowering treatment on transgender women on some tissues, yes.

BY ATTORNEY BROOKS:

Q. Well --- and not to get carried away with the terminology, there are also studies that relate to application of testosterone suppression to males who don't identify as transgender, are there not?

A. To cisgender men in addition to transgender women there are some studies --- yes, there are actually some modest studies, yes, on cisgender men.

Q. And have you now taken some care to review yourself all the peer-reviewed studies of that type that were cited in Doctor Brown's report?

A. I have looked at papers that were cited by

Doctor Brown. The moment we use the word all I hesitate, but certainly I've read through the papers that were cited.

ATTORNEY BROOKS: Well, let's start with one you referenced, article by Roberts, et al., from 2020, which I will mark as Exhibit --- Safer Exhibit-10.

COURT REPORTER: 10.

ATTORNEY WILKINSON: 10, Tab 60.

(Whereupon, Exhibit 10, Roberts, et al, Articles, was marked for identification.)

BY ATTORNEY BROOKS:

Q. And in fact, this is one of only very few articles that you cite in your expert report start to finish.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So this paper is referenced to an expert report.

BY ATTORNEY BROOKS:

Q. Let me direct you to the last page of your expert report where there is a bibliography. And other than citing to your own writings as the entire basis of

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your opinions you cited only six articles.
Correct?
ATTORNEY BLOCK: Objection to characterization about its entire cases for his opinions.
THE WITNESS: So the paper specifically referenced two reviews and six papers but recognized that some of these papers specifically are summaries of the topic.
BY ATTORNEY BROOKS:
Q. You have studied the Roberts 2020 article with some care.
Is that correct?
A. I have indeed, yes.
Q. And so far as you know it is the only longitudinal study of the impact of testosterone suppression in natal males and actual athletic performance and in this case running.
Correct?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: So the Roberts study and the Harper study are both studies of transgender women with at least two time points.
BY ATTORNEY BROOKS:

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Q. The Harper study is strictly retrospective, it is not a prospective, longitudinal study?
A. The Harper study is --- that's a good question. I actually don't know if it is --- it's probably mixed, honestly.
Q. Well, we can look at it, but it is not mixed. It is a one-time survey.
A. Well, to be clear, the way we phrase these things sometimes are --- I'm trying to be --- are according to certain conventions academically, so that sometimes it will be framed that way because from an academic perspective we'll use that context, but I think some of the data was actually collected in both collections.
Q. The Roberts study you understand to be a prospective, longitudinal study, do you not?
A. Well, actually, you are testing me on that. Did they set out at the beginning to do it or did they go back and look? I'd have to see.
Q. Well, based on the method, I think the answer is they went back and looked because it begins we reviewed?
A. Yes.
Q. Do you --- is it your opinion that amongst the available data, the Roberts study is --- on the impact

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of testosterone on athletic performance is some of the strongest data that we have available?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: It is my opinion that the Roberts and Harper studies are the only two studies that we have available.
BY ATTORNEY BROOKS:
Q. Is it your opinion as an expert, is it not, that the structure of the Roberts study renders it --- and the source of its data renders it far more reliable than the Harper 2015 study?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: I would not overstate that, so no. If I'm being --- if I'm being professorial and saying this is how to organize something, then in that context I might say that, but in terms of simply believability of data, I got two modest papers that are the sum of the world literature on the subject.
BY ATTORNEY BROOKS:
Q. You say in paragraph 56 of your report that Roberts found, quote, after two years of gender-affirming hormone therapy transgender women completed the 1.5 mile run 12 percent faster on average than non-transgender women, closed quote. Do you see

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that?
ATTORNEY BLOCK: I think he needs some time to get ---.
THE WITNESS: Yeah, to actually find the ---.
BY ATTORNEY BROOKS:
Q. Paragraph 56. And I will refer you to the third sentence.
A. All right.
Sorry say that again.
Q. I'm simply calling your attention to the place where you wrote at the Roberts report that after two years of a gender-affirming hormone therapy transgender women completed the 1.5 mile run 12 percent faster on average than non-transgender women.
A. Yes.
Q. And two years, not a trick question here, twice as long as the one year testosterone suppression requirement that led to the NCAA rule.
Correct?
A. Two years is twice one year, yes.
Q. And you would agree with me that a 12 percent faster in women's time is a substantial advantage?
ATTORNEY BLOCK: Objection to form.

THE WITNESS: So this is a bit --- this is a bit of the same conversation. I guess I can't say that in a blanket way. It depends on context.

BY ATTORNEY BROOKS:

Q. The context here is that that these are all Air Force members, do you recall?

A. I believe they are all Air Force members, yes.

Q. All subject to Air Force physical fitness requirements. So we are not talking about couch potatoes?

A. I'm not rendering an opinion there as an expert.

Q. Generally you would accept that this is a relatively fit population?

A. I can't even render an opinion there as an expert.

Q. Do you have some unhealthy relative who's a member of the armed forces?

A. I was in the National Guard, so I do have some insight.

Q. Okay.

You would agree, would you not, that running speed and endurance, per se, are relevant to quite a number of sports?

A. Running speed and endurance are relevant to many

sports. I'm certain that is true. I'm not ---

Q. Well ---.

A. --- an expert again.

Q. I'm no sports fan, but we've all seen enough sports to know there's a lot of running involved not just in track but in basketball, soccer, lacrosse and field hockey.

Correct?

A. I have observed that, yes. But again, I'm not rendering an expert opinion there, but yes.

Q. And on page six of this paper ---.

A. This is Roberts.

Q. Yes, Roberts and Exhibit 10. Roberts and his co-authors summarize in their conclusion by stating, quote, in this study we confirm that the use of gender affirming hormones are associated with changes in athletic performance and demonstrated that the pretreatment differences between a transgender and a cisgender woman persist beyond the 12-month time currently --- requirement currently being proposed for athletic competition by the World Athletics and the IOC. Do you see that?

A. This is the conclusion section?

Q. It is.

A. Yes, I see that.

Q. And you don't have any expert opinions that the findings of Roberts are inaccurate or unreliable, do you?

A. So the --- this is again a question of context. So I have no reason to suspect that these data are suspect. The only question then is what we conclude when you do a study of --- for the transgender women I think we are talking about 29 people, which I certainly like a lot better than simply pointing to a random individual, but I recognize as also simply 29 individuals in a certain circumstance that might or might not be replicated as we do this again and increase the numbers of people that we evaluate.

Q. You don't propose to offer any expert opinion that the findings of Roberts as reported in this paper of 2020 are inaccurate?

A. So, I guess the way I said it is how I said it already, which is I'm not doubting Roberts' data, but I wouldn't then over generalize to say that I know that these would be the findings we would see in every similar circumstance.

Q. And are you aware that one common track event or cross-country event, I can never keep them straight, is

the 1600 meter, which is about a mile?

A. Actually, that is not my expertise. I believe you.

Q. Are you aware that the 3,000 meter, a 1.8 mile distance, is a standard event?

A. If you are meaning to quiz me on the standard lengths these days and meters and all of that, no.

ATTORNEY BROOKS: Well, I can't complete my next document in two minutes, we if we want to break at 1:00 now or I can do one more document.

ATTORNEY BLOCK: I'm fine continuing if you are.

THE WITNESS: My bias is to push.

ATTORNEY BROOKS: Folks online, we're going to continue a little bit farther.

BY ATTORNEY BROOKS:

Q. You cited a paper by Harper from 2015. And that paper also I take it you studied with some detail?

A. Yes.

Q. And how many individuals did Harper have in that study?

A. I --- do we have her ---?

Q. Everything that you mention I have.

ATTORNEY BROOKS: Let me mark as Safer

Exhibit 11 ---
ATTORNEY WILKINSON: Yes.
ATTORNEY BROOKS: --- Harper's --- Harper et al. or just Harper, article Race Times for Transgender Athletes from 2015.
ATTORNEY WILKINSON: Tab 61.

(Whereupon, Exhibit 11, Race Times for Transgender Athletes Article, was marked for identification.)

THE WITNESS: Thank you.
BY ATTORNEY BROOKS:
Q. You say you have worked with Joanna Harper, you are aware that Dr. Harper is both an athlete and transgender?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: I am aware. I am aware that she is an athlete, and I'm aware that she is transgender.
BY ATTORNEY BROOKS:
Q. Did you have after studying the paper end up with an understanding of how many participants there were?

A. There were eight participants. I'm looking at Table 5.
Q. Did you have an understanding of how those participants were recruited?
A. I do have some understanding of that, yes.
Q. How is that?
A. The --- how would I characterize this? It's somewhat ad hoc in the sense that Ms. Harper is in the category of these other participants, and so she was able to identify others that met the criteria of being both transgender and being sufficiently intense in their middle distance running that they had race times that they could identify that would allow for the --- for these determinations of age based --- I don't know all the terminology here, but their age-based grade proportional to others in that same sex category.
Q. And it is consistent with your understanding, is it not, that all of the information in this study about what hormonal treatment these individuals had undergone was self reported?
A. This is --- the entire study is self report, that is she didn't have --- Ms. Harper did not have access to people's individual records independently.
Q. So there was no independent confirmation of how

long that they had suppressed testosterone.
Correct?
A. There was no independent confirmation beyond Ms. Harper and her dealing with other subjects directly.
Q. Well, in your view as a scientist, that's not independent confirmation, is it?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: So I'm not expressing an opinion there because in a science --- you know, in a scientific paper we would have --- we would have peer review, but we don't --- that just --- ends up being a little bit of a fuzzy realty.
BY ATTORNEY BROOKS:
Q. There is no information in this paper about what testosterone levels were achieved by any of these individuals as a result of suppression, is there?
A. I don't know. Let's --- I can look through that a little bit because does she reference how many of them have had surgery and such? It has been quite a while, you know. So notably, there is some independent confirmation of some of the data because some of this was posted.
Q. Wait. Let me just be clear. Some of the times were verified independently.

Correct?
A. That's correct.
Q. Nothing about the hormonal treatment?
A. Right.
ATTORNEY BLOCK: Do you want to give him a chance to review it?
BY ATTORNEY BROOKS:
Q. Doctor Safer, let me just withdraw that question and ask you another question.
A. Yeah, go ahead.
Q. Do you know whether Doctor Harper stands behind the conclusions of her 2015 paper today?
A. If you ask me do I know it, that's too strong a statement.
ATTORNEY BROOKS: Let me mark as Safer Exhibit 12 an article by Joanna Harper and others from 2021 entitled How Does Hormone Transition in Transgender Women Change Body Composition, Muscle Strength and Hemoglobin.
ATTORNEY WILKINSON: Tab 21.

(Whereupon, Exhibit 12, Joanna Harper Article, was marked for identification.)

BY ATTORNEY BROOKS:

Q. Dr. Safer, have we put that in front of you? Yes, we have. Are you familiar with this article?

A. I am.

Q. And have you read it, reviewed it recently?

A. I have reviewed it relatively recently.

Q. And do you understand, and I didn't completely read the title. The second sentence of the title says Systematic Review with the Focus on Implications for Sport Participation.

Do you see that?

A. I do.

Q. Can you tell me why when you cited Harper's 2015 paper that you just referred to as older science you didn't cite Harper's 2021 publication?

A. So to be clear, I didn't use the older science. I simply referenced Harper's paper as one of the only two papers on the subject. And your question?

Q. Why didn't you cite Harper's 2021 paper on the topic?

A. So this paper is more in the category of the papers looking at impact on tissues of which there are several papers as opposed to actually investigating a specific activity, a person's activity. And does this

have primary data in it?

Q. Well, let me take you to page eight.

A. Yeah, I don't even think this has a final data in it.

Q. Describing the Roberts study, Harper here on page eight, column one, about halfway down, summarizes as follows: Quote, trans women ran significantly faster during the 1.5 mile fitness test than ciswomen. These observations in trained transgender individuals are consistent with the finding of the current review in untrained individuals whereby 30 months of gender affirming hormone therapy maybe sufficient to attenuate some but all influencing factors associated with muscular endurance and performance, closed quote.

Do you see that?

A. Yes. This is the end of the paragraph there?

Q. Yes.

A. We're starting with these observations, yes, I see that.

Q. And do you propose to offer any expert opinion inconsistent with Joanna Harper's summary of the data here suggesting that 30 months of gender affirming hormone therapy may be sufficient to attenuate some but not all influencing factors associated with muscular

endurance and performance?

A. The statement here is too broad, so it's simply raising questions.

Q. Well, Joanna Harper says here that the findings of her current review were that 30 months of gender affirming hormone therapy may be sufficient to attenuate some but not all influencing factors associated with muscular endurance and performance?

ATTORNEY BLOCK: Objection to leaving out words of what you quoted.

BY ATTORNEY BROOKS:

Q. And my question for you is do you intend to offer an expert opinion that you believe is inconsistent with that statement?

ATTORNEY BLOCK: Same objection. It's misquoting the document.

THE WITNESS: So the operative or inoperative word here is may be sufficient, and so when we're --- these are research questions as we try to understand physiology and the relevance of certain testosterone levels at certain endpoints and then not just endpoints as surrogates, which is what most of the papers to date still are, but endpoints in actual athleticism and athletic competition. And so that's all

this is doing is putting out some questions or some potential thoughts.

BY ATTORNEY BROOKS:

Q. Let me ask you to turn to page one and column one.

A. Of this same paper?

Q. Of the same paper. In the conclusion of the abstract the last sentence reads, quote, these findings suggest the strength may be well be preserved in trans women during the first three years of hormone therapy, closed quote.

Do you see that?

A. I do.

Q. And having reviewed whatever literature you have reviewed to date do you share Doctor Harper's understanding that strength may well be preserved in trans women during the first three years of hormone therapy?

ATTORNEY BLOCK: Objection to misquoting the document.

THE WITNESS: So I can't comment on Ms. Harper's understanding, but if you're asking is that --- you know, is the question a question, so the question is a question. These findings suggest that strength may

and again an operative word is may.
BY ATTORNEY BROOKS:
Q. Yes.
A. And these are as I, a scientist, and she is a scientist too, we are turning the earth, as it were, of what we know looking for what questions we might want to study and how we might want to frame studies going forward.
Q. Let me take you back to page eight, if I may. And the penultimate sentence of this paper at the bottom of the first column of paragraph of page eight reads, quote --- well, let me read --- yeah, I will just read that, quote, whether transgender and cisgender women can engage in meaningful sport even after gender affirming hormone therapy is a highly debated question, closed quote.
Do you see that language?
A. I do.
Q. You'll agree that up to the present that is a highly debated question?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: There's context there too. So this is referencing a league sport and it's --- as well there are a range of potential sports, and so the

question and the degree to which it is highly debated even I'm not going to render an official opinion there. So the --- whether transgender and cisgender women can engage in meaningful sport depends on what sport we're talking about, what treatment we're talking about, age group, whether elite versus more of an intermural setting. And so it's just a relatively simple statement and to summarize a paper I guess.
BY ATTORNEY BROOKS:
Q. You agree that this --- that is the question of whether transgender and cisgender women can engage in meaningful sport even after gender affirming hormone therapy is one on which reasonable scientists can disagree and today are disagreeing?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: So going back --- so is your --- so are you asking me --- I guess help me reframe what the question is there because there are a bunch of things packed into that sentence actually. And you heard me try to unpack them both.
BY ATTORNEY BROOKS:
Q. That may be a complex question, as debated questions often are, but my question is do you agree that the question of whether transgender and cisgender

women can engage in meaningful sport even after gender affirming hormone therapy is one on which reasonable scientists can differ and are differing today given the possibility of data?
ATTORNEY BLOCK: Objection to form for the same reasons.
THE WITNESS: So I'm sitting here as a scientist talking about differences in athleticism and such and whether --- and so moving onto meaningful sport goes beyond my expertise. I'm only putting data together in a --- that's my lane on this subject.
ATTORNEY BROOKS: Okay.
Let's break for lunch.
ATTORNEY BLOCK: Let's go off the record, so 2:15.
ATTORNEY BROOKS: 2:15? Any dissent? No dissent.
VIDEOGRAPHER: Going off the record. The current time is 1:16 p.m. Eastern Standard Time.
OFF VIDEOTAPE

(WHEREUPON, A SHORT BREAK WAS TAKEN.)

ON VIDEOTAPE

VIDEOGRAPHER: Back on the record. The current time is 2:18 p.m. Eastern Standard Time.
BY ATTORNEY BROOKS:
Q. Good afternoon, Dr. Safer. Take you back into context, I'm going to ask you to find your expert report, Exhibit-1, and find paragraph 25, which we have looked at before. And there in the third sentence it reads based on current research comparing non-transgender boys and men with non-transgender girls and women before, during and after puberty the primary known biological driver of these average group differences is testosterone starting at puberty, and not reproductive biology or genetics, period, closed quote.
Do you see that language?
A. Yes.
Q. And your one cite for that is the endocrine that we've already looked at already.
Right?
ATTORNEY BLOCK: Objection to the form.
THE WITNESS: So the citation in that paragraph is the Handelsman, yes.
BY ATTORNEY BROOKS:
Q. And do you recall our earlier discussion about how the effects of testosterone are cumulative over time

rather than depending solely on the testosterone level of an individual at a particular time, right? Do you recall that discussion?

A. So the impact --- excuse me, the impact of testosterone is cumulative. It depends what impacts we're talking about. So there are impacts that are cumulative, like height, and there are impacts that really do reflect that point in time.

Q. Now, at the moment let me ask just based on your recollection. The Handelsman article is Exhibit-4. Do you have that? And I will ask you to find it in your pile. I should have neated up your pile of exhibits while you were out. That looks like it.

A. Got it, yes.

Q. The Handelsman article, as far as you recall, does not contain any data or conclusions concerning the effects of testosterone after the beginning of male puberty, does it?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Honestly, I would have to go look carefully.

BY ATTORNEY BROOKS:

Q. Then I won't take time to do that.

A. Okay.

Q. It does or it doesn't. We will deal with that.

A. Yes.

Q. Do you know whether any other writing Professor Handelsman has expressed any view as to whether testosterone suppression after male puberty eliminates sex-based physical advantages sufficiently to maintain fairness in sports for women?

ATTORNEY BLOCK: Objection to the form.

THE WITNESS: So first of all, putting it altogether that way isn't necessarily how I would say it or how I would expect it to be said. It would be testosterone suppression and whatever the scientific finding at the moment would be. So we already know that the data that relate to athleticism are just the Roberts paper and the Harper paper, so I guess that is as much as I can say in that particular context. And in terms of --- so yes, I think that it wouldn't be --- I forgot already how you phrased that.

BY ATTORNEY BROOKS:

Q. Let me just ask again.

A. Yes.

Q. So the first question is not a hard one.

A. Okay.

Q. Do you know whether Professor Handelsman has

himself in his publication expressed any view whether testosterone suppression after male puberty eliminates sex-based physical advantages sufficiently to maintain fairness in sports for women?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So I don't know if he has written something covering all those bases that you just described, how you described it.

ATTORNEY BROOKS: All right. Let's look at treatment variable. Let me mark as Exhibit 13 a short article by Dr. Roberts with a subsequent comment by David Handelsman.

ATTORNEY WILKINSON: Tab 62.

ATTORNEY BROOKS: And unfortunately, the words were a little clipped on this. We will see how we do.

(Whereupon, Exhibit 13, Dr. Roberts Article, was marked for identification.)

ATTORNEY BLOCK: Thanks.

BY ATTORNEY BROOKS:

Q. And I think a fair description of what we have here is a relatively popular press type piece by Dr.

Roberts first. And this document is dated December 16, 2020.

ATTORNEY BLOCK: Objection. Does it say where it was published?

ATTORNEY BROOKS: No, it doesn't say on its face where it was published. And as we sit here right now I don't recall, though actually looking at it I do recall that Kilio is an online publication of some sort, and I've seen the brand came from the Kilio website.

BY ATTORNEY BROOKS:

Q. At any rate, I see the date, I see the title. It purports to be an article by Professor Roberts. I just want to be clear in my description it does not --- it does not have the appearance of a separate peer review article since the summary taken off of the article that we've already looked at. And then at the end of it is a two-paragraph prospective on this offered by Dr. Handelsman.

Do you see that?

A. I do.

Q. And he begins by making clear that he is commenting on this study, that is Roberts study that is discussed above. He is not introducing new science,

correct, is that consistent with your understanding?

ATTORNEY BLOCK: Objection. Give him a chance to read it.

THE WITNESS: So that, yes, my understanding, too, is that there is not new data here, mostly a commentary within the context some of our existing knowledge on the Roberts study.

BY ATTORNEY BROOKS:

Q. And in his comment to Dr. Handelsman states in the second paragraph, as of 2020, quote, a major question remains whether gender affirming hormone treatment overcomes sex-based physical advantages sufficiently to maintain fairness so that an exception can be made for trans women, paren, natal males, closed paren, treated with estrogen.

Do you see that language?

A. I do.

ATTORNEY BLOCK: Objection. I believe that is what it says, but I just want to note for the record that there is text cut off on the left.

ATTORNEY BROOKS: There is. And I'll get better copies. I'm looking at a copy that's not cut off I will represent.

BY ATTORNEY BROOKS:

Q. And do you have an expert opinion as to --- well, do you propose to offer any opinion disagreeing with Professor Handelsman that as of 2020 it remained a major question whether gender affirming hormone treatment to overcome sex-based physical advantages sufficiently to maintain fairness so that an exception could be made for trans women treated with estrogen?

A. So to me that's too broad a question if you're asking me to render an expert opinion about his opinion.

Q. I'm asking whether you propose to offer an expert opinion inconsistent with his view that remains a major question as of 2020.

A. It's --- I might --- well, I would at least phrase things differently in there --- we might have to go through pieces of it because certainly where we lack data I think we would agree, but in terms of those statements that then go on to editorialize, I don't know that we necessarily agree in how we would frame that.

Q. A little farther down, maybe two sentences down it reads, quote, by contrast, trans women treated with estrogens after completing male puberty experienced only minimal declines in physical performance over 12 months, substantially surpassing average female performance for up to eight years, closed quote. Do you agree or

disagree with Professor Handelsman summary of the findings of Roberts?

ATTORNEY BLOCK: Objection to form. I'm just not sure it's all based on Roberts?

THE WITNESS: It is not clear to me that it's --- that it is based on Roberts for what it's worth. It's also somewhat simplistically written. And an example is we don't --- the contention with regard to athletic outcomes relates more to testosterone, and so saying transgender women treated with estrogens wouldn't be precisely how I would frame that either.

BY ATTORNEY BROOKS:

Q. He concludes --- Professor Handelsman concludes by stating supporting federations should incorporate these findings in the strategies for including trans women in elite female competitions while maintaining fairness and safety for other women. Dr. Safer, do you agree that maintaining safety for cisgender women is a legitimate and indeed important concern?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: As an expert I'm not going to give an opinion.

BY ATTORNEY BROOKS:

Q. As Doctor Safer do you agree that ensuring

safety for cisgender women and girls is a legitimate concern?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So if I'm simply speaking not as an expert, just as an educated person in the field, then it is true that safety is important, but I'm not clear that --- I don't know that in most of these athletic activities it's actually a concern.

ATTORNEY BROOKS: Let me mark as Safer Exhibit 14 a document entitled Guidance with Transgender Inclusion in Domestic Sport with symbols of a number of UK sport governing bodies across the front and a statement published September 2021.

ATTORNEY WILKINSON: Tab 22.

(Whereupon, Exhibit 14, Guidance with Transgender Inclusion in Domestic Sport, marked for identification.)

THE WITNESS: Thank you.

BY ATTORNEY BROOKS:

Q. And my first question for you, Dr. Safer, is whether you have seen this document before?

A. I have seen this document before.

Q. And were you aware of it prior to its reference in this litigation?

A. I don't know that I was.

Q. And are you familiar with the role of the supporting body mentioned on the front page in governance of sport within the United Kingdom?

A. By looking at all their logos, I cannot say that I know them all, no.

Q. And do you have any knowledge as to whether these are official government charted --- chartered sporting governing bodies?

A. I do not have that knowledge.

Q. Have you now studied this document with some care?

A. I would say that I have only looked at this document superficially. I'm certainly happy to look through it.

Q. I will ask you just about a couple of passages. Let me ask you to turn to page three of the document. And towards the very bottom and the next to the last paragraph this --- five organizations states, quote, our work exploring the latest research, evidence and studies made clear that there are retained differences in strength, stamina and physique between the average women

compared with the average transgender women for nonbinary person registered male at birth with or without testosterone suppression.

Do you see that language?

A. I do.

Q. And do you disagree with the conclusion of these UK sporting bodies that the latest research, evidence and studies now make clear that there are retained differences in strength, stamina and physique in nonbinary --- in transgender women or nonbinary persons registered male at birth with or without testosterone?

ATTORNEY BLOCK: Objection to referring to this as something written by the governing bodies as opposed to the quality council that makes recommendations to the governing bodies.

THE WITNESS: To the statement written by whoever actually wrote it that evidence and studies on the subject of transgender people make clear anything, I disagree.

BY ATTORNEY BROOKS:

Q. Let me ask you to turn to page six, under the heading question review is recommending it states, quote, as a result of what the review found the guidance concludes that the inclusion of transgender people into

female sport cannot be balanced regarding transgender inclusion, fairness and safety in gender affected sport where there is meaningful competition, period, closed quote.

Do you see that?

A. I do.

Q. And do you disagree with that conclusion of this organization or these organizations?

A. So I really --- as we discussed earlier, I'm not going to express as an expert --- I don't think I'd be able to express as an expert fairness and so I can't comment any further.

Q. Let me ask you to turn to page nine in your expert report, paragraph 49.

A. Okay. Paragraph 49.

Q. At the end of paragraph 49 you state, quote, a person's genetic makeup and internal and external reproductive anatomy are not useful indicators of athletic performance and have not been used in elite competition for decades. In making that statement when you refer to a person's genetic makeup were you referring to the question of whether they had XX or XY chromosomes?

A. So when I'm making the statement genetic makeup

I'm heavily referencing chromosomes. So I guess I would say that is mostly correct with some --- with perhaps some known genes, but mostly chromosomes.

Q. You would agree, would you not, that respected voices in the field take the view that genetic sex it is at least an important determinant of athletic performance, do you not?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So that I'm supposed to comment that there are people in the field who say that? I guess what I would say is the consensus right now among medical people advising elite athletic organizations would be to move away from using that as a surrogate. In the past it was. There were chromosome tests and the problem is that people have --- there is quite a bit of variety in biology and of course the moment you make a rule you see the exceptions.

BY ATTORNEY BROOKS:

Q. The exceptions.

A. And so I would say that as an expert I can't comment in terms of, you know, some study of everybody's opinion or some survey. But as somebody who has been on these committees I've observed that that was discarded.

Q. So if you put alongside individuals who suffer

from any condition that has been identified as a disorder of sexual development, am I correct that you consider yourself to have expertise in what constitutes a disorder of sexual development?

A. I have some expertise. And the terminology is actually differences of sexual development or sexual differentiation or intersex are the terms that are more popularly used.

Q. You would agree with me, would you not, that many respective sources up to the present would continue to refer to disorders of sexual development?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So there --- what I would say there is that --- the newer terminology has not --- has not yet permeated because there have not been revisions to all the documents that have been created.

BY ATTORNEY BROOKS:

Q. How about if we say DSD?

A. DSD is a reasonably safe or DSD intersex is what some people do, yes.

Q. Well, not all DSDs would be considered intersex conditions.

Correct?

A. You are right that some people try to parse

those two terms even. And there is --- but I think those kinds of distinctions might be on the scope of what we are discussing.

Q. Probably so. If we put on side individuals who suffer from anything that is characterized in the field as a DSD you would agree, would you not, that genetic makeup and specifically whether the individual possesses XX or XY chromosomes is a statistically meaningful indicator of athletic performance?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So no, and the --- it's --- I guess it depends what you mean is what it comes down to. So if you are --- if you are simply saying, well, a certain fraction of people of these chromosomes are going to be --- have this other characteristic, then maybe there are those kinds of associations. But if you are going to say that it's connected to the point where you could actually use one of those let's say observing a chromosome as an actual determination for a given individual, then I would say no.

BY ATTORNEY BROOKS:

Q. Is it your opinion that a gender identity itself is a --- or useful indicator of athletic performance?

A. It is my opinion that gender identity itself is

not a useful indicator of athletic performance.

Q. You say at paragraph 44 of your report --- I will save that. I think that is a new Declaration and we will not take time to do that.

Let me ask you to look at paragraph 24 of your rebuttal report. You say in paragraph 24 that none of Doctor Carlson's arguments support HB-3293 categorical ban of all girls who are transgender from all girls sports teams.

Do you see that?

A. I do.

Q. And I should continue. I'm sorry. Doctor Carlson's safety argument relates solely to contact and collision sports and the physical characteristics developed during puberty, period. By referring to a categorical ban let me ask this. Do you agree that safety considerations could justify or may justify excluding natal males who experienced all or significant part of male typical pubertal development from participating in female division of contact or collision sports such as basketball and soccer?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So if the question is would I anticipate as an expert that there would be a safety

explanation for banning transgender women from the female category, then I would --- I wouldn't --- I certainly --- let me think about which way to phrase it. I would have a hard time coming up with an example where I would use being transgender as a safety criterion as opposed to body habitus size or some other more objective criterion.

BY ATTORNEY BROOKS:

Q. Well, and I didn't say anything about gender status. Let me ask again. Would you agree that safety considerations could justify excluding natal males who have experienced all or a significant part of male typical pubertal development from participating in female division contact and collision sports such as basketball or soccer?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So you're saying that even if we otherwise decided that it would be okay for cisgender males to play with cisgender females, would I envision there being a safety reason to ban those cisgender males?

BY ATTORNEY BROOKS:

Q. All I asked had nothing to do with gender identity. Do you agree that the introduction onto the

field or the court in or have been spoken of its contact or collision sports in the female division of natal males who have gone through all or a significant part of male typical pubertal development could raise legitimate concerns about safety for the natal females?

ATTORNEY BLOCK: Same objections as the previous two questions.

THE WITNESS: So any person who's gone through a male puberty would that, per se, make me invoke a safety concern, if that's the question ---.

BY ATTORNEY BROOKS:

Q. Could that in your mind raise the given safety concerns?

A. So I would not --- the word legitimate I'm not addressing, but I'm not aware of that in and of itself being a safety concern.

Q. You state in paragraph 22 of your rebuttal report that, quote, transgender athletes and women have been competing in NCAA and secondary school athletics for many years at this point. Let me ask you if you are aware of any instance in which natal males have competed in the female category in any contact or collision sport in either the NCAA or high school division?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So can I identify transgender girls or women specifically and specific instances of participation? I cannot.

BY ATTORNEY BROOKS:

Q. What was your basis for asserting that such athletes have been competing in the NCAA and secondary school athletics for many years?

ATTORNEY BLOCK: I'm sorry. Is the question about collision sports? Because you are quoting something that is not about collision sports.

ATTORNEY BROOKS: Let me break that out. Thank you.

BY ATTORNEY BROOKS:

Q. Do you have a view as to whether --- I shouldn't say a view. Do you have any information as to whether transgender athletes have been competing in the women's division of NCAA or secondary school athletics in any contact or collision sports for many years?

A. That information on the validity is that they have had access because there has not been a ban.

Q. But whether they have done so you do not have any information?

A. But I cannot point to specific instances, exactly.

Q. I apologize if I asked something early in the morning, but it's faster than trying to dig back into the transcript. Do you have any opinion as to whether it is reasonable to exclude a natal male with a male gender identity from a high school girls basketball team?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So ask that again a little bit slower.

BY ATTORNEY BROOKS:

Q. Do you have have any opinion as to whether it is reasonable to exclude a natal male with a male gender identity from participation in a girls high school basketball team?

ATTORNEY BLOCK: Objection.

THE WITNESS: I do not have an expert opinion on that subject.

BY ATTORNEY BROOKS:

Q. Do you have a personal view?

A. I don't know that I --- there it would get more complicated depending on context.

Q. You don't have a simple yes or no personal view on that question?

A. I don't.

Q. And do you have a view whether it is reasonable to exclude a natal male with a female gender identity from participation in a high school girls basketball team?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So do I have a view on participation of a cisgender girl in the girls category? Sorry. Say it again.

BY ATTORNEY BROOKS:

Q. I said do you have a view on whether it is reasonable to exclude a natal male with a female gender identity from participation in the high school girls basketball team?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So that is a transgender girl, got it. So --- and the question is do I have a view on --- I apologize. Go back.

BY ATTORNEY BROOKS:

Q. I can do it again.

A. Yes, do it again. Sorry.

Q. Do you have a view as to whether it is reasonable to exclude a natal male with a transgender identity from participation in the girls high school basketball team?

ATTORNEY BLOCK: Objection to form.
THE WITNESS: And it is do I have a view on excluding --- as an expert am I opining on that? I'm not. I'm opining as a scientist on what the data are.
BY ATTORNEY BROOKS:
Q. Do you consider a policy that excludes natal males with a male gender identity from the girls basketball team to be, quote, discriminatory?
ATTORNEY BLOCK: Objection to form and scope.
THE WITNESS: So as an expert I'm not taking a position on excluding cisgender males from the female category, if I answered that correctly.
BY ATTORNEY BROOKS:
Q. My question was simply do you consider such a policy to be a discriminatory policy?
ATTORNEY BLOCK: Objection to form and scope.
THE WITNESS: So are you asking me as an expert to define discrimination?
BY ATTORNEY BROOKS:
Q. I will direct you to paragraph 27 of your rebuttal report. And there you wrote Doctor Carlson has not offered cogent explanation for why alleged safety

concerns based on average differences in size and strength should be addressed within an across the board exclusion of transgender women as opposed to tailored nondiscriminatory policies.
Do you see that?
A. I do.
Q. So understanding discriminatory, however you did understand it when you wrote that, do you consider a policy that prohibits natal males with a male gender identity from participating on the girls basketball team to be a discriminatory policy?
ATTORNEY BLOCK: Same objections.
THE WITNESS: Right. So I'm not defining --- I'm not defining discriminatory here. I'm --- right. So if you are asking as an expert to define discriminatory, that I can't do.
BY ATTORNEY BROOKS:
Q. Well, if you don't know what discriminatory means, what do you mean when you referred to a tailored nondiscriminatory policy?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: I guess I have to circle back initially to --- I mean we can do that for any word here, right, where I could have like my own personal

definition or am I acting as an expert to define these words, and I think we are kind of in that situation.
BY ATTORNEY BROOKS:
Q. But I'm asking you about your expert reports in the litigation. You must have meant something. What did you mean by nondiscriminatory when you submitted this expert report?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: So when I'm using the word nondiscriminatory I am using it to mean something that isn't using some other indicator --- well, I'm really just using it in the broadest sense to something that is including people.
BY ATTORNEY BROOKS:
Q. Using it in the broadest sense, discriminating between one category and another is --- could be a good thing or a bad thing.
Correct?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: As an expert I --- that is way outside my scope. But simply as an English speaker, yes, discrimination could be good or it can be bad, yes.
BY ATTORNEY BROOKS:
Q. And for instance, if you are --- well, you said

you don't prescribe to minors, so --- but if you are dealing with a 19-year-old who says and you concluded I need gender affirming hormone, and I will use the term you prefer, if that individual's hormones and biology are female then gender affirming hormones are going to consist, among other things, perhaps of administering testosterone.
Correct?
A. Yes, typically we would have have ---.
Q. And if that individual's biology and hormones endogenous were male, then the gender affirming hormones would include among other things estrogen or estrogen analog.
Correct?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: If that person had typically --- typically a male hormone profile, right, to move toward a more feminine profile that typically would include estrogens or some other agents that were other than testosterone, yes.
BY ATTORNEY BROOKS:
Q. So speaking scientifically and not in civil rights terms, if I may, you as a scientist, as you decide which regimen of hormones to administer to this

individual have to discriminate between those who are endogenously male and those who are endogenously female in deciding which regimen you prescribe.

Correct?

ATTORNEY BLOCK: Objection to the form.

THE WITNESS: We have to make a decision. And so if you are trying to get me to say that discrimination can be defined as making decisions, I'm with you and yes.

BY ATTORNEY BROOKS:

Q. Okay.

Let me just run down a few items to make sure. You have not personally engaged in any research regarding sports physiology, have you?

A. I'm trying to think it there's anything. I don't believe I have.

Q. You yourself haven't personally engaged in any research or published any papers --- that's a compound question. You, yourself, haven't engaged in any research relating to sports medicine or sports injuries, have you?

A. I have not engaged in any research with regard to sports injuries. And the answer to the first part of that gets a little muddled because some of the papers

that I have written about physiology and transgender people could apply to sports medicine.

Q. Have you, yourself, ever participated in devising any athletic training regimes for individuals of either sex?

A. I've not been involved in devising any training regimes.

Q. Have you done any research with related to male physiology --- I'm sorry, male physiological advantages relevant to athletics before, during or after puberty?

A. So there I have --- none of the research that I have done to date has been specifically loopholed as --- well, I can't even say that. So research that I have done with regard to observing physiology among my subjects can be applicable to sports medicine in some context.

Q. On what publications, if any, of yours do you believe relate to male physiological advantages in athletics before, during or after puberty?

A. Well, just off the top of my head, without looking at it exhaustively, I have a paper on hematocrit, which is the oxygen-carrying cells in people. In transgender people I have a paper on testosterone levels with different treatments. So those

can have --- those actually can have a sports context.

Q. Have you done any research on the impact of testosterone suppression on athletic performance or any measurement of strength?

A. So the second piece of that is I have not done any research that specifically used strength as an endpoint in my own studies. To the second piece of those --- I forgot what ---.

Q. Athletic performance?

A. Athletic performance, there it gets a muddled thing. The research that I have done can be applicable in that context.

Q. Well, that is if your endpoint is hematocrit count, to use the right term, you're saying that might have implications for athletic performance? Is that your point?

A. That is correct, yes.

Q. But you have not done any research in which any measurement of athletic performance is an endpoint?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Again, I have to think about how to say that because some of the --- part of the problem is that papers that we're looking at include quite a bit of literature on components that may be

applicable --- that may be applicable in sports medicine, whether it is muscle strength and muscle size or blood cell counts and such. And so that more expansively than my research is in that category. Whereas, if I'm trying to be focused and narrow, then I've got those two studies, the one by Roberts and the one by Harper. And my papers are not those.

BY ATTORNEY BROOKS:

Q. You don't have any information about numbers of children in West Virginia who suffer from any DSD, do you?

A. No, as --- I guess I have to say no there in terms of actual surveys of kids in West Virginia, I know some brought statistics. West Virginia is big enough that you would predict that the statistics would generally apply, but that is as smart as I could get on the subject.

Q. And you are --- I think you effectively answered this, but to be clear for the record you are not opining that BPJ suffers from any DSD?

ATTORNEY BLOCK: Objection to the form.

THE WITNESS: So the --- here too we get into --- into an evolving area of definitions where you could envision if some of the specific genetics that are

associated with being transgender became identified, would we in the medical world start to label those instances as DSD? It's possible. So that is just ---.

BY ATTORNEY BROOKS:

Q. Thus far no such indicators have been identified.

Correct?

A. I can't even --- I can't even say that definitively. It is an area of active conversation in terms of --- in terms of boarder setting in the medical community right now.

Q. However, I think my question is easier. You're not offering an opinion --- any opinion that BPJ suffers from any DSD, are you?

A. So I don't have --- so to be clear first I don't know the --- BPJ's specific medical condition. I wasn't brought in to evaluate that and I have not. So I can't actually render an opinion on any of the medical story there.

Q. And you don't know whether any child or typical XY chromosome --- pardon me, you don't know whether any child with XY chromosomes who suffers from a DSD has ever sought to compete in female athletics in West Virginia up until the present?

ATTORNEY BLOCK: Objection to the form.

THE WITNESS: So the question is do I know of an instance of a specific individual with XY chromosomes and a DSD connected to that who has specifically participated in sports in West Virginia?

BY ATTORNEY BROOKS:

Q. Who has sought to participate in female athletics in West Virginia?

A. Right, so who has sought to participate in female sports in West Virginia. I cannot give you a specific instance, that is true. I can say, though, knowing the percentage of people who have DSDs and the size of the State of West Virginia that you would predict it would be true, but that would be again as smart as I could be on one subject.

ATTORNEY BROOKS: Let me mark as Safer Exhibit 15 what was previously designated as Tab 53, an article by Dr. Safer and others entitled the Mount Sinai Patient Center Preoperative Criteria Meant to Optimize Outcomes are Less of a Barrier to Care than WPATH SOC 7 Criteria Before Transgender Specific Surgery. And yes, that is a mouthful.

(Whereupon, Exhibit 15, Dr. Safer Article, was marked for identification.)

BY ATTORNEY BROOKS:

Q. Now, Dr. Safer, to be fair, I see that you are the last listed author on a fairly lengthy list of authors. And maybe that does and maybe that doesn't have significance in terms of how in depth your involvement in this paper was. Let me ask. Was this a paper of which you had some significant input?

A. I had significant input. I can tell you that in the medical and scientific community the first author typically did the work and the last author is the senior author and supervisor. And the middle authors are actually the ones where you ---.

Q. Okay.

I was aware of the significance of the first. I was not aware of the significance of the last. Okay. That is helpful. All of the authors here, if I'm correct, are colleagues within the Mount Sinai Clinic or division that you supervise.

Am I correct?

A. All of the authors were in those positions at some point, which is how we came together to write the paper.

Q. And the paper I should say for the record is dated 2020. And let me see if I correctly understood what the paper is about. If we --- in this paper you compare the eligibility of patients who are seeking vaginoplasty under the WPATH Standard of Care 7 criteria versus the criteria actually used by your clinic.

Am I correct?

A. Yes.

Q. And just so we're clear, vaginoplasty is a surgery that is only done on biological male, natal male individuals.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So a vaginal plasty is the genital reconstruction surgery to create a vagina in a person. When we are using it as a gender affirming surgery, then we are using it on people who have what would be considered typically male anatomy in that circumstance but the surgery could also be used on somebody with typically female anatomy requiring construction for whatever their circumstance may be.

BY ATTORNEY BROOKS:

Q. That said, the subjects discussed in this paper are all individuals who are seeking the surgery for

gender affirming purposes rather than, for instance, because of a severe DSD.

Correct?

A. The people in this circumstance are all people seeking the surgery for gender affirming purposes and not those for DSD or for other purposes, reconstruction of vaginas for accidents and cancers. I mean there is quite a range.

Q. And the result as summarized in the abstract is that of 139 patients who were identified as subjects of this study, 63 qualified for surgery immediately based on the Mount Sinai criteria.

Correct?

A. Yes.

Q. Whereas only 21 of those would have qualified based on the criteria set out in the WPATH Standard of Care Version 7?

A. Yes.

Q. Three times as many individuals qualified for immediate surgery under the standard used by your clinic as opposed to the standards set out in the WPATH Standard of Care?

A. That's correct.

Q. When did your clinic begin approving surgery for

patients who are not eligible under the WPATH Standard of Care?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Yeah, so to be clear, the patients in our program qualify by both criteria. The paper is simply pointing out that our process is more efficient and patient friendly, but it's not to say that we were not informed by WPATH criteria also. And I think I need to expand even a little bit further. Part of the point of the paper is that it includes --- it includes efforts to know benefit to the patient that end up being time consuming and therefore are a waste of energy in contrast to our approach, which is actually more conservative than WPATH's approach. We actually look at more things but we do so in a more efficient fashion and that is actually the point of the paper.

BY ATTORNEY BROOKS:

Q. Well, let me clarify one thing you just said. According to this paper, it is not the case, is it, that every patient for whom your clinic approved surgery was at that time qualified according to the WPATH criteria?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Wait. Say it again. Could you repeat that?

BY ATTORNEY BROOKS:

Q. It is not the case, is it, that every patient who was qualified for surgery by your clinic had been demonstrated to satisfy the WPATH criteria for eligibility?

A. It is --- so there were --- the patients just as stated who qualified by our criteria but not by WPATH criteria, there is such a group that existed, exactly, yes.

Q. Okay.

And specifically, according to your criteria, three times as many patients are eligible according to WPATH criteria?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: It's not so much the three times. It is the pace. Some of this relates to pace and efficiency.

BY ATTORNEY BROOKS:

Q. Dr. Safer, your clinic, according to this paper, approved for surgery 42 patients who were at that time not eligible according to WPATH criteria.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: No. So the reality is we

still live in the universe that everybody else lives in, so we are --- so this paper proposes a more appropriate and a more patient appropriate model, but it is not the case that we actually sent people to surgery who would not be approved by WPATH.

BY ATTORNEY BROOKS:

Q. Well, were you personally involved in developing and approving Mount Sinai's criteria?

A. Let me look at the role here. Yes, I definitely had a role in developing our criteria.

Q. Let me ask you to look at page 168, column one, call your attention quite a bit to table one. And if I understand correctly, table one is designed to help us compare and contrast what is required by the WPATH criteria for surgical readiness versus the Mount Sinai criteria for surgical readiness.

Correct?

A. That is correct, yes.

Q. And the WPATH requires a letter of support from the patient's hormone provider confirming the hormone regimen and the length of time of hormone therapy.

Correct?

A. That is how it is written, yes.

Q. And farther down, under mental health it says

that it requires two letters of support from mental health providers?

A. It does, yes.

Q. And it gives on page 157 a definition who is a qualified mental health professional down towards the bottom of the second column. I'm going to ask you to find that language if you could?

A. Uh-huh (yes), yes.

Q. You say, many define licensed mental health providers having one or more of the following credentials, the LCSW, Licensed Clinical Social Worker. Is that right?

A. LCSW is Licensed Clinical Social Worker, yes.

Q. And MD, DO that is a medical doctor, a doctor of --- what does the O stand for?

A. Osteopathy.

Q. There we go. A psychiatrist, a Ph.D., yes, that was surprising to me. Surely not just any Ph.D.?

A. Right, that's referring to a Ph.D. clinical psychologist.

Q. Okay.

Or any Master's level for above counseling degrees. But then you go on to say that in your evaluation based on SOC-7 criteria. That's the WPATH

criteria?

A. That's the WPATH criteria, yes.

Q. We included the above degrees with the following exclusions, mental health providers with lower than Master's level training and unlicensed mental health providers of any type, NPs and PAs without mental health credentials, physicians who are not psychiatrists or mental health providers who are still in training. Do you see that language?

A. I do.

Q. So under the definition used in your clinic you, yourself, do not qualify as a mental health professional.

Correct?

A. That is correct.

Q. So at no point have you relied on your own opinion for any mental health evaluation for eligibility?

A. That's correct.

Q. Okay.

I just wanted to understand that clearly. So back to mental health data. In says in the WPATH column that two letters of support from mental health providers are required. In this paper you state on the next page,

but I will quote it the most significant of the Mount Sinai criteria is the removal of the requirement of two independent psychiatric evaluations. And that is in column two of page 169, at the end of the first full paragraph. The first full paragraph, column two, the final sentence.

A. I'm in which column? Sorry.

Q. Column two.

A. Oh, column two. Sorry.

Q. The first full paragraph, final sentence.

A. The most significant deletion from the Mount Sinai criteria is the removal of --- yes, I see that.

Q. And you stated at the top of column one on the same page that, quote, finding two mental health providers to do independent evaluations is time-consuming, expensive and difficult.

Right?

A. Just trying to find that exact wording. Yes.

Q. So in your own clinic's practice, while WPATH calls for two letters from independent mental health providers, you concluded that because it was hard to get two independent evaluations your clinic would simply dispense with the requirement of any independent mental health review.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: No, that is not quite correct. Part of the difference for our operation is that we have --- we have expertise in-house and we have --- if you notice, looking at the table, a longer list of requirements actually than WPATH does, which includes a social work component. And that actually is the --- that's the source of actually yet a second pair of eyes, as it were. And so it is not the case that we are --- that we're providing less of a screen, we are actually providing more of a screen. It's just that we are operating in a more efficient manner for the patient.

BY ATTORNEY BROOKS:

Q. Let's flip back to column one. A few more lines down it says for our analysis patients who otherwise met WPATH SOC 7 criteria received one letter of support from the CTMS mental health provider. Right? You would agree with me, would you not, that the only letter of support for a mental health provider required by your protocols is from a mental health provider within your employment?

ATTORNEY BLOCK: Objection to not reading the complete sentence.

THE WITNESS: So yes. So maybe let me just --- show me the wording again.

BY ATTORNEY BROOKS:

Q. Yes. For our analysis --- and I'm beginning at perhaps eight lines down.

A. Our analysis, yes.

Q. Patients who otherwise met WPATH SOC 7 criteria received one letter of support from the CTMS mental health provider doing the assessment, period, closed quoted.

Do you see that?

A. I do, yes.

Q. As the term is generally understood in your field, a CTMS mental health provider is not independent --- let me use the correct terminology, is not an independent mental health provider?

A. So in a clinic setting I don't know that the word independent actually has the same meaning as in some other context. So even a WPATH requirement isn't necessarily that it would be an unaffiliated person or I don't know what you were thinking independent might mean here, so I don't want to put words in your mouth or conjecture too much. But when we say independent we just mean two different people.

Q. But in fact, the letter of support from the CTMS mental health provider that you refer to in this paragraph at the top of column one of page 169 actually plays no role in your determination as to whether this patient is eligible for surgery.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So yes. I'm confused by the question.

BY ATTORNEY BROOKS:

Q. I'm confused by the text. The final paragraph --- sentence in that paragraph reads these letters of support were used to satisfy third payor requirements to cover surgery and were not part of the CTMS assessment?

A. Oh, yeah, that's a good point. The literal letter is because we are all in-house the opinion of the person is, of course, important and so the screen takes place. But the need to create --- the bureaucratic of creating a specific letter is one of the burdens that we are suggesting could be removed.

Q. In table one, let me find this. Under mental health WPATH SOC-7 requires, quote, persistent, well documented gender dysphoria.

Do you see that?

A. I do.

Q. And you understand well documented gender dysphoria to be referring to a general diagnosis under the DSM-V criteria?

A. So for WPATH's purposes I think they are specifically referring to the DSM diagnosis.

Q. In your clinic you are willing to approve for this --- I'm not sure how to actually say the word vaginoplasty surgery, individuals who do not suffer from persistent well documented gender dysphoria.

Correct?

ATTORNEY BLOCK: Objection to the form.

THE WITNESS: So if you look, the list of the criteria for Mount Sinai, then the phrasing is a confirmation that this person --- for all intents and purposes, that this person is transgender and with the language and evolution we use that word gender dysphoria and we also use the new word that will replace gender dysphoria, gender incongruence, as the terms I referenced before, transgender.

BY ATTORNEY BROOKS:

Q. And the effect of that is you do not require a diagnosis of gender dysphoria under the terms of DSM-V.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So the --- yeah, if we had our druthers, which is I think you are asking, and we did not --- and we weren't simply satisfying a third party payor, would we insist on that formal DSM-V criteria for a person we otherwise know to be transgender? We would not.

BY ATTORNEY BROOKS:

Q. And in fact, you do not.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Well, as a practical matter, like I said, we live in a universe where we end up doing both what we suggest is the necessary approach and we end up, because we still live in the universe that we live in, satisfying the other approach even though we're suggesting that it's cumbersome.

BY ATTORNEY BROOKS:

Q. Dr. Safer, you testified earlier that, in fact, in 42 patients your clinic determined they were surgery eligible even though they did not satisfy the SOC criteria listed in column one of table one?

A. Right. So they are not --- so they would be --- they theoretically would be eligible without having

satisfied the --- some of those specific WPATH criteria that we discussed. But in practice nobody went to surgery without covering both sets of criteria.

Q. Isn't the precise results reported by this paper that 42 patients were deemed surgery approved who did not qualify under WPATH criteria?

A. But I guess the bottom line of the paper is that if we followed our --- our rules alone, we would actually cover more details and be more conservative in our approach if a longer list of criteria and we would do so more quickly. That's all the paper says. It doesn't say that we have --- that we have actively defied the existing universe and sent people to surgery without covering the criteria that are generally being used by doctors.

Q. And by the way, the surgery we're talking about, vaginoplasty, in the context where it is being used for gender affirming purposes, invariably includes castrating the individual.

Correct?

ATTORNEY BLOCK: Objection to form and foundation.

THE WITNESS: So a vaginoplasty is a genital reconstruction surgery, which in this context is

taking the existing typically --- typical male genitalia and reconfiguring it into typically female genitalia. And in that --- in the procedure the testes are removed.

BY ATTORNEY BROOKS:

Q. They're not reconfigured?

A. They are not reconfigured.

Q. Let me ask you 169, column one, it says about two-thirds of the way down, at the end of the paragraph that begins medical requirements for the Mount Sinai CTMS? I want to direct your opinion --- your attention to the final sentence.

A. So which paragraph, column one.

Q. Column one, the paragraph that begins halfway down, medical requirements?

A. Yes.

Q. Now, let's jump to the end. The Mount Sinai criteria also removed the 12-month continuous hormone therapy requirement for the vaginoplasty which complicates matters for people who have received hormone therapy from non-medical providers.

Do you see that language?

A. I do.

Q. Explain to me the reference for people who have received hormone therapy from non-medical providers?

A. Well, it is the circumstance that some people more so outside of New York, some transgender people still do not have access to care for --- to gender affirming care and do get some of their treatment by alternative means. And if there is an insistence on a documented 12-month continuous hormone therapy requirement, then those people might not be able to be approved for surgery.

Q. I need to ask you to clarify what you mean by obtaining by alternate means?

A. We have people getting hormones from internet providers. We have people inappropriate --- well, I apologize, I don't want to make a value judgment there, but we have people getting hormones from friends or connections of theirs, things outside the system.

Q. So you have some people come to you who have effectively self-diagnosed and self-prescribed ---

ATTORNEY BLOCK: Objection.

BY ATTORNEY BROOKS:

Q. --- hormone therapies?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So when we are seeing people for surgeries, then it is no longer a matter of self-diagnosis because we see them ourselves with our

internal team. But there are people who have self-prescribed their hormones or obtained them by nonconventional means, that part, yes.

BY ATTORNEY BROOKS:

Q. And when people come in who have obtained hormones by nonconventional means and taken them without prescription necessarily, you chose to remove the requirement for 12 months properly prescribed continuous hormone therapy rather than insisting that the patients undergo control of hormone therapy for 12 months before you operate on them?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So to clarify, again, these are --- we are proposing that this would be the protocol. In practice, we have not been able to do this, that is we have had to do both. But in our experience, as a program we don't see any benefit to a supervised --- a supervised regimen, that is we are not --- I'll just leave it there.

BY ATTORNEY BROOKS:

Q. WPATH in table one requires that all psychiatric symptoms be, quote, well controlled.

Correct?

A. They use that language, yes.

Q. And the language under the CTMS column is rather different. Among other things it says no suicide attempt in the last six months. Do you see that?

A. Let me find it. We're in the table, right?

Q. We are in the mental health section under CTMS column?

A. Yes.

Q. No suicide attempt in the last six months. But if the patient tried to commit suicide seven months ago, that's okay?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So the point here and the distinction is that the WPATH criteria are too vague, and so what you are observing with the Mount Sinai criteria is they're much more granular. And rather than leaving something to some subjective interpretation we define some of the specifics to make it clearer on what the guidelines should be.

BY ATTORNEY BROOKS:

Q. You refer here in your guideline to no suicide attempt in the last six months. If a patient has entertained suicidal thoughts but made no attempt in the last six months, did that patient potentially satisfy the Mount Sinai criteria?

A. So that kind of decision would be at the discretion of the reviewing mental health professional, the psychiatrist or the psychologist, and so you can certainly envision different circumstances. So even going back to your example of seven months, you could envision that something like that might be considered, depending upon the person, too unstable even though they technically met criteria. This isn't just a check box. It is more a guideline. And similarly, to your point about a suicidal ideation, there are different tiers of them. And I won't claim to be an expert on the specifics there, but my mental health professionals are more concerned about some of those than others.

ATTORNEY BROOKS: Take a break.

VIDEOGRAPHER: The current time reads 3:35 p.m. Eastern Standard Time.

OFF VIDEOTAPE

(WHEREUPON, A SHORT BREAK WAS TAKEN.)

ON VIDEOTAPE

VIDEOGRAPHER: We are back on the record. The current time is 3:55 p.m. Eastern Standard Time.

BY ATTORNEY BROOKS:

Q. Dr. Safer, you testified earlier, and I think I'm using the word that you used that if your clinic had its druthers they would be following or making decisions strictly based on the criteria that are laid out in this paper, Exhibit 15, under the heading of Mount Sinai CTMS.

Correct?

A. Yes.

Q. And can I infer from that that you, yourself, don't view the WPATH SOC-7 as setting out scientifically established best practices but rather recommendations on which you use different?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: No, I would not say that. So SOC-7 sets out the guidelines as things were understood in 2011 and 2012, and we have learned --- we've learned and things have evolved since then in terms of the care of transgender people.

BY ATTORNEY BROOKS:

Q. Did you have any participation in the development of the SOC-7 guidelines?

A. I had very minimal participation. I helped review some articles that informed those guidelines.

Q. Those guidelines --- did you have any

familiarity with the process of how they were being drafted?

A. I'm trying to think if I can say things usefully. I was not close enough to the process that we would want --- that I would want to start commenting on.

Q. Do you know whether they addressed issues on which opinions within the drafting committee differed?

A. I can't comment on SOC-7. We are literally writing SOC-8 now.

Q. And on that are there issues that the SOC-8 is addressing on which opinions significantly differ?

A. Yes.

Q. So it's not that every aspect of the guidelines are unanimously agreed by every member?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So with medical guidelines in general there isn't --- that unanimity wouldn't be a thing. They're referred to as consensus documents rather than unanimous documents.

BY ATTORNEY BROOKS:

Q. And what that tells us is that there is --- that reasonable people differ on at least some aspects of what is set forth in the document?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: In all guidelines, including these, members of the committee even differ in terms of how things are framed and when consensus is obtained, but not unanimity.

BY ATTORNEY BROOKS:

Q. How many gender performing surgeries or gender affirming surgeries were performed in your clinic in 2021?

A. In 2021, all --- there were, according to the New York Times, about 9,000 total surgeries performed at Mount Sinai hospitals, including everything we do. So that wouldn't just be vaginoplasty. That would include chest reconstruction surgeries, revisions of older surgeries, et cetera.

Q. Well, you quote the New York Times. Where did they get the information?

A. I suppose the sources is us.

Q. You believe that number to be approximately accurate?

A. I think that's right.

Q. I don't trust the New York Times, but you have a pass. And now 2021 may or may not have been affected by COVID in terms of patients presenting and wanting surgery. Has there been a clear trend in numbers of

surgeries performed by your clinic over the last five years?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So there is definitely an increase in the number of surgeries at Mount Sinai over the past five years. Unfortunately, expectation is the challenge. We opened the program in 2016, so roughly those five years. And certainly the first few years were quieter as the reputation grew. In 2020, numbers were down because we had to divert resources to taking care of people with COVID. Our group, including myself, literally dropped what we were doing for a period of time to go become COVID hospital employees, and so there was a dip there in 2021 as a little bit of a rebound element to it.

BY ATTORNEY BROOKS:

Q. Are you able to give me any average total receipts of your clinic or the hospital as a whole and associated physicians from gender affirming surgeries performed within 2021?

A. I'm sorry, say that again.

Q. Let me just ask this again. Do you have any knowledge as the total --- as to the total receipts of your clinic or the wider hospital and physicians

involved as a result of gender affirming surgeries performed by your clinic in the last year?

A. So do I know some of the financial elements?

Q. Correct.

A. So I do know some of the financial elements, but nothing that the hospital would allow me to share.

Q. Your counsel can designate it as confidential later on, so it doesn't become public, but you are obliged to answer the question.

ATTORNEY BLOCK: I'm not ---.

BY ATTORNEY BROOKS:

Q. I'm entitled to understand your financial interest in the area of your testimony.

ATTORNEY BLOCK: We are not representing him in the context of any legal dispute with Mount Sinai.

ATTORNEY BROOKS: I am entitled to understand the expert's financial interest. And I suggest to you, Counsel, that you'd rather have me questions asked here where you can designate it as confidential than at trial in a public courtroom.

ATTORNEY BLOCK: It's not up to me.

ATTORNEY BROOKS: You can confer if you want, because that would be the alternative. If you

want to step out and confer with your witness, you should do so.

ATTORNEY BLOCK: It's not up to me to say what he can and can't say in contravention with an agreement with his employer, and so I think if you want to like obtain like a Protective Order, you know, with him.

ATTORNEY BROOKS: We have a Protective Order in place, Counsel.

ATTORNEY BLOCK: I know, I'm not representing him in that capacity, though. So if you want to interface with his attorney through Mount Sinai then you can, but I don't have an attorney/client relationship with him for purposes of any employment disputes.

ATTORNEY BROOKS: Are you instructing the witness not to answer?

ATTORNEY BLOCK: No, I'm not.

ATTORNEY BROOKS: Are you refusing to answer?

THE WITNESS: I wouldn't be able to answer without including the hospital lawyers.

BY ATTORNEY BROOKS:

Q. Can you tell me ---?

ATTORNEY TRYON: This is Dave Tryon. I'm sorry ---.

ATTORNEY BROOKS: Go ahead.

ATTORNEY TRYON: May I just also say that I think if the witness is not willing to disclose his financial interest here, that that would be grounds to disqualify him as a witness, which on behalf of the state I would likely pursue. So I would respectfully request that he answer the question.

ATTORNEY BLOCK: Dave, on what basis is that grounds to --- he has disclosed everything required by the rules. You're asking for --- he has no financial interest in this litigation.

ATTORNEY BROOKS: We don't need to argue the motion right now. The motion seems likely, the motion will be briefed, but we don't --- we got no Judge here, we're not going to be deciding ---.

ATTORNEY BLOCK: If you want to file a subpoena as a third-party subpoena for that information with a Court Order, than you're free to do so. He is appearing here as an expert witness on his expert testimony. So you have plenty of discovery tools to obtain that information. And we're not his counsel for that.

ATTORNEY BROOKS: I do have discovery tools, including asking him questions at this deposition. I've attempted to do so. You have not instructed him not to answer. The witness has refused to answer. The record is clear.

BY ATTORNEY BROOKS:

Q. Let me ask you about personally. Does your own income or any bonus you receive depend on any part of the overall revenues of your plan?

A. It does not.

Q. And does your personal income consist strictly of a salary or also a salary plus fees associated with surgeries performed?

A. Exclusively a salary.

Q. And your income depends in no way on how many surgeries, you yourself perform?

A. That --- well, I don't perform surgeries I'm not an endocrinologist.

Q. Pardon me.

A. But that's right, it's not revenue based.

Q. It's not revenue based in any way?

A. In any way. That's right.

Q. That is helpful. Do you have any understanding as to the average revenues per patient that your clinic receives for patients who are seeking gender affirming surgery in the clinic?

A. We don't characterize it that way. There's a --- there's a wide range of reimbursements or lack of reimbursements across medicine. And gender affirming care includes quite that entire range actually, from mental health, which is under reimbursed, to the surgeries which are --- where there's more money.

Q. I've been waiting to hear the flip side of that.

A. So yes, so we have that, so I don't think I could give --- I wouldn't --- even were I allowed by the hospital to give you the specifics, I don't know that I would be able to do that on a per patient basis.

Q. Can you tell me your total personal income in 2021 from --- in any way related to your work in connection with your employment at Mount Sinai?

A. So is this something that I'm answering?

ATTORNEY BLOCK: I'm sorry, could you restate the question?

THE WITNESS: He's asking for my --- you're asking for my salary?

BY ATTORNEY BROOKS:

Q. I'm asking for your total income, in any way --- in 2021 in any way associated with the clinic at Mount Sinai?

A. So we're running into --- so I'm simply on salary, but the specifics of that are also something where I would need to include the Mount Sinai lawyers, because that's part of their practice, and I would have to defer to them.

Q. You decline to answer the question about your own personal income?

A. Yes.

ATTORNEY BROOKS: I won't take time to speak upon it, but I will object.

BY ATTORNEY BROOKS:

Q. I read in some document that your spouse is an employee of Parexel --- if I'm pronouncing that company correctly.

Is that still the case?

A. Yes.

Q. And does that company derive any revenues from the sales, testing, clinical trials of any pharmaceutical that is used to suppress puberty or is used as a cross sex hormone?

A. I don't know the answer. Parexel is a very large back office organization supporting clinical research with many clients. And so you can envision

some connection buried in there, but I don't know specifics.

Q. Fair enough.

ATTORNEY BROOKS: Let me have 54.

BY ATTORNEY BROOKS:

Q. Let me ask you to turn to paragraph 18 in your expert report, and there in the first sentence you write although the detailed mechanisms are unknown, there is a medical consensus that there is a significant biologic component underlying gender identity, closed quote.

Do you see that?

A. No, I might have pulled the wrong thing out. Which ---?

Q. It's the expert report not the rebuttal?

A. Expert report. And it's which paragraph?

Q. Paragraph 18?

A. Oh, sorry.

Q. This is why lawyers number their paragraphs.

A. That is wise. All right. Paragraph 18.

Q. I'm just calling your attention --- and I have read into the record the first sentence of that paragraph.

A. I see it.

Q. And picking up on our earlier discussion about

consensus. When you say there is a medical consensus, do you mean that all experts in the field agree or do you mean that in your view this is a majority opinion?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So when I guess similar to when we talked about guidelines if the question is, is there unanimity, then there is never unanimity, so there you go.

BY ATTORNEY BROOKS:

Q. Okay.

A. I can be a little stronger, though, because the mainstream medical organizations have various statements in this space. So for example, the endocrine society, which is the largest international organization of endocrinologists does actually have a statement where the sum of the modeling for gender affirming care is prefaced with statements that support this.

Q. In providing the basis for your opinion that there is such a consensus, you cite only two papers and those only papers that you had written yourself.

Did you consider those papers written by yourself to adequately document the existence of the medical consensus?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So both of the papers reference reviews with larger bibliographies that reference yet other papers that support the statement. And when we're talking about what's informing the statement, of course, is not limited to the specific papers referenced, so that's part of the reason why I gave that example, for example, the endocrine society's formal statements on the project, which is a consensus view of more people than myself, of course.

ATTORNEY BROOKS: Let me mark as Exhibit 16, an article by Aruna Saraswat and others entitled Evidence Supporting the Biological Nature of Gender Identity from 2015 of which Dr. Safer is one of the co-authors.

ATTORNEY WILKINSON: Tab 54.

(Whereupon, Exhibit 16, Aruna Saraswat Article, was marked for identification.)

BY ATTORNEY BROOKS:

Q. And Dr. Safer, is that a paper that you --- I guess I see by placement --- had supervisory responsibility for?

A. Yes.

Q. Let me --- I learned something in this deposition, so that is good.

Let me call your attention to page two and column two, and in the very bottom paragraph ---.

ATTORNEY BLOCK: I'm sorry, did you mean 200?

ATTORNEY BROOKS: I did mean 200. I apologize. That is also the second page.

BY ATTORNEY BROOKS:

Q. In the bottom --- first column bottom paragraph it states, quote, however it is important to note that most transgender individuals develop a gender identity that cannot be explained by atypical sexual differentiation, closed quote.

A. So this is column two.

Q. Column one. If I misspoke I apologize.

A. I could have misunderstood at this hour.

Q. At the bottom paragraph?

A. However it is important to note, I'm there, yes.

Q. All right.

Can you explain to me what is meant by the statement that most transgender individuals have a gender identity that cannot be explained by atypical transgender differentiation?

A. So that is referencing, in this context at the time that this was written, the anatomy, genitals, reproductive structures.

Q. And let me just --- for purposes of terminology, you said at the time this was written. This is about seven years ago, six years ago?

A. 2015, yes.

Q. And if you look at the page one, column one abstract. This paper is using the term disorders, in sexual development, and that DSD.

Do you see that?

A. I do.

Q. That was a term that you were comfortable with most recently?

A. It was a terminology that I was using that recently, yes.

Q. The point here, on page 200, column one, that we were just looking at is, in fact, most transgender individuals do not suffer from any identifiable DSD.

Is that what this is saying?

A. From a physically identifiable DSD, that is what this is saying, yes.

Q. Physically, genetically, hormonally, identifiable by any physical measurement.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So you have to be careful to be not too broad, and part of the reason is the line there is actually blurring. So when I'm sitting here and talking in 2022 I recognize that there is a potential for some blurring in that line. But in 2015 it was certainly understood to be how you're saying it.

BY ATTORNEY BROOKS:

Q. Well, it remains true today, does it not, that the overwhelming majority of transgender individuals do not suffer from any identifiable atypicality genetically, physically or hormonally.

Correct?

A. Well, that's not how I would say it, because gender identity is a biological phenomenon and so one would predict that as we identify certain correlates or even explanations, than we will have things in that space. But if we're talking about how things were defined in 2015, being transgender was defined as somebody where their gender identity was not aligned with the rest of their biology, and there was no apparent, physical variation either in terms of their anatomy or their chromosomes in terms of their genitals,

in terms of their reproductive anatomy or in terms of their chromosomes. So that is how it was defined at the time.

Q. Well, today, and using identifiable to mean you, Doctor safer, are able to identify it now, not hypothetically in the future, it remains true that the overwhelming majority of transgender individuals do not suffer from any current identifiable, physical chromosomal or hormonal irregularity.

Correct?

A. I would say that right now in 2022, it would be true to say that a transgender person does not have an identifiable genital difference almost by definition or a --- or an internal reproductive organ difference almost by definition. Chromosomal I can't say, because we actually don't check. And hormonal gets even grayer than that, because it could be the case that there are hormonal exposures, for example, in utero that explain at, least some people as being transgender.

Q. As you sit here today, you don't know of any chromosomal test that can identify an individual as transgender, do you?

A. Is there a --- there --- as I sit here today there are no tests to identify somebody who is

transgender.

Q. And that includes genetic tests?

A. There's no scan and there are no blood tests and there are no genetic tests.

Q. And no hormonal tests?

A. That's right. There are no hormonal tests right now to identify a transgender person.

Q. As you sit here today and based on your whole knowledge of the field, there is no biological test from some mental professionals, as they can do, but there is no biological test that will tell you in advance which prepubertal child who is suffering from gender dysphoria would persist and which would desist as they enter adolescence?

A. So I would have to challenge how you're stating that a little bit just so that we are cleaner in terms of how we think. So we're thinking right now in terms of identifying kids who are transgender. We use various terminologies, so that --- we've have been using the term gender dysphoria we're going to be shifting to more gender incongruence, but we're trying to identify people who are transgender and who may require intervention later.

Recognizing further that only a subset of

transgender people would require a medical or surgical intervention. And so if the question is can --- is there a test now in 2022 to determine in an prepubescent kid who says they're transgender or people who suspect may be transgender on whatever they're saying, no, there is no test to know that is true or not and to know if they'll think that later or not, and to know if they'll want treatment or not.

Q. So it is your opinion that there is consensus that there is a biological basis for transgender identification, but as of 2022 you don't know with any confidence what that biological basis is.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I would say that it is complicated and there may even be more --- there might be multiple explanations for people being transgender. We see that with other biological entities like diabetes, for example. So the idea that we don't know what it is, is also a little too narrow.

BY ATTORNEY BROOKS:

Q. You don't know any one identifiable biological cause with any confidence that state within a scientific knowledge?

A. No. That's not quite true. We know that --- and it's not even the biology of being transgender even though that is how I just framed it. It is even one step back which is the biology of gender identity. We all have gender identity, and how is that determined and what is that biology. And we know there --- and we know then that some transgender people have that particular biology not aligned with some of their other biology.

So going back to what you just asked, that we don't know any mechanisms is not quite true. That is people that looks to be true that exposure to androgen, male hormones in utero can have some influence on some people as to their identity.

Q. Well, if there is not yet any test that is predictive of gender identity in a prepubescent child, then as a matter of science it follows that you don't actually know any causal relationship, any biological basis, is that not true?

A. No, that wouldn't be quite sure. We can't test for somebody deemed transgender, and we can't test gender identity with a test. But like I said, that at least in some circumstances the androgen exposure in utero, in a mother's womb, could be part of the explanation for some people. Maybe isn't all the

explanation for some people.

Q. It could be, but no science has been done to prove that that is a fact, has it?

A. So it isn't really a hypothetical, that is we do have --- we do have data that support it, but it doesn't lead us to a test.

Q. If it is not testable, then it is a hypothesis, not a fact, isn't it, not of science.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: No, that is using testing two different ways. So in a scientific study, then a hypothesis is something that you have based on a certain --- based on certain data, but then you test to see how true it might be. But when I was using the word test, I'm talking about like a blood test or something that we could actually do on a given individual to know their circumstance with regard to their gender identity.

BY ATTORNEY BROOKS:

Q. Let me ask you to look at the paper that I've marked as Exhibit 16, Evidence Supporting the Biological Nature. Is that that which you have in front of you?

A. I do, yes.

Q. And on the first page you refer under the result

that begins by discussion of a seminal study by Meyer-Bahlburg. Do you see that? Second column, beginning of the results section.

A. Yes.

Q. And is it your contention that the Meyer-Bahlburg study provides evidence of a biological basis for transgender identification?

A. What the Meyer-Bahlburg study does is it provides evidence of a biological basis for gender identity.

Q. Well, specifically the study, the Meyer-Bahlburg study --- let me have that so we are not shooting in the dark. Exhibit 17 is a paper from 2005 from Professor Heino Meyer-Bahlburg, entitled Gender Identity Outcome in Female Raised 46, comma XY persons with penile agenesis, and it continues. It's a long document?

ATTORNEY WILKINSON: Tab 14.

(Whereupon, Exhibit 17, 2005 Paper by Professor Heino Meyer-Bahlburg, was marked for identification.)

BY ATTORNEY BROOKS:

Q. I believe the level of questions that I will be

asking, however, are the ones that you will know off the top of your head given the importance of this study in the field. The study concerned exclusively children who are born with what's referred to as a 46 XY condition.

Right?

A. Yes.

Q. And that is long recognized as a DSD?

A. No, 46 XY is the classic male chromosome pattern.

Q. Yes. Pardon me. So these are individuals with typical male pattern chromosomes?

A. Yes.

Q. Who, however, for some reason have had a developmental disorder or defect affecting their genitals?

A. Who have had some sort of alteration or development of their genitals, exactly.

Q. And the study concerns the results of efforts to raise such genetically male children as female in some cases after surgical procedures to feminize them and in some cases absent surgical procedures.

Correct?

A. The study really relates to the gender identity of those where there is an attempt to raise them as

females.

Q. And the results, if I understand the study, were mixed, that is that some of the individuals who were raised as females nevertheless came to identify as male and some of the individuals who were raised as females came --- persisted in identifying as female.

Correct?

A. It is not actually as clean as you're saying it. So we should look at some of the specifics and we might need to point out to specific sentences, but this too is a survey of --- a survey of studies, to be clear, it's not its own isolated study, and then there --- in none of these studies were they systematic or, you know, I guess I will just use the word systematic in ascertaining that all of the people who were being raised female and ascertaining all of the gender identity of those people. But what they are really observing is that the numbers that they mention of the people who they were trying to raise female who had male gender identity were whatever the numbers were. I don't know if that makes sense, but you'll follow as necessary.

Q. If you turn to page 432 it begins under the heading discussion. It begins, quote, the main findings

can be summarized as follows. One, the majority of 46 XY individuals with presumably normal male prenatal hormonal milieu, comma, non-hormonal anatomic abnormalities of the genitals, comma, and female gender assignment at birth or in early childhood have not changed gender to male. Do you see that?

A. I do see it.

Q. And one thing, and I understand the qualifications that you've just described this is not recording a carefully structured study performed by Doctor Meyer-Bahlburg but rather a review of case histories.

Right?

A. Exactly.

Q. But his conclusion from his review of those is that the majority of genetically presumably normal male individuals who were raised female, and I believe it's fair to summarize in most cases after feminizing genital surgery, adhered to a female gender identity at least to the data we have?

A. Yes, so I don't know whether they actually all had surgery or not.

Q. They did not all have surgery.

A. Right or even the larger number. I don't know.

I would have to go through.

Q. Fair enough.

A. But the --- and it was his opinion at the time he was writing this that the majority who were reared female were living as female, although we don't know their gender --- but now this is me stepping out, saying we don't know their gender identity, nobody asked. The reason why this paper is interesting is even in the circumstance where they were being so passive in how they were collecting the data, such a large fraction of these individuals were so clear in their male gender identity that they actually identified themselves against the protocols.

Q. And that seemed to be evidence that --- of a biologic basis of gender identity congruent with their male genetics.

Correct?

A. That --- for these people, that's right. That is with or --- with their chromosomes.

Q. Right.

A. Which you would predict. If we think about --- if we recognize --- if we think that by survey a half a percent or even a full percent of people are transgender that would mean that 99 percent of people are cisgender.

And so if you take a population of people with certain chromosomes, 99 percent of them are going to be cisgender and will have a gender identity incongruent with their chromosomes.

Q. The study includes no individuals who were raised with a gender identity inconsistent with their male chromosomes who came to identify or later perceived themselves as identifying as female.

Correct?

A. Well, we don't know that because they were --- they're all XY individuals who were being raised female. And somebody who had a female gender identity who is transgender among them would never be identified as transgender in this case.

Q. So my question was a little more specific. The study simply doesn't include any individual who had male chromosomes who was raised male who came to identify as female?

A. That's correct. All of these people who are XY chromosome people raised female.

Q. And you would agree with me, would you not, the study provides some evidence that external forces such as feminizing surgery or how their parents treat the child can have some influence on the formation of gender

identity?

A. I can't say that because the study really doesn't go there. The study is only passive observation and all --- the only thing I would say with some confidence is that some fraction of these individuals who are so clear in their gender identity that despite nobody even looking for that sort of thing, because that wasn't even a consideration when these --- when these cases occurred, they --- the individuals spontaneously announced to the authorities around them, parents and doctors, that they were wrong, that the parents and doctors were wrong.

Q. And that, in your view, provides at least some evidence of a genetic basis for gender identity congruent with chromosomal sex?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: No. It provides some evidence of a biological basis for gender identity that can't be manipulated externally.

BY ATTORNEY BROOKS:

Q. Well, considering that the study included no examples of any individual who adopted a transgender identity inconsistent with how they were raised, the study simply can't provide any information about

biologic basis of transgender identification, can it?

A. Wait. I think say that again.

Q. The study includes no individuals who adopted a gender identity, a transgender identity apart from social transition and, therefore, can provide no information one way or the other about whether there is or is not a biologic basis for transgender identification?

A. So not quite. So the --- because remember the point is that gender identity, period, universally, has a biological basis. It's not that we --- and to be clear, I don't even know that we won't find and some people even wonder if we will find a gene that associates a gene with transgender, per se. But I'm not even saying that. If there's --- I'm only saying that we will find let's say genes associated with gender identity and not everybody will have them aligned with the rest of their biology. So I just want to preface with that.

And in this particular review, they're taking people who have XY chromosomes exclusively. So therefore, if one --- if a certain fraction of them were to have female gender identity despite assuming different development they would have had male --- they

would have had other male biology, those are the people we would have categorized as transgender using current definitions. And those individuals would not have been apparent in this study they were being raised female anyway.

Q. And my point was that, therefore, that this study can't provide any information about whether there is or isn't a biological basis for transgender identification?

A. So yes. I guess how you are framing that is where I'm pushing back. So the point of this study is as evidence of there being a biological basis of gender identity period, having nothing --- not necessarily for being transgender. In fact, I don't even know if there --- yeah, I don't even know if that would be the model. The model would be somebody who has a certain gender identity, a certain other biology, and then that combination is what we are calling transgender.

Q. You also referenced a paper by Doctor Reiner. And let me have that.

ATTORNEY BROOKS: And I will mark that as Exhibit 18, 2004 Discordant Sexual in Some Genetic Males With Cloacal Exstrophy Assigned to Female Sex at Birth.

ATTORNEY WILKINSON: Tab 71.

(Whereupon, Exhibit 18, Paper by Doctor Reiner, was marked for identification.)

BY ATTORNEY BROOKS:

Q. And Dr. Safer, you are well familiar with this paper.

Am I correct?

A. I am, yes.

Q. And this is the only other paper that you cite for the assertion that gender identity has a biological basis.

Am I correct?

A. No, there are a range of categories of papers, but these are two of my favorite papers in the first category, which is the category of attempting to manipulate gender identity externally.

Q. Dr. Bahlburg in his paper, on page 433 of Exhibit 14, in column one ---.

A. Yes. Let me get there.

Q. Yes. 433, column one.

A. 433, column one.

Q. He says about two inches off the bottom, referring to the Reiner and Gearhart paper of 2004,

which I believe is this paper, he says, quote, it has serious methodological flaws. Do you agree with that statement?

A. Let's read what he is criticizing. All these papers have their weaknesses. All right. So the remainder of that --- so the remainder of the paragraph is --- details the complaints for Doctor Meyer-Bahlburg, where his --- which I focus as a social science researcher that they didn't do various assessments that would make it --- that would make standard people doing some of this research able to replicate some of the items in the paper. And I will --- so while Doctor Meyer-Bahlburg may be frustrated and be complaining about that, he is not actually attacking the veracity of their results.

Q. Well, the point was serious methodological flaws is you are not really able to evaluate the veracity of the results.

Correct?

A. Not necessarily.

Q. Do you agree with Doctor Meyer-Bahlburg's evaluation that the methodology of the study reported by Reiner and Gearhart suffers from serious methodological flaws?

A. No.

Q. So let's summarize this study if I may. I'm turning to page 334.

A. And extending that too, part of his frustration wouldn't be my frustration because I am not looking for those particular endpoints, that is for my purposes for determining whether gender identity is a biological basis Reiner and Gearhart's paper is actually quite strong.

Q. Let's look at the first page in the summary up front. It refers to this paper dealt with 16 --- under methods, 16 genetic males.

Correct?

A. Yes.

Q. And these were all males who suffered from --- uses the word in the second line of the background as severe developmental disorders affecting their genitals.

Correct?

A. That's how it is phrased here. Where am I seeing that?

Q. The second line of the background says severe.

A. Severe phallic inadequacy, yes, I see that.

Q. Which is to say not --- absent or severely disformed penis?

A. That's what that means, yes.

Q. Okay.

But these are individuals who are genetically male, and more than that, on page 334, column two, two-thirds of the way down it says the testes were histologically normal in all 14 when examined?

A. I'm on column two.

Q. It is column two.

A. I apologize.

Q. You can kind of see where my finger is pointing here.

A. And this is under ---.

Q. Under methods and the paragraph that begins parents to be educated?

A. Testes were histologically normal in all 14. I'm there, yes.

Q. So we had individuals who were genetically male that had normal testes and had severe deprivation of their penis or it was absent?

A. Yes.

Q. And what was done to these 14 subjects, looking just above that, is that they were assigned a female sex surgically by means of orchiectomy and construction of vulva.

Right?

A. Yes.

Q. And orchiectomy is another medical term for what the layman thinks of as castration?

A. As removing the testes.

Q. And construction of the vulvi is creating a --- I'm not sure what the right term is, a pseudo vagina?

A. It wouldn't be a pseudo vagina, but creating a vagina.

Q. It says that --- just immediately following the description of the surgery 14 of these 16 --- looking back at the results paragraph and the abstract, 14 of these 16 were assigned female but later declared themselves male despite the surgery, despite being raised as female.

Right?

A. Right, 8 of the 14 who were assigned female.

Q. I'm sorry, I misread that. Thank you. Eight of the 14 who were assigned female nevertheless declared themselves male at some stage?

A. That's correct.

Q. And the two who had been raised as males, even though they suffered the same type of phallic developmental defect, remained identifying as males.

Correct?

A. Yes.

Q. There was an --- whatever assignment was made, this was made to infants. It wasn't made or based on any choice or reported sense on the part of the child?

A. That's exactly right, yes.

Q. So several of these individuals, specifically six, who were assigned female at least throughout the period identified by this study adhered to a female --- living out the female gender identity?

A. Actually it was five because one of the children refused to have contact with the surgeons when some of these conversations began to take place.

Q. So we know that five --- we don't know what that person was thinking, feeling or identifying --- but we know that five ---?

A. They were angry.

Q. They were angry. Whichever that came out, I'd be angry, so ---

A. Yes.

Q. --- so 5 of the 14 subjects who were assigned female and surgically transitioned and socially transitioned continued to at least physically identify as female?

A. As of when they wrote the paper they were still identifying as female as far as I remember. That's right.

Q. And it would be your position that visibly identifying as female doesn't necessarily mean that they were generally transgender?

A. That --- we don't know that because that wasn't asked.

Q. Is it your view that if you had these children who were surgically transitioned, socially transitioned visibly identifying as female, that if you had simply asked them you would have found out the undoubted truth about their gender identity?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So it is true that as people develop and assuming that there are good language skills and that there aren't other developmental, mental developmental reasons or other mental health reasons why people would not be clear, that people are able to articulate their gender identity. Certainly adults do so apparently quite reliably and older teenagers the same, so depending on age. But yes, there would be a point in time when you could simply ascertain that by asking.

BY ATTORNEY BROOKS:

Q. Dr. Safer is that fundamentally a medical question or a psychology/mental health question? The question of the reliability of a patient's self report?

A. I don't know that I separate it that way. I say that based on the data we slowly develop overtime of transgender people where we see that any absence of other confounding items along the lines that I said, people at a certain stage in maturity who tell you a certain thing about their gender identity are consistent in that regard.

Q. This study, the Reiner Gearhart study, Exhibit 18, concerns --- looks at the effect of trying to raise individuals in a gender identity discordant with their chromosomal sex.

Correct?

A. It is discorded with quite a number of things, but yes, chromosomal is one of your hard data points.

Q. This study does not look at the question about whether and when or how any sort of intervention might encourage development of a gender identity consistent with one's genetics sex; does it? It simply does not look at this issue?

A. Say that again, sorry.

Q. This study does not address the question of whether or how or at what developmental stage therapeutic interventions might encourage the development of a gender identity consistent with one's chromosomal sex?

A. The study is --- the way I'm interpreting the study is it's looking at our inability to manipulate gender identity. And it's just that. And I'm a little fuzzy on the rest of what you're asking me.

Q. Well, the study looks at efforts to manipulate gender identity away from chromosomal from the identity normally associated with one's chromosomal sex. In this case the male sex.

Right?

A. It does.

Q. This study simply does not look at efforts to manipulate gender identity towards alignment with the identity normally associated with a subject's chromosomal sex?

A. I think I'm following you now. So you're suggesting that if we took a transgender person and tried to manipulate their gender identity to align with some of the rest of their biology?

Q. I'm not suggesting that I'm simply saying this

study.

A. That particular instance. Yes.

ATTORNEY BROOKS: 15. It is one of the previous marked ones, if that matters. All right.

I will not show you that document. Let me ask the court reporter how many --- how much time we have left on the clock.

COURT REPORTER: I have 5:52, five hours and 52 minutes.

ATTORNEY TRYON: I didn't hear that. Could you repeat that?

ATTORNEY BROOKS: We've got an hour and eight minutes according to the clock of the court reporter here, and I believe that our friend in the ether is calculating separately.

VIDEOGRAPHER: Correct. And it sounds like the same. I have to do the math.

ATTORNEY BROOKS: Okay.

BY ATTORNEY TRYON:

Q. Are you familiar Dr. Safer with a paper recently published by Lisa Littman of Brown University looking at the surveying 100 teens or young adults --- actually surveying a hundred individuals who report having de-transitioned and gone from identifying as transgender

to identifying in a manner consistent with their genetic sex?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So I'm aware of Dr. Littman having written a second paper. But I'm not facile, I guess.

BY ATTORNEY BROOKS:

Q. You haven't read that paper?

A. I have not read the paper. I probably did read it, but I would not be able to be quizzed on it.

Q. Then I won't quiz you on it. I always tell witnesses I don't know is the easiest way out of a line of questioning.

Are you --- let me ask you this, does your clinic have any procedure in place to track outcomes on patients on whom you perform gender conforming surgery long term?

A. We're actually in the --- we have a couple of processes, so I guess the short answers are yes and we're going to be more rigorous going forward.

Q. Do you have any knowledge as to how many patients on whom your clinic has performed surgery have after that surgery committed suicide?

A. I don't off the top of my head know that.

Q. Do you believe that your clinic possesses reasonably complete information on that question?

A. I actually don't think our information is sufficiently complete currently, and that actually is an area where we're going to develop more vigorously, because I would actually like to know that.

Q. Do you know whether any patients on whom your clinic has performed surgery has subsequently sought to de-transition and take on or revert to, whichever way you want to see it, a gender identity that's aligned with their chromosomal sex?

A. So it's a complicated question. And actually I just want to go back to the first part where you were talking about suicide.

To be clear, the rigor I'm talking about is not suicide focused, because I actually am not anticipating that that is --- that that is happening or is happening more than with being seen in a general population, but for all encompassing that we do definitely need that.

But back to your current question ---.

Q. Let me jump back to suicide for a moment. Are you aware of studies coming out of DeVry University and Amsterdam suggesting that post-surgical transgender populations continues to experience elevated rates of

complete suicides compared to controlled populations?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So I'm aware that transgender people have more mental health morbidity than other populations. Once corrections are made for other confounding factors I don't know that we would have --- that we're very clear yet on those data including ---.

BY ATTORNEY BROOKS:

Q. When I refer to a published study coming out of DeVry University of Amsterdam showing high rates of suicidality in postsurgical transgender patients, you believe you're familiar with that literature?

A. I guess it would fall in the same category as Littman's second paper.

Q. Okay.

A. Where I'm familiar with the fact that they're doing surveys and I'm familiar with the broad outlines, but could not ---

Q. Okay.

A. --- comment on specific studies without it being in front of me.

Q. And have any patients on whom your clinic has performed surgery subsequently decided to de-transition

and assume a gender identity aligned with their chromosomal sex?

A. I don't --- I don't know. There is absolutely the case that there are people who stop their treatment at different levels, so it has definitely been my experience that I have patients who I've put on hormone treatments who have stopped those hormone treatments. And there are also, among our patients --- I don't know if any of the patients where we performed the original surgery they actually were opting for a different surgery, but we definitely have patients who have come to us, who had a surgery done elsewhere who were looking for a degree basically what you're calling a reversal, to the degree that that's possible. So that such a thing does exist. So the point about saying that they have a different gender identity, that would --- that is not typically how the patients come saying it. They don't say, oh, it turns out my gender identity is not that. It's more often society is not treating me well, this isn't working out. That's the more --- that's the --- that's the typical scenario. I mean, yes, we definitely have seen that circumstance.

Q. Dave Tryon, who is with us remotely as Counsel for West Virginia, I have promised him an hour, so I

have to stop, even though I have so many more interesting questions.

ATTORNEY BROOKS: So Dave, I will stop and I will turn the witness over to you.

ATTORNEY BLOCK: Could we take a break now?

ATTORNEY BROOKS: Of course, it is a good time for sure.

ATTORNEY BLOCK: Thanks. Can we go off the record?

VIDEOGRAPHER: The time is 5:03 p.m. Eastern Standard Time.

OFF VIDEOTAPE

(WHEREUPON, A SHORT BREAK WAS TAKEN.)

ON VIDEOTAPE

VIDEOGRAPHER: We are back on the record. The current time reads 5:25 p.m. Eastern standard Time.

ATTORNEY BLOCK: This is Josh Block on behalf of the Plaintiff. We have conferred off the record, including with counsel from Mount Sinai, and Doctor Safer can answer the two questions he declined to answer before provided that we mark those portions of

the deposition transcript confidential, and all counsel for Defendants have agreed with that.

ATTORNEY BROOKS: And this is Roger Brooks, and yes, I confirm that all counsel for Defendants have agreed to that.

CONFIDENTIAL PORTION BEGINS

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[redacted]

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[redacted]

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[redacted]

CONFIDENTIAL PORTION ENDS

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EXAMINATION

BY ATTORNEY TRYON:

Q. Hello, Dr. Safer. Thanks for your time today. So I am David Tryon. I represent the State of Virginia. I'm appointed by the Attorney General's Office. And I wanted to start out by looking at --- asking you to take a look at your Rebuttal Report. I don't recall what exhibit number that is. If you could tell us what it is marked?

ATTORNEY WILKINSON: Exhibit 2.

ATTORNEY TRYON: Exhibit 2.

ATTORNEY WILKINSON: Tab 51.

THE WITNESS: I have that in front of me.

BY ATTORNEY TRYON:

Q. Could you take a look at paragraph six, please? Do you have that in front of you?

A. Yes.

Q. Great. Now, in here it says in the second or maybe third sentence as reflected in the same source cited by Doctor Brown dimorphous sexual characteristics in men and women are produced by a combination of genes, prenatal androgen exposure to sex hormones. And I'd

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like to focus on that particular clause. Can you explain what prenatal androgen exposure to sex hormones is?

A. Yes. That references --- I guess to me it's more or less exactly what it says, which is that the developing fetus is exposed to various hormones and other factors and androgen is specifically the male --- is typically what we consider to be the male sex hormone, although everyone has some. And then prenatal just means and in utero or in the mother's womb.

Q. So androgen for males is testosterone. Is that right?

A. Androgen in general is that category of hormones that we think of as typically male, even though, like I said, we all have them. And one of the androgens is testosterone. And with adults it is the one that we are talking about most of the time, of course.

Q. Okay.

So as I understand it, your suggestion is that that prenatal exposure to testosterone can have an impact even after birth.

Is that right?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So all factors --- well, I

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don't want to overstate it, but factors that occur to which a fetus is exposed in the womb have impact on the development of that fetus, of that person when they are born, and so androgens, including testosterone, would be part of that, so yes.

BY ATTORNEY TRYON:

Q. So are you aware of studies addressing the impact of prenatal exposure to testosterone as it impacts people after their birth?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I think I need you to be specific about which studies.

BY ATTORNEY TRYON:

Q. Are you aware of any study that addresses the effect of prenatal testosterone upon boys after they're born?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So the ---.

BY ATTORNEY TRYON:

Q. Or men?

A. So I can --- I guess --- I have to --- kind of two answers. Exposure to prenatal androgens, kind of generally because it is not always, testosterone explain the development of what we consider to be typically male

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genitalia so that all babies born with what --- with a penis and with a urethra that is the part for which you urinate, that's up inside the penis and having the gonads, which would typically be testes in the scrotum, all of that happens in response to testosterone.

BY ATTORNEY TRYON:

Q. And then that also triggers a question I had. You had previously said in your original report a person's genetic makeup and internal and external reproductive anatomy are not useful indicators of athletic performance and have not been used in a league competition for decades.

My question on that is, when you say a person's genetic makeup doesn't their genetic makeup trigger whether or not they are going to --- a person's genetic makeup will determine whether or not they're a boy or a girl, and therefore if they're a boy that would trigger their generation of more testosterone than a girl.

Is that a fair statement?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Yeah, no, that's --- so I think I need to walk that back a little bit. Why don't we --- can we do it like piece by piece or have you restate parts?

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BY ATTORNEY TRYON:

Q. I will restate it. So when you say a person's genetic makeup, what does that mean?

A. Mostly in this context I'm referencing their chromosomes that's the specific that in the further past was actually being used to identify people which we no longer do. It's not sufficiently reliable.

Q. Does the --- you have an X Y chromosome that is typically considered to mean that you're a male. Correct?

A. The XY chromosome is typically considered to mean that you're a male, correct.

Q. And that would mean that you would be generating more testosterone than if you have an X chromosome. Right?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So the presence alone of that XY pattern is insufficient to know with certainty that you're producing more testosterone and that is part of the point of I'm saying it is that biological sex is more complex, and you could have the gene for the testes that produce testosterone elsewhere, and then you wouldn't have that pattern and you still would be producing the testosterone or vice versa.

BY ATTORNEY TRYON:

Q. Okay.

Well, let's go back to prenatal testosterone. So you're not --- if I understood what you're saying before, you're not aware of any studies that show whether or not prenatal testosterone would have --- let me just start that over again.

Are you aware of any studies that address whether prenatal testosterone has impact on sporting, on athletics in children after birth?

A. Correct. That would be right to say that there are no studies of which I'm aware that can associate prenatal testosterone with athleticism. And I don't know what levels we're even talking. Like an adult level? What's your question there?

Q. My next question is, have you heard of the Journal of Sports Science and Medicine?

A. I guess you would have to show it to me.

Q. Okay.

Have you ever heard the name Jim Goldby or Jennifer Mays?

A. No.

ATTORNEY TRYON: Jake, could you bring up the Exhibit that I sent to you today, which is the

General Sports Science and Medicine?

ATTORNEY WILKINSON: Do you see anything?

THE WITNESS: I don't see anything. Oh, that'S too small. Okay. That's okay.

ATTORNEY TRYON: Okay.

And this will be Exhibit --- what Exhibit are we on Jake, do you know?

VIDEOGRAPHER: This is 19.

(Whereupon, Exhibit 19, Article, was marked for identification.)

ATTORNEY TRYON: I'm sorry, 19?

VIDEOGRAPHER: Correct.

BY ATTORNEY TRYON:

Q. Okay.

I take it from your earlier answers, you probably never seen it before.

Is that right?

A. I certainly don't recall. I don't want to state definitively I've never seen it either, but it's certainly not a paper that I'm going to know off the top of my head.

Q. Well, let me ask you to take a look at the

conclusion on page 449?

A. So can we move the pictures because they're blocking.

Q. Can you see it?

A. We're getting there. And then is there a way to move that? Oh perfect. Yes.

Q. Okay.

The conclusion says, current paper provides initial support from an association between prenatal testosterone levels and mental toughness, optimism, goal orientations, coping strategies and hostility, period. Findings tentatively suggest that the mentioned psychological characteristics may be partially biologically predetermined.

Do you see that?

A. I do see it, yes.

Q. Do you have any reason to believe whether that's true or not true?

ATTORNEY BLOCK: Objection. I just object to asking him about a conclusion when he just has a little snippet of that and hasn't reviewed the article. And I'm not even sure if it has been cited in the other expert reports.

THE WITNESS: I certainly can ---.

BY ATTORNEY TRYON:

Q. Go ahead.

A. I certainly cannot say if that conclusion has any logic to it without knowing the study.

Q. Understood. Is it possible since this particular study suggests there is an impact on adults by prenatal testosterone? Is it that prenatal testosterone could also have a DSD explanation for why should boys at 11 years old have more athletic ability than girls?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So speaking --- yeah, speaking as an expert, I can't give you an expert comment there without seeing their study.

BY ATTORNEY TRYON:

Q. Okay.

So you just can't say one way or the other. Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I mostly wouldn't want to comment on their study. I will only make the observation that the data of which I am aware do not show differences for prepubertal children, if that was part of your question.

BY ATTORNEY TRYON:

Q. And so the performance data that Dr. Handelsman pointed out showing that there are some damages given before puberty, you reject those?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So those broad cross-sectional studies don't get at input, whether they are referencing biological explanations versus societal explanations.

BY ATTORNEY TRYON:

Q. Okay.

Whether it's societal or biologic explanations, Handelsman still demonstrated that there is an advantage for pre-pubescent males over females in athletics.

Right?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: No, neither Dr. Handelsman in his paper --- he doesn't actually say that. And if you --- I think we looked previously at one of the figures where specifically the range of outcomes, if you were to repeat the study, included the girls doing better than the boys.

BY ATTORNEY TRYON:

Q. Well, that was only one of them. That was not

it. That was one of the charts. The other chart showed that there was an advantage, right?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: The other --- yeah, let me think with that one. Right. We are not getting into what the causality is, then the other charts did show the boys doing better. And again, the caveat remains what is not --- what is not demonstrated there is that there is --- that that is a biological thing versus simply the very longstanding societal and cultural environments.

BY ATTORNEY TRYON:

Q. And you've contended that there's a biological component to gender identity.

Correct?

A. Yes.

Q. Which we have not been able to identify in this deposition.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So it is not quite --- well I actually don't know what's been identified in the deposition. The data are included in my --- in the papers that I referenced that are what are convincing to

the medical community right now. The detailed explanations for the specific biology are not known if that's where you're going.

BY ATTORNEY TRYON:

Q. Assuming there is actually a biological component, as you say, to gender identity, that says nothing about whether a biological male identifying as a female should, as a public policy matter, be allowed to participate on a girls athletic team in high school and middle school.

Right?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So the way that I would say that is even if we recognize that there is a biological explanation for gender identity, that does not --- well, I don't know that then I can go on to make an expert statement, honestly, because that gets outside my purview and in terms of --- my lane is just simply to say that.

BY ATTORNEY TRYON:

Q. Got it. Can you look at your rebuttal report and look at page two?

A. I have my rebuttal in front of me and I'm on page two.

Q. Paragraph 4B?

A. I have that in front of me.

Q. You say --- great. You say circulating testosterone is the primary known biological driver of average differences in athletic performance. Do you see that?

A. I do.

Q. You say it is primary so what are the other biological drivers of average differences in athletic performance?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So when I --- so we're talking about circulating testosterone --- let me just look at this. Right. The truth is, is that it may --- that the only candidates that we have so far are testosterone at puberty and testosterone in the moment.

BY ATTORNEY TRYON:

Q. So it's --- according to you, it's testosterone at puberty and circulating testosterone are the only biological drivers of average differences in athletic performance.

Is that right?

A. So excuse me. I'm actually --- so this is the president of the hospital.

ATTORNEY BLOCK: I'm sorry. Can we go off the record for a minute and take a break. The president of the hospital is returning his previous call.

VIDEOGRAPHER: Going off the record. The current time is 5:48 Eastern Standard Time.

OFF VIDEOTAPE

(WHEREUPON, A SHORT BREAK WAS TAKEN.)

ON VIDEOTAPE

VIDEOGRAPHER: Back on the record. The current time reads 5:54 p.m. Eastern Standard Time.

BY ATTORNEY TRYON:

Q. My last question was according --- according to you, testosterone at puberty and circulating testosterone are the only biological drivers of average differences in athletic performance.

Is that right?

A. Right, they are the only ones that are known.

Q. And in paragraph 4C, looking on page three --- let's move over to page three, at the top of the page, your statement is there is no basis to expect that transgender girls who receive puberty delaying

medication followed by gender affirming hormones would have an athletic advantage. There's a comma. But if we just put a period there, is that your opinion?

A. That is correct. Yes, that is my opinion.

Q. Let me ask you the converse. You say there is no basis to expect that transgender girls who receive puberty delaying medication followed by gender affirming hormones would not have an athletic advantage, period. Would you agree with that statement?

A. No.

Q. Do you have any --- excuse me, any performance data from an actual athletic event that support your opinion?

A. I do not have any data from an actual athletic performance study for that. No, I do not in that context, in that specific instance.

Q. Let me ask you to look at your report. Turn to paragraph 45.

A. So my report, paragraph 45. All right. I have that in front of me.

Q. Great. Finally, unlike elite international competition, schools and colleges often provide athletic competition as part of a broader educational mission. In that context, when scholastic athletics are

components of the educational process, institutions may adopt policies designed to emphasize inclusion and to provide the most athletic opportunities to the greatest number of people. You see that.

Right?

A. I do.

Q. So these policies you referred to are designed to emphasize inclusion and to provide the most athletic opportunities to the greatest number of people, what's the source of that policy? Did you come up with that or did you see it someplace else?

ATTORNEY BLOCK: Objection to the form.

THE WITNESS: So the question is how am I aware? Yeah --- I apologize. You can hear that I'm confused on your question.

BY ATTORNEY TRYON:

Q. I'll try and do better. You said intuitions may adopt policies designed to emphasize inclusion and to provide the most athletic opportunities to embrace a number of people. And those policies that you're saying there, is that a policy that you read about somewhere or something you are just suggesting? What's the source of that?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So an operative word in this is may adopt policies, so this isn't referencing a specific policy that I would give you right this moment, if that's what you are asking.

BY ATTORNEY TRYON:

Q. So right, just aside from education --- this whole paragraph is talking about education, but you're not an expert on education or teaching methodology, are you?

A. I certainly am not.

Q. And you don't have any degrees in education or training in teaching methodology, do you?

A. I do not.

Q. And you have no degrees or training in pedagogy?

A. I have no degree in pedagogy. I will be careful how absolutely I do not, because that's not my --- that's not where I am representing myself to be an expert. I am involved in some education, but at the scholastic level not, so let's just say no.

Q. And you have no expertise as to whether sports or how sports are used as part of educational systems.

Right.

A. Correct. That is not the expertise. The how and my decisions among this are not my expertise.

Q. Do you have any idea how many schools actually have sports programs?

ATTORNEY BLOCK: Objection. I couldn't hear the full question. You cut out.

BY ATTORNEY TRYON:

Q. Sorry. Do you have any idea how many schools have sports programs?

A. I could not give you a number, no.

Q. Are you aware that some colleges do not have athletic programs?

A. I guess I'm vaguely aware. If you're asking me as an expert than I wouldn't comment on that as an expert, but as a human in society I certainly am aware that that is a thing.

Q. Okay.

And do you have any idea what percentage of kids are in athletic programs in schools versus those that are not that are still students?

A. No, I would not be your source for that data point.

Q. So when you are expressing this opinion in paragraph 45 that's not an expert opinion there, is it?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So right, I guess it's a

bit confusing here, because it's not my expert opinion that --- well, I'm certainly aware as an individual that this is a priority and when I sit on --- when I sit on committees where we discuss relative priorities, there are experts present who discuss these priorities. But if I'm speaking to you as an expert, then I --- then I can't be the representative expert in that space.

BY ATTORNEY TRYON:

Q. Right. Well, I'm just asking, in paragraph 45, given your lack of expertise and education, you are not giving an expert opinion in paragraph 45.

Is that a correct statement?

ATTORNEY BLOCK: Objection, asked and answered.

THE WITNESS: So I'm simply --- I'm raising all of the issues that we know exist, but then I'm not providing an expert opinion in terms of the relative priorities among these circumstances that exist.

BY ATTORNEY TRYON:

Q. Let me just ask you very clearly is paragraph 45 an expert opinion of yours?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I don't think I'm even

expressing an opinion in paragraph 45, expert or otherwise. I'm simply stating the background situation.

BY ATTORNEY TRYON:

Q. Okay.

But --- okay. I would ask you to turn to paragraph 37 of your report.

A. All right.

I have that in front of me.

Q. This is talking about the International Olympics Committee. Right? Let me move back to paragraphs 35 and 36.

A. Yes, this is the International Olympic Committee. This relates to the International Olympic Committee.

Q. So this 2021 framework, do you believe that you understand this framework?

A. I think you'll have to ask more specific questions because I might understand parts and I might have questions about parts.

Q. Very good. First of all, it says the 2021 framework further provides that, quote, any restrictions arising from eligibility criteria should be based on robust and peer-reviewed research that, A, demonstrates a consistent, unfair, disproportionate competitive

advantage with performance and/or an unpreventable risk to the physical safety of other athletes. You see that part, right?

A. I do, yes.

Q. Do you understand what the word disproportionate means in this context?

A. To a degree.

Q. Okay.

What do you understand it to mean when it says a disproportionate competitive advantage in performance?

A. The IOC is aware that there's quite a wide range of advantages with different body types and different biology, and so they use language like disproportionate when they want to talk about something that's --- that's --- that's systematically associated with one circumstance in a way that they think would violate the rules, whatever they might be, for a specific sport.

Q. That's pretty ambiguous. I have no idea what that means. Let me see if we can narrow it down. Is a disproportionate competitive advantage in performance --- would 20 percent be a disproportionate competitive advantage?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So that's --- I can't

answer that, because it depends on context, and I'm not the person who wrote the specific language in that document, so that is the quote from the document. But in terms of --- I don't --- I think we go someplace we don't want to go if we try to over define the specific word disproportionate.

BY ATTORNEY TRYON:

Q. So it's just not something that you or I could look at and reach any kind of conclusion to tell them what that means sitting here today.

Is that right?

A. I think if we look at a specific sport, I think that if it was limited to just the two of us we might need more expertise to make a decision.

Q. Well, let's say if we talked about the one mile --- running one mile, is that something that we could then determine what disproportionate competitive advantage and performance would mean?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: It would depend on context. And if we're talking about at the elite level which is what the IOC references and we limited --- even then if we limit it just to you and to myself, we would want more expertise.

BY ATTORNEY TRYON:

Q. Right. Okay.

So we don't know what the IOC meant by this in any particular context do we?

ATTORNEY BLOCK: Objection to form.

ATTORNEY TRYON: Actually, let me redraw this question.

BY ATTORNEY TRYON:

Q. You as an expert would not be able to give me an expert opinion on what disproportionate competitive advantage in performance of the one mile run would be; right? You could not give me an expert opinion on that.

Fair statement?

A. If you break the words out in that --- in that fashion then it does become difficult. If you ask me what the entire statement after the letter A is referencing, I can at least explain some of the thought process for the IOC there.

Q. Well, my question is simply, you as an expert, are you able to tell me what --- able to define for me what would be a consistent, unfair disproportionate competitive advantage in performance in a one mile run for the IOC?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I, as an expert, cannot give you a blanket explanation of what would specifically consist of --- what would specifically meet that definition. When they wrote the statement they didn't actually even have specific guidance, that is simply the spirit of a guideline --- the spirit of what a specific guideline should consider when that guideline is made.

BY ATTORNEY TRYON:

Q. Do you know what they meant when they said unfair?

A. So the --- it's kind of the same circumstance. That is the purpose of this statement is to be global guidance for the experts in the specific sport when they might develop guidelines relevant to their specific sport. So for example, the group with expertise in that one mile run that you're referencing should think in this context. That's all this is doing.

Q. And some of the sporting organizations have come up with some very specific rules.

Correct?

A. Some of the sporting federations have come up with specific rules, yes.

Q. And as I recall, some of them require a certain

level of circulating testosterone.

Is that right?

A. Some of the sporting federations use a certain level of circulating hormone as part or all of their roles.

Q. And some of them use the level that you've mentioned that you were involved in setting, which was 5 Nmol --- say it for me. Nmol something.

A. Nmol/Ls per liter. Yes, some of them use that nmol/L per liter threshold.

Q. Did they --- where did they get that 5 nmol/L quantity, do you know?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So I do know where that number comes from originally for World Athletics, which is the first one to put that number out. And that number comes from studies of some Olympic athletes in some races where there was for at least certain distances a demonstrable difference between people who had --- and specifically people in the female category who had lower numbers of testosterone than that and higher numbers of testosterone than that.

BY ATTORNEY TRYON:

Q. You were on that committee.

Right?

A. I was on the group that wrote that World Athletics policy, yes. Not on the group that did that study.

Q. And so how did you finally come up with the number of five as opposed to four or six or three or seven?

A. The number five discriminates in terms --- in terms of there being some demonstrated advantage or improved outcome is really what it was, for those with higher numbers versus those with lower numbers. That was not true necessarily with a lower testosterone threshold. That is a difference was not as apparent and that's really the entire logic pattern there.

Q. Well, earlier you just said it could have been --- you didn't think there was that much difference between five and six. That was your testimony earlier as I recall.

Right?

ATTORNEY BLOCK: Objection.

THE WITNESS: As an endocrinologist I can tell you that those difference --- that that's right that to --- the difference between five and six would be hard to demonstrate.

BY ATTORNEY TRYON:

Q. So how did you settle on five instead of six or five or six instead of four?

A. So I guess the inputs are that there needed to be a line so that there's ability to enforce something. There needed to be a rule. And the choice of five, mostly, is what I've been saying already, which is --- it's a clean number where there's at least some distances, there's a demonstrable difference in outcomes at that level --- above and below that level.

Q. So are you saying that there is a value of having a hard rule?

ATTORNEY BLOCK: Objection to form.

BY ATTORNEY TRYON:

Q. Maybe I should say having a clean rule?

A. So as an expert I'm not --- that wasn't my role on the committee to determine that there needed to be a rule, but that is certainly the logic pattern of the committee that there ought to be a rule. That is not my expert opinion.

Q. Okay.

But different organizations are free to come up with different conclusions of about what their rules ought to be.

Right?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So the different International Athletic Federations were to make use of data such as it exists to make their own rules for participation in their sports.

BY ATTORNEY TRYON:

Q. And different organizations came up with very different rules.

Right?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: So most of the international federations still do not have rules, actually. And honestly, that's mostly a logistics situation where some of these organizations are too small to put the data together or the committees together to make rules.

BY ATTORNEY TRYON:

Q. Those that do have rules have different rules.

Correct?

A. Those that do have rules have had different conversations in the space. I don't know that I could systematically go through all of them, but there is some variation, yes.

Q. Some require --- have a Level 5 nanomoles per liter and some still have ten.

Right?

A. So I'd have to go back and look. You would have to show me. World Athletics has five for sure. And that's the one where I'm most familiar because I was actually sitting in the room helping draft that. The IOC in the past had used ten as a line, but that just sits there right now as a --- as a number someone might adopt. I actually don't know off the top of my head if anybody has adopted that for their formal rules.

Q. What was the scientific basis for the ten nanomoles per liter?

A. The logic for ten at the time is it is the bottom of the male range. That's its history.

Q. Okay.

So it sounds to me like there is room for reasonable discussion about what the appropriate rule ought to be?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: The way I would say it is as different athletic organizations obtain data, they might use those data to determine differences, including if the --- if our best measure is testosterone,

different thresholds of testosterone.
BY ATTORNEY TRYON:
Q. Would it be appropriate to use performance data as well to make those decisions?
A. The best data in my opinion are actual outcomes within a given sport.
Q. What do you mean by outcomes, performance? Are we saying the same thing?
A. I don't know if we're saying the same thing. So the studies that I reference are the Roberts study and the Harper study, where they actually look at specific athletic endeavors and measure those as opposed to the studies where they're simply sitting in a physiology lab measuring somebody move an arm back and forth and thinking that it might associate with some actual athletic performance.
Q. Somebody moving their arm back and forth with weights, that's not athletic?
A. It's --- again, it would --- right, that's --- that's only --- that's what we would call a surrogate endpoint where you are simply looking at something that might correlate with what you want, but --- but you don't know it until you test it. It ends up being what we call hypothesis generating. That is how we would say

it in a scientific way.
Q. And the same would hold true with the level of circulating testosterone, you would want to actually test that in real life to see how people's circulating testosterone actually translates into performance of an actual athletic contest.
Right?
A. That's right. So the data that were used to determine the five nanomole per liter cut point are passively collected data. And if somebody did a study looking at that threshold and found that there was, let's say, no difference, then that rule might be discarded.
Q. And so far, other than Roberts and Harper, if I recall correctly, those are the only two that you know of.
Right?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: Those are the only two studies that have gone that extra step and looked at an actual athletic activity with an outcome that is part of that athletic activity and not what I was just referencing, as a surrogate endpoint.
BY ATTORNEY TRYON:

Q. In those two studies did they check the circulating testosterone in the individuals in these studies?
A. I'd have to look. I think we did look earlier today with regard to the Harper study, and I don't think she's referencing testosterone levels at all. Again, I'd have to go back and look to be sure. We were talking about whether they were self-reported. And the --- with the Robert study I would have to go back and look at that one, too. I'm feeling like the answer is no, but we can look there if you want.
Q. Yeah, we don't need to. I'm pretty sure that we just talked about how long they had been in the therapy rather than actual measurements.
Well, let me move on. I know we don't have a lot of time left.
So you said you're familiar in your expert report you are familiar with HB-3293.
Is that right?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: So yes, I'm somewhat familiar.
BY ATTORNEY TRYON:
Q. Have you read the whole thing?

A. I don't think I've read the whole thing, no.
Q. When did you first hear of HB-3293?
A. I probably first heard of it when the --- when I received contact from the ACLU to serve as an expert witness.
Q. Do you recall if that was before or after it was passed?
A. I don't recall. I would have to speculate that it would be after, because that would --- I mean that would make sense that that is true, but I don't recall, so I wouldn't be able to answer that.
Q. Okay.
So we would refer to this as State Women's Sports Law and there's other types of laws like this throughout the country.
Are you aware of that?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: So I'm aware that there are attempts at legislation and some actual legislation passed to block transgender athletes in various permeations, including transgender women in several states. I'm aware of that, yes.
BY ATTORNEY TRYON:
Q. Are you aware then House Bill 3293 the word

transgender does not appear at all?
A. House Bill --- that's this one?
Q. That is this one.
A. I was not aware that the word transgender does not appear at all.
Q. Are you tracking the other bills out there that are similar to House Bill 3293?
A. I am not personally tracking the other bills, no.
Q. Can you take a look at the Handelsman report that you have in front of you. I don't recall the exhibit number.
ATTORNEY WILKINSON: I think Exhibit 13 --- oh, sorry, it's Exhibit 4, I think.
THE WITNESS: I don't see.
ATTORNEY WILKINSON: I can give you that.
THE WITNESS: The stack got big.
ATTORNEY TRYON: We can just bring it --- if you can't find it we can bring it up on the screen?
THE WITNESS: Okay.
I was given another copy, so we're good. I have it in front of me.
BY ATTORNEY TRYON:
Q. Okay.

On the second page?
A. On the second page.
Q. Okay.
Under fairness and segregation in sports.
Do you see that section?
A. I do.
Q. In the third full paragraph underneath there --- oh the formatting there is a little different than the copy that I have. Let's see. There's a paragraph that starts the terms sex and gender. There it is. The terms sex and gender are often confused as interchangeable. Now, I want you to focus on this next sentence. Sex is an objective specific biological state, a term with distinct fixed facets notably genetic, chromosomal, gonadal, hormonal and phenotypic including genital sex, each of which has a characteristic defined binary form. Did I read that correctly?
A. You read that correctly, yes.
Q. Do you agree with that statement?
A. I don't agree with that statement completely, no.
Q. What specifically do you find objectionable.
A. It's missing some components of sex, including,

for example gender identity. And the phrasing characteristic defined binary form is not necessarily true for each component of biological sex.
Q. So you disagree with the statement in the Handelsman report, is that --- did I state that fairly?
A. Right. I would characterize the statement as not exhaustive.
ATTORNEY TRYON: Let me ask the court reporter if I have any time.
COURT REPORTER: I have six minutes and 58 --- six hours and 58 minutes.
ATTORNEY TRYON: Well, I guess with my last two minutes I'll just say thank you for your time and I appreciate it. And I don't have any other questions. I don't know if any of the other Defendants do. I doubt it. But go ahead. If they do, go ahead. Kelly?
ATTORNEY MORGAN: This is Kelly Morgan. I don't have any questions. Thank you so much.
ATTORNEY TRYON: Roberta? Susan, you're next.
ATTORNEY GREEN: This is Roberta Green on the behalf of the SSAC. No questions. Thank you.
ATTORNEY DENIKER: Dr. Safer, this is

Susan Deniker. I have no questions. Thank you for your time today.
ATTORNEY TRYON: We are finished.
VIDEOGRAPHER: This concludes this deposition. The current time reads 6:31 p.m. Eastern Standard Time.
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VIDEOTAPED DEPOSITION CONCLUDED AT 6:31 P.M.
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IN THE UNITED STATES DISTRICT COURT

FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA

* * * * * *

B.P.J., by her next friend and mother, HEATHER JACKSON, Plaintiffs vs. WEST VIRGINIA STATE BOARD OF EDUCATION, HARRISON COUNTY BOARD OF EDUCATION, WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION, W. CLAYTON BURCH in his official capacity as State Superintendent, and DORA STUTLER in her official capacity as Harrison County Superintendent, PATRICK MORRISEY in

* Case No. 2:21-CV-00316

VIDEOTAPED DEPOSITION OF

DEANNA ADKINS, M.D.

March 16, 2022

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his official capacity as Attorney *
General, and THE STATE OF WEST *
VIRGINIA, *
Defendants *
* * * * * *

VIDEOTAPED DEPOSITION OF
DEANNA ADKINS, M.D.
March 16, 2022

DEPOSITION
OF

DEANNA ADKINS, M.D., taken on behalf of the Intervenor herein, pursuant to the Rules of Civil Procedure, taken before me, the undersigned, Lacey C. Scott a Court Reporter and Notary Public in and for the Commonwealth of Pennsylvania, taken via videoconference, on Wednesday, March 16, 2022 at 9:06 a.m.

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STIPULATION

(It is hereby stipulated and agreed by and between counsel for the respective parties that reading, signing, sealing, certification and filing are not not waived.)

PROCEEDINGS

VIDEOGRAPHER: Good morning. We're now on the record. My name is Jacob Stock. I'm a Certified Legal Video Specialist employed by Sargent's Court Reporting Services. Today's date is March 16th, 2022 and the current time is 9:06 a.m. Eastern Standard Time. This video is being taken place remotely by video conference. The caption of this case is in the United States District Court for the Southern District of West Virginia, Charleston Division, B.P.J., et al. V. West Virginia State Board of Education, et al. Civil Action Number 2:21-CV-00316. The name of the witness is Deanna Adkins. Will the attorney present state their names and the parties they represent for the record?

ATTORNEY BROOKS: Roger Brooks taking the deposition with Alliance Defending Freedom and

representing the intervenor.

ATTORNEY HOLCUMB: Christina Holcumb for intervenor.

ATTORNEY DUCAR: Timothy Ducar for intervenor.

ATTORNEY CSUTOROS: Rachel Csutoros for intervenor.

ATTORNEY TRYON: David Tryon at the Attorney General's Office in West Virginia, and I represent the State of West Virginia.

ATTORNEY MORGAN: Kelly Morgan with Bailey and Wyant on behalf of West Virginia Board of Education and Superintendent Burch.

ATTORNEY DENIKER: Good morning, everyone. Susan Deniker representing Defendant Harrison County Board of Education and Superintendent Doris Stutler.

ATTORNEY GREEN: Roberta Green, Shuman McCuskey Slicer. I'm here on behalf of West Virginia Secondary School Activities Commission.

ATTORNEY BORELLI: And this is Tara Borelli with Lambda Legal on behalf of the Plaintiff, B.P.J..

ATTORNEY SWAMINATHAN: This is Sruti

Swaminathan also from Lambda Legal also on behalf of Plaintiff.

ATTORNEY HARTNETT: And this is Kathleen Hartnett from Cooley on behalf of the Plaintiff.

ATTORNEY BARR: Andrew Barr, also from Cooley on behalf of the Plaintiff.

ATTORNEY REINHARDT: This is Elizabeth Reinhardt, also with Cooley, also for Plaintiff.

ATTORNEY BLOCK: Josh Block from ACLU on behalf of Plaintiff.

VIDEOGRAPHER: If that is everybody, then can I ask the notary to swear in the witness?

DEANNA ADKINS, M.D.,

CALLED AS A WITNESS IN THE FOLLOWING PROCEEDING, AND HAVING FIRST BEEN DULY SWORN, TESTIFIED AND SAID AS FOLLOWS:

VIDEOGRAPHER: And at this time the notary may be dismissed and we can begin.

ATTORNEY BROOKS: Thank you, ma'am.

NOTARY:

Thank you. Have a good day everybody.

EXAMINATION

BY ATTORNEY BROOKS:

Q. For convenience --- good morning, Dr. Adkins, ---

A. Good morning.

Q. --- and thank you for your time here today.

ATTORNEY BROOKS: For convenience, let me start out by marking three exhibits. As Adkins Exhibit Number 1, I would like to mark the Declaration and expert report of Deanna Adkins, which in the file will be made available to the court reporter is tab two. And I have copies for the witness and for counsel. I would also like to mark as Adkins Exhibit 2 what we have provided as tab three, which is the CV of the witness, Deanna Adkins.

(Whereupon, Adkins Exhibit 1, Report of Deanna Adkins, M.D., was marked for identification.)

(Whereupon, Adkins Exhibit 2, Curriculum Vitae, was marked for identification.)

THE WITNESS: If you don't mind, it's

Deanna (corrects pronunciation).
ATTORNEY BROOKS: Deanna. I certainly don't mind. I want to get that right. Sorry about that.
THE WITNESS: Thank you.
ATTORNEY BROOKS: And I would like to admit as Exhibit 3 the rebuttal report submitted by Dr. Adkins. I will provide copies of that to the witness. Just write the number on it.
THE WITNESS: Thank you.
ATTORNEY BROOKS: We'll have occasion to come back to those.

(Whereupon, Adkins Exhibit 3, Rebuttal Report, was marked for identification.)

BY ATTORNEY BROOKS:
Q. Dr. Adkins, let me ask you to find amongst the three documents I have given you Exhibit 2, which is your Curriculum Vitae.
VIDEOGRAPHER: Counsel, do you want that pulled up on the shared screen?
ATTORNEY BROOKS: That's up to the remote. You should certainly make it available.

Obviously, everybody here in the deposition room has it.
BY ATTORNEY BROOKS:
Q. Dr. Adkins, let me ask you to turn to page two of Exhibit 2, your Curriculum Vitae. And you have there a list headed professional training and academic career. Do you see that?
A. Yes.
Q. Am I right that you have done either residencies or fellowships in the field of pediatrics and endocrinology?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: I've done both, yes, residency and fellowship in pediatrics followed by endocrinology, yes.
BY ATTORNEY BROOKS:
Q. And you have not done either a residency nor a fellowship in psychiatry. Have you?
ATTORNEY BORELLI: Objection to form.
THE WITNESS: No.
BY ATTORNEY BROOKS:
Q. And you don't have any degree in child or adolescent developmental psychology, do you?
A. No.
Q. Do you consider yourself trained and

professionally competent in using the American Psychiatric Association Diagnostic and Statistical Manual to make child and adolescent mental illness or psychiatric diagnoses generally outside the scope of gender dysphoria?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: In pediatrics, we're trained to make some of the diagnoses that are appropriate for a pediatrics provider to treat.
BY ATTORNEY BROOKS:
Q. So is that a --- do you consider yourself generally competent in making diagnosis of child or adolescent mental illness according to the standards of DSM-V?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: For the things I was trained in and have continued to get CME in, I do.
BY ATTORNEY BROOKS:
Q. And you do not have any training in sports physiology, do you?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Nothing specific.
BY ATTORNEY BROOKS:
Q. You would consider that to be outside your field

of professional expertise. Am I right?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: There is probably some over lap given that physiology and endocrinology are very important and tied and interlinked, but I couldn't tell you since I don't know where the overlap might be.
BY ATTORNEY BROOKS:
Q. You yourself have not done any research related to sports physiology, have you?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Not myself, no.
BY ATTORNEY BROOKS:
Q. Nor have you done any research relating to the impact of hormones on athletic capability?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Not personally.
BY ATTORNEY BROOKS:
Q. Do you consider yourself to be an expert in any sense in the question of what is or is not fair?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Well, that's a broad question. That's ---.
BY ATTORNEY BROOKS:
Q. Do you consider yourself an expert in the

concept of fairness?

ATTORNEY BORELLI: Objection.

THE WITNESS: I believe that I can recognize fairness and have a concept that would be appropriate for someone of my age.

BY ATTORNEY BROOKS:

Q. Do you believe that you have expertise and fairness beyond that from ordinary human experience?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I would have to see what that would look like to say yes or no to that question.

BY ATTORNEY BROOKS:

Q. All right.

Let's look at your list of publications, which is on page three of Exhibit 2, your curriculum vitae. And under the --- the page three and continuing onto page four is a section titled Refereed Journal.

Correct?

A. Yes.

Q. And by Refereed Journal --- we'll both have to remember that. And also the court reporter may from time to time tell one of us to slow down. These all just ordinary parts of the process, just forgetting to speak up or to go slow enough to be transcribed.

Can you explain for the record what you mean by refereed journal, what the significance of that heading is?

A. Yes. So for those journals they are reviewed by an editor, and those are peer reviewed as well.

Q. So these --- this would be the list of your publications that would --- you would consider to be peer reviewed publications?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Looking at the date on the front of this one, yes.

BY ATTORNEY BROOKS:

Q. And that date is January 21st of this year, 2022.

Right?

A. Yes.

Q. And have you had any peer reviewed publication appear since January 21st of this year?

A. I have one that is --- that's in press for next month.

Q. And what is the title of that?

A. I would have to review the title in my e-mail. It's Clinical Simulation for Education of Nurse Anesthesia in Gender Affirming Care.

Q. Thank you.

A. Roughly.

Q. Roughly?

I see an article here, number three on the list, Tejwani, from Tejwani, et al, and you are one of the authors shown from year 2017. Do you see that?

A. Yes.

Q. And that relates to disorders of sexual development.

Am I correct?

A. Yes.

Q. And am I correct that that article has --- doesn't speak at all to the questions of gender.

Does it?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: That, no.

BY ATTORNEY BROOKS:

Q. Not correct?

A. I'm sorry, no, it doesn't speak.

Q. Just to be clear for the record, the Tejwani et al. article which you are a co-author does not speak at all to questions of gender identity.

Correct?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Correct.

BY ATTORNEY BROOKS:

Q. And I see here a Lapinski, et al. article, the 4th item, from 2018, entitled Best Practices in Transgender Health: A Clinician's Guide for Primary Care.

Do you see that?

A. Yes.

Q. Am I correct that that article does not report on any regional research by the authors?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: I believe that's true.

BY ATTORNEY BROOKS:

Q. Are you the author of any peer reviewed papers that report original clinical research relating to gender identity or for transgender therapies?

ATTORNEY BORELLI: Objection to form.

ATTORNEY BROOKS: I don't know who spoke to the witness.

THE WITNESS: So gosh, I have a lot of things that are in process. Let me give it a second.

ATTORNEY BORELLI: Take the time you need to review that to answer the question fully.

THE WITNESS: Could you repeat the

question?
BY ATTORNEY BROOKS:
Q. Yes. Are you the author of any published peer reviewed papers that report original clinical research relating to gender identity or transgender therapies?
ATTORNEY BORELLI: Objection to form.
THE WITNESS: The item on number six would be the closest. And it is talking with patients about the gender identity and their experience of transgender care, yes.
BY ATTORNEY BROOKS:
Q. The --- that paper in particular is essentially calling for research.
Am I correct?
ATTORNEY BORELLI: Objection to form.
THE WITNESS: Yes.
BY ATTORNEY BROOKS:
Q. It is not reporting on accomplished clinical research, is it?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: So in that study we actually did interview individuals as part of the study, so it has --- it's done as a --- oh, Lord, words. I'm going to find the word in a second. Not in like ---

more of a public health-based research approach where you do not actual like counting of things like you would do sort of --- search, but more around interviewing and looking at quantitate versus qualitative. That's the word I'm looking for. It's a qualitative study which is typically done in public health programs or other public health research.
Q. All right.
Am I correct, Dr. Adkins, that you, yourself, have not treated nor personally examined Plaintiff, B.P.J.?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: That's correct.
BY ATTORNEY BROOKS:
Q. And you don't have any direct knowledge as to at what Tanner stage B.P.J. began puberty blockers.
Am I correct?
A. I don't recall seeing that in any of the documentation.
Q. And you don't have any knowledge as to how B.P.J.'s physiology or athletic capabilities compare to a genetic female of a similar age, do you?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: I haven't assessed the

particular patient, person.
BY ATTORNEY BROOKS:
Q. Let me take you again to Exhibit 2 and page two ---?
ATTORNEY MORGAN: May I interrupt for a moment.
ATTORNEY BROOKS: I'm sorry. Who's speaking?
ATTORNEY MORGAN: Sure. This is Kelly Morgan. I'm having a terrible time understanding the witness. So before we go on is there any way to see if we can --- it sounds extremely muffled. I'm only catching like maybe half of the words.
ATTORNEY BROOKS: Most --- most of the voice is coming through very clear on our end. I'm going to move speaker so that paper shuffling is not as likely to shuffle it. Beyond that, I think everybody in this room will agree that we're speaking slowly and clearly and, frankly, loudly. So I'm not sure there's more we can do.
ATTORNEY BORELLI: And Kelly, for what it is worth, I think I caught maybe half of your words. I wonder if there is a connection issue on your end that might be worth investigating.

ATTORNEY HARTNETT: I will just say for the record, and others should speak up too because we obviously want all counsel to hear the deposition. I have been able to hear Mr. Brooks, the witness, and the objections have been a bit more faint, but we have been able to make them out so far.
ATTORNEY TRYON: This is Dave Tryon. I share Kelly's frustration. I'm having difficulty understanding the witness, so ---.
ATTORNEY BROOKS: And similarly, Dave, when we hear you, you're a little bit more muffled than some of the other voices. So the issue, perhaps the mics and speakers on the other end, but there's nothing more we can do at this end.
ATTORNEY GREEN: This is Roberta Green, and I'm also having trouble hearing. And I'm considering maybe --- you know, maybe muting my computer and calling in on my phone and see if I can hear better. I think when the doctor looks down to look at documents we lose some of that. So I'll report in if calling in on my phone is a breakthrough, but I appreciate you all. Thank you.
ATTORNEY DENIKER: Yes. Thank you. I'm also having trouble. And I'm curious if the court

reporter is having trouble. And if she's not, that's good, but I just want to make sure that we --- that everybody can hear.

COURT REPORTER: So my biggest issue is people not saying their names when they're speaking. So we just had a bunch of people and I really have no idea who is sayin anything. I don't know who is making the objections. And ma'am, with the mask on, it is hard to understand you at times. I'm really like having to really focus in on you. And the objections are coming in quick. And I mean, there are definitely some challenges, but I don't know.

ATTORNEY BORELLI: Well, in case this is helpful, so this is Tara Borrelli with Lambda Legal on behalf of the Plaintiff. I am the person defending the deposition, so the objections will be coming from me, in case that's helpful going forward.

COURT REPORTER: Yes.

ATTORNEY HARTNETT: This is Kathleen Hartnett for the Plaintiff from Cooley. I was the first person that spoke after someone raised the issue. I believe Miss --- Ms. Morgan had raised the issue of the ability to hear. And I would just say for the record this is an in person deposition that was scheduled where

we had proposed it to be remote if parties saw fit to do that. We're not objecting to it being in person. We're --- obviously they're defending. And all parties had the ability to attend in person if they chose to.

ATTORNEY BROOKS: And I --- I will --- this is Roger Brooks taking the deposition. I will suggest that we just agree by voice acclimation that we're not going to cycle through all the names and try to identify all the people who have chatted with us about their reception and simply move on with the deposition unless anybody objects to that.

ATTORNEY MORGAN: I have no objection to that. This is Kelly Morgan. But is there any possibility that the witness would be able to remove her mask if everyone else is masked other than the questioner? Like I --- I'm not having trouble hearing anyone else other than the witness, and it just seems to get muffled.

ATTORNEY BORELLI: I'm sorry, but I --- I don't believe that's going to be an option. I mean, this --- this is partly why a remote deposition would have been our --- our preference, but Dr. Adkins obviously has to take precautions because she is continuing to see and treat patients. And so she needs

to protect her health.

ATTORNEY BROOKS: And we did agree to proceed in whatever way the witness wanted when it comes to that, so we'll all just have to live with that as part of these days.

May we proceed?

ATTORNEY TRYON: Yes.

BY ATTORNEY BROOKS:

Q. If you have Exhibit 2 and on page two of that we have professional training and academic career, which towards the bottom includes your current two appointments associated with Duke University.

Am I correct?

A. Three.

Q. I apologize. I see that. One is you're an Associate Professor of Pediatrics.

Correct?

A. Correct.

Q. And you are the Director of the Duke Child and Adolescent Gender Care Clinic?

A. Correct.

Q. And you are a Co-Director of the Duke Sexual and Gender Health and Wellness Program.

Correct?

A. Correct.

Q. What is the total compensation you receive in connection with those three appointments with Duke University?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Well, you want a number or ---?

BY ATTORNEY BROOKS:

Q. I do.

A. I'm going to have to give an approximation.

Q. And that's fine?

A. Approximately, $173,000 per year.

Q. And that is your total compensation on a W-2 from Duke University?

A. No. Duke University only pays me $20,000 per year. I work for the private Diagnostic Clinic, which is our private practice, and they pay me the balance.

Q. Okay.

And do you receive any other compensation in connection with your work with patients in connection with the Duke Child and Adolescent Gender Care Clinic?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: No.

BY ATTORNEY BROOKS:

Q. Can you tell me what you earned in speaking fees in 2021, approximately?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: In 2021? Is that what you said?

BY ATTORNEY BROOKS:

Q. I did.

A. Let's see. I'm losing track of dates. I think only like $500.

Q. And what were the total expert fees that you received in 2021 in connection with serving as an expert in litigation?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Nothing.

BY ATTORNEY BROOKS:

Q. And in 2021 did you receive any payments for any reasons from any pharmaceutical company?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: No.

BY ATTORNEY BROOKS:

Q. Let me ask you to look at Exhibit 1, which is your expert report. And if you would turn --- if you would turn to paragraph 37 of that report, paragraph 38. And there you say when a child is born a sex assignment

is usually made based on the infant's externally visible genitals. This designation is then recorded and usually becomes the sex designation listed on the infant's birth certificate. Do you see that language?

A. I do.

Q. And as a trained physician, can you tell us how a sex assignment is usually made based on the infant's external visible genitals?

A. Yes. In most cases the external genitals will have a form that looks typical to a male versus typical to a female. And if there is a question, then I get consulted, if there's something different.

Q. And by typical to a male, for instance, you mean what?

A. So male external genitalia at birth typically has a phalic structure, penis that is, of a certain length most of the time. And then there's scrotum and then there are usually testicles, although sometimes they can be up or down in the scrotum.

Q. And do you, yourself, have children?

A. I do.

Q. And you're aware that for quite a number of years now, in fact, parents often learn of the sex of their child before birth.

Correct?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I have been aware that ultrasonographers often tell people what they think they are. And I'm also the one that has to tell the parents that it is different when they're born and it is not exactly accurate.

BY ATTORNEY BROOKS:

Q. That is as a result of the quality of imaging on ultrasound sometimes the wrong call is made on that?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Possibly the quality of imaging, the skill of the person. There are also sometimes variations that aren't easily visible on ultrasound.

BY ATTORNEY BROOKS:

Q. You're are aware, are you not, that the genetic sex of infant is, in fact, determinable by genetic testing as early as the first trimester of pregnancy?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: The typical testing for that is chromosomes, which are broad view and not specific for the hundreds of genes that can change the sex of the individual.

BY ATTORNEY BROOKS:

Q. Well, my question was you are aware, are you not, that the chromosomal sex of the infant is determinable as early as the first trimester of pregnancy?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I'm sorry. I didn't hear you say chromosomal. I thought you said biological. I apologize.

BY ATTORNEY BROOKS:

Q. I can't swear what I said the first time.

ATTORNEY BROOKS: Let's ask the reporter to read back the second question I asked. Is the court reporter muted perhaps?

COURT REPORTER: One minute.

ATTORNEY BROOKS: Okay.

COURT REPORTER: You said genetic testing. Do you want me to read the whole question?

ATTORNEY BROOKS: I do.

COURT REPORTER: You are aware, are you not, that the genetic sex of an infant is determinable by genetic testing as early as the first trimester of pregnancy?

ATTORNEY BORELLI: Objection to form.

COURT REPORTER: And again I just want to say that the witness is hard to understand. There is definitely a lot of muffling words coming through, you know, just like in the sentence there might be two words that I just have to like really --- I'm just struggling over here with this mask. I can't see your lips moving, so it's really hard, but --.

THE WITNESS: I'll slow down, but I was sick earlier this week, and I'd really rather not share that with anyone in the room. And I don't think that they would like that, so ---.

BY ATTORNEY BROOKS:

Q. Don't consider yourself pressured to take off your mask. Just do what you can to speak clearly into the microphone.

ATTORNEY BORELLI: Thank you. And we just moved the mic closer to the witness as well, so we --- we hope that that will help make a difference.

ATTORNEY HARNETT: Excuse me. This is Kathleen Hartnett from Cooley. I would like to ask whether the videotaping that's happening now will allow further transcription after the deposition?

VIDEOGRAPHER: Yes, that's --- the videotape is picking up everything that --- I'm having

no troubles on my side, so it's picking up all of the audio and everything.

ATTORNEY HARTNETT: Thank you very much.

VIDEOGRAPHER: You're welcome.

ATTORNEY BROOKS: And rather than re-reading the question, I'm just going to forget all that and ask you a new question.

BY ATTORNEY BROOKS:

Q. You are aware, are you not, that the chromosomal sex of an infant nowadays can be determined as soon as the first trimester of pregnancy?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: You can obtain the baseline chromosomes, yes.

BY ATTORNEY BROOKS:

Q. And that will tell you the chromosomal sex of that infant?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: The --- not really a term that is really precise as there's hundreds of genes that can change that.

BY ATTORNEY BROOKS:

Q. So you are not able to answer my question yes or no?

ATTORNEY BORRELLI: Objection to form.

THE WITNESS: I'm not able to answer the question yes or no.

BY ATTORNEY BROOKS:

Q. You would agree that the genetic sex of an infant is determined at the instant of conception?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: The actual Y chromosomes are at that time, yes.

BY ATTORNEY BROOKS:

Q. That's not something that a doctor has any choice or could change at the time of birth?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: The chromosomes, no.

BY ATTORNEY BROOKS:

Q. And you understand what I think we all learned in perhaps sixth grade biology that an individual with two X chromosomes, provided that there is no chromosomal abnormality, is female female and an individual free of abnormalities who has an X and a Y chromosome is male. Correct?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Free of any abnormalities, yes.

BY ATTORNEY BROOKS:

Q. And you also understand that in humans, like all mammals, a gamete from a male and a gamete from a female are necessary to create a fertilized egg in a new individual?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Can you read the very first part of the question again, please?

BY ATTORNEY BROOKS:

Q. You understand that in humans, as in all mammals, a gamete from a male and a gamete from a female are necessary to create a fertilized egg and a new individual?

ATTORNEY BORELLI: Same objection.

THE WITNESS: Yes.

BY ATTORNEY BROOKS:

Q. Now, if you look at paragraph 41 in your declaration ---

A. Yes.

Q. --- in paragraph 41 you state, quote, biological sex, biological male or female are imprecise and should be avoided. Do you see that?

A. Yes.

Q. And it is your view that the terms biological

male, biological female and biological sex are so imprecise as to be not useful from a medical point of view?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: In my practice we have to be more careful than that because I see quite a lot of individuals where that wouldn't be a very precise answer.

BY ATTORNEY BROOKS:

Q. My question is is it your expert opinion, are you offering expert opinion in terms of biological sex, biological male and biological female are so imprecise as to not be medically useful?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Yes.

ATTORNEY BROOKS: Let me mark as Exhibit 4 what is tab 5, and that is the Endocrine Society Guidelines dated 2017, but the number of authors. The first name is Wiley Hembree.

(Whereupon, Adkins Exhibit 4, 2017 Endocrine Society Guidlines, was marked for identification.)

ATTORNEY BROOKS: I'm handing that to the witness and to opposing counsel.

BY ATTORNEY BROOKS:

Q. Dr. Adkins, this is a document that you cite in your expert report.

Correct?

A. Correct.

Q. And with which you are quite familiar?

A. Correct.

Q. Do you know Dr. Hembree?

A. I spoke with him on the phone.

Q. You would agree, would you not, that he's been prominent in the field of transgender medicine for decades?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: His publications, yes.

BY ATTORNEY BROOKS:

Q. And another author is Peggy Cohen-Kettenis. Do you see that? She's the second author.

A. Yes.

Q. And likewise, she has been prominent in the field for at least 20 years?

ATTORNEY BORELLI: Objection.

THE WITNESS: I've seen publications in

that date range, yes.

BY ATTORNEY BROOKS:

Q. Have you met Dr. Cohen-Kettenis?

A. No.

Q. And she is associated with a highly respected institute in Amsterdam.

Am I right?

A. I am not certain. I would have to look that up.

Q. You don't know. You weren't invited to serve on the committee that drafted these guidelines, were you?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: There is an invitation extended to all Endocrine Society members. I did find a time. That was early in my work with this at that time.

BY ATTORNEY BROOKS:

Q. If you look down on page one, about five lines from the bottom ---.

A. Say it again.

Q. Page one, five lines from the bottom?

A. Yes.

Q. Actually, let's go two more up and begin a sentence. There's a sentence that begins they require a safe and effective hormone regimen that will, one, suppress endogenous sex hormone secretion determined by

the person's genetic/gonadal sex. Do you see that?

A. I do.

Q. And do you think you understand what's referred to by the term genetic/gonadal sex?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Yes.

BY ATTORNEY BROOKS:

Q. And what is your understanding of what that refers to?

A. So that would include both the chromosomes as mentioned before, the broad XY, and it should include all of the other genetic mutations as well as what actual gonads are present in the person.

Q. And this committee, these prominent researchers at least considered genetic/gonadal sex to be a meaningful and readily understandable binary classification.

Correct?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: That's not clear there and it is different from what you said before.

BY ATTORNEY BROOKS:

Q. I try to make each question somewhat different from the one before, so yes. Let me ask a new question.

This committee considered --- the committee that drafted these guidelines considered genetic/gonadal sex to be a meaningful and readily understandable classification.
Correct?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Yes. They didn't use the word chromosomal sex. And they included gonads which are also a part of the broad development of human reproductive biology.
BY ATTORNEY BROOKS:
Q. And in fact, you, yourself, quoted this language in your expert report, did you not?
A. Yes.
Q. And genetic sex, in your understanding, what is the meaning of genetic sex?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Well, in most patients, in most people, it is whether you received an X or a Y chromosome and all of your body parts include an XY containing or an XX containing cell. There are cases where you can have mossaicism or different parts of a human at different sex chromosomes where a part is XX, a part is XY, part is XO. And then there is also some mutations that can occur in lots of other locations that

can determine whether or not a patient's, you know, likely to have the rest of their human development appear as what we would more typically see in a male human or a female human.
BY ATTORNEY BROOKS:
Q. Well, in every human individual who is healthy and free of disorder of sexual development, genetic sex and gonadal sex are --- directly correspond.
Correct?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Typically, yes.
BY ATTORNEY BROOKS:
Q. So in a healthy individual free of genetic defect every individual who is chromosomally XX is going to have female gonads and female genitalia.
Correct?
ATTORNEY BORELLI: Objection to form.
THE WITNESS: My only concern is I would not use defect as a language. There's --- you know, we see variation across humans and we --- you know, there are variations that are normal and variations that are typical versus rare. So I would not call it necessarily a defect, maybe a variation would be the word I would use.

BY ATTORNEY BROOKS:
Q. The relationship between chromosomal sex and gonads are not separate things that can vary in healthy individuals, are they?
ATTORNEY BORELLI: Objection to form.
THE WITNESS: Well, I have healthy individuals who have XY chromosomes and external genitalia that are completely female.
ATTORNEY BROOKS: Let me mark as Exhibit 5 the prior edition guidelines put out by the Endocrine Society in 2009, eight years earlier.

(Whereupon, Adkins Exhibit 5, 2009 Endocrine Society Guidelines, was marked for identification.)

BY ATTORNEY BROOKS:
Q. And the primary author is on --- the first author on the 2009 guidelines are the same individuals, Dr. Hembree and Cohen-Kettenis?
Correct?
A. Correct.
ATTORNEY BORELLI: Objection, form.
BY ATTORNEY BROOKS:

Q. In fact, you, yourself, were familiar with and regularly consulted these guidelines.
Am I correct?
ATTORNEY BORELLI: Objection to form.
THE WITNESSS: Prior to 2017?
BY ATTORNEY BROOKS:
Q. Correct.
A. I used these guidelines.
Q. And did you find them to be incomprehensible?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: No.
BY ATTORNEY BROOKS:
Q. If you look with me on page marked 3134, which is the third page of the document, second column three quarters of the way down is the definition of --- under the heading of definitions is a definition of transsexual or transsexual people.
Do you see that?
A. I see it.
Q. It says there that a transsexual person refers to a biological male who identifies as or desires to be a female --- a member of the female gender or vice versa.
Do you see that?

A. Yes.
Q. And so in 2009 these prominent authors in the field considered biological male to be a scientifically useful and adequately clear term for them to use in these guidelines issued by the Endocrine Society.
Correct?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: It's written that way in this paper, yes.
BY ATTORNEY BROOKS:
Q. And you in that time period 2009 to just 2017 used these guidelines and were able to understand them.
Correct?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: You know, I would have to spend some time looking to see what else is in here. It has been a long time since I've used these particular and pulled out. And it is a single location. It can sometimes be misleading if you're aware --- if you've read many medical articles.
BY ATTORNEY BROOKS:
Q. So you don't recall whether you found these guidelines to be comprehensible and useful for your purposes in the years between 2009 and 2017?

ATTORNEY BORELLI: Objection, form.
THE WITNESS: Generally they were useful.
BY ATTORNEY BROOKS:
Q. If you look just a little lower is --- the next definition is transition.
Do you see that?
A. Yes.
Q. And it refers to a period of time during which transsexual persons change their physical, social and legal characteristics to the gender opposite that of their biological sex.
Do you see that?
A. I do.
Q. And again, these authors used the term biological sex, did they not?
A. They did.
Q. And they indicated their understanding that biological sex is binary in referring to opposite of a biological sex.
Correct?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: In this older version they do use more binary terms. As you know, language changes over time. In the new guidelines they don't talk as much about binary.
BY ATTORNEY BROOKS:
Q. Is it your belief that the underlying biology has changed since 2009?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Our understanding of a lot of things in this area is growing rapidly. It's a rapid area of research.
BY ATTORNEY BROOKS:
Q. Let me ask you to turn in this document to page 3141.
A. Same document, 3141?
Q. Yes.
A. Thank you.
Q. And here we're in a discussion of the use of GRNH analogs, which is to say puberty blockers.
Am I correct?
A. Which section?
Q. Well, the heading is 2.3, evidence, and it is talking about in the second paragraph treatment with GRNH analogs?
ATTORNEY BORELLI: Counsel, can we give the witness one moment to look at this?
ATTORNEY BROOKS: Of course.

ATTORNEY BORELLI: Thank you.
THE WITNESS: Yes, that appears to be what is discussed in this section.
BY ATTORNEY BROOKS:
Q. Here the authors in the 2009 Endocrine Society guidelines describe the effect of treatment with puberty blockers.
Correct?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Yes.
BY ATTORNEY BROOKS:
Q. And they say among other things that, quote, in girls breast development will become atrophic and menses will stop. And they continue, quote, in boys verilization will stop and testicular volume will decrease.
Do you see those quotes?
A. I do.
Q. Again, in 2009, the Endocrine Society didn't think there was ambiguity or imprecision as to what is a girl and what is a boy for purposes of development in puberty, did they?
ATTORNEY BORELLI: Objection to form.
THE WITNESS: As I said, the language

would be different and likely is different in conversations around this because it is not as precise as I would use or my colleagues would use.

BY ATTORNEY BROOKS:

Q. In 2009 the Endocrine Society in publishing these guidelines didn't think there was any ambiguity or imprecision as to what is a girl and what is a boy for purposes of the effect of puberty.

Correct?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: I would have to read the article up to this point to see what their clarifications are with regard to those phrases. Oftentimes in the beginning of articles they will clarify what they mean by a particular phrase, and taking it out of context is a little bit difficult for me to just say it is true right here on the spot.

ATTORNEY BORELLI: I would also just object to the extent that we're asking about select definitions without having given the witness an opportunity to review the entire definition and section of the document and asking her to draw conclusions about the larger document.

ATTORNEY BROOKS: Counsel, I think that

you are supposed to under the Rules to confine your objections to stating objection.

BY ATTORNEY BROOKS:

Q. In your practice today with respect to individuals who do not suffer from any disorder of sexual development you don't have any trouble telling girls from boys, do you?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: I do not have trouble deciding who was assigned female at birth versus those who were assigned male at birth.

BY ATTORNEY BROOKS:

Q. We have already talked about how that assignment is done based on observation of genitalia, which depend on underlying genetic sex.

Right?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So the typical manner of assignment we have discussed. Sometimes those things change over time with --- absent of course a difference of sex development or intersex conditions. Typically they would match.

BY ATTORNEY BROOKS:

Q. And if you are, for instance, getting ready to

prescribe cross sex hormones for a patient in patients who are free of any disorder of sexual development you don't have any trouble determining which patients need testosterone as a cross sex hormone versus which patients need estrogen as a cross sex hormone, do you?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: My mouth is getting dry. I don't have any trouble with that.

BY ATTORNEY BROOKS:

Q. And that's because absent rare and unusual disorders of sexual development it's really easy for all of us to tell girls from boys, isn't it?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: With regard to their sex assignment at birth, yes.

BY ATTORNEY BROOKS:

Q. Now, you've mentioned a couple times when I asked you questions about the 2009 guidelines that perhaps a language that's used has changed.

Am I right?

A. Yes.

Q. You are not contending that how human biology works has changed?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Our understanding of human biology at this time is accelerating greatly, especially in the area of genetics. We can now look at someone's whole exome, whole chromosome, and it's --- I mean in this timeframe there's an amazing amount of information that's become more clear.

BY ATTORNEY BROOKS:

Q. So is it your --- are you asserting that the more recent Endocrine Society policy statement should be accepted as a more precise Scientific statement?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: The goal is for that to be, yes, when you are writing those. And it's also been sometimes since this was published as well.

BY ATTORNEY BROOKS:

Q. Since the 2017 guidelines?

A. Correct.

Q. But in general, is it your view the more recent statements of the Endocrine Society that touch on issues of the definition of gender and sex are --- we should consider more accurate or reliable than earlier statements?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: In the correct context,

yes. Sometimes when they're taken out of context and applied to not the exact same population, they may or may not be as precise.

BY ATTORNEY BROOKS:

Q. They may or may not be. That is you don't maintain that generally more recent statements of the Endocrine Society relating to definitions of gender and sex are more reliable than earlier statements?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: Their goal and our goal as a community is to be as precise as possible. Sometimes that works and sometimes it doesn't.

ATTORNEY BROOKS: Let me mark as Exhibit --- what are we at, 6. Exhibit 6. What is tab 4 in the materials provided to the court reporter, an article Lapinski, et al., which Dr. Adkins is a coauthor from 2017. Pardon me, 2017.

(Whereupon, Adkins Exhibit 6, 2017 Lapinski Article, was marked for identification.)

BY ATTORNEY BROOKS:

Q. And this is your only or perhaps one of only two

peer reviewed articles on which you were an author that relate to transgender patients.

Correct?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I'm going to refer back to my ---.

BY ATTORNEY BROOKS:

Q. Please do, and that's Exhibit 2.

A. I apologize --- I'm sorry. I was thinking of the book chapter. Yes, I was thinking of the book chapter I've written there. So those are also peered reviewed. So if you just falling manuscript of joint articles, that's true, but I also have one book chapter published and one that is in process.

Q. Well, at any rate, this article was published in 2017, the same year as the more recent guidelines from the Endocrine Society.

Correct?

A. Correct.

Q. And in this article --- let me ask you to turn to page 692. And looking at a paragraph that actually runs over from 689 because of a long intervening table. Paragraph is headed understanding the meaning of transitioning for transgender patients.

Do you see that?

A. Yes.

Q. And the paragraph continues on to page 692 and the language I want to call your attention to is there, but of course feel free to look at the paragraph?

ATTORNEY BORELLI: Counsel, for clarity of the record, I'm showing that the heading is on page 689.

ATTORNEY BROOKS: Correct. That's where the paragraph begins and then there's a two-page table breaks up the paragraph and now we're on 692.

ATTORNEY BORELLI: Thank you.

THE WITNESS: Just that paragraph.

BY ATTORNEY BROOKS:

Q. Yes.

A. Okay.

Q. In 2017, writing a guide for clinicians as to what you considered to be best practices in transgender health you and your coauthors thought that it was clear and useful to refer to, quote, the opposite biological sex, closed quote, did you not?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: The language would be reflective of the original publications.

BY ATTORNEY BROOKS:

Q. Dr. Adkins, what do you mean by that answer?

A. When you're putting something into a journal article and you're reporting that original article's information, it would be inappropriate to change the language. So the original report that states this particular information used those words.

Q. Well, you didn't put this in quotation marks in your article, did you?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: We don't necessarily have to put them in quotation marks. In medically referred journals you can just put the reference.

BY ATTORNEY BROOKS:

Q. And in fact, there is no footnote to this, is there, there is no reference?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Not right at the end of that sentence.

BY ATTORNEY BROOKS:

Q. What that sentence says to get it into the record, I'm referring to sexual orientation, it says, quote, this fluctuation tends to occur more commonly with individuals who are attracted to the opposite

biological sex before transitioning, closed quotes. Have I read that language correctly?

A. Correct.

Q. And publishing this guideline for clinicians in 2017, is it your testimony that even if you thought that language was inaccurate and confusing you would not have clarified it?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I can't change what the publication states. It would be inappropriate for me to make a statement that was different from what the publication states. And there are people that fall on the binary and people who fall in the middle, and that particular study investigated people who identified on each end of the binary spectrum of individuals identification of gender identity.

BY ATTORNEY BROOKS:

Q. So you believe as a scientist and an author that writing in 2017, even if you thought the term biological sex was misleading and inaccurate, you --- it was nevertheless appropriate for you to use that term in a best practices guide that you were writing for clinicians?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So if you would read the entirety of the article, I would hope that we would be clear and it would be understood in that isolated paragraph, again I, have to use what language was used in the original publication. Otherwise, I'm misrepresenting the original publication and I would not want to do that.

BY ATTORNEY BROOKS:

Q. Well, if you thought the original publication was in accurate and misleading you wouldn't want to cite and rely on it, would you?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: As it's stated, it's not inaccurate. And if you infer things from a sentence it could be misleading. If you read it straight for what it says, it's accurate to what the report gave in the initial publication.

BY ATTORNEY BROOKS:

Q. Are you familiar, Dr. Adkins, with a NIH policy that requires research supported by NIH grants that involves animal or human clinical work to consider what NIH refers to as, quote, sex as a biological variable, closed quote?

ATTORNEY BORELLI: Objection, form.

THE WITNESS:S I have seen that policy and also seen the policies that are presented by the NIH which uses sex assigned at birth as well as gender identity and in addition, as variables that should be included in their research.

BY ATTORNEY BROOKS:

Q. My question is precise. Are you familiar with the NIH policy that requires grant supported research in sales or clinical work to, quote, consider sex as a biological variable?

ATTORNEY BORELLI: Objection, form. Counsel, if you are going to continue questioning her about the policy, we'd request a copy be placed in front of the witness.

ATTORNEY BROOKS: At the moment I'm just asking the witness if she's familiar with that policy.

ATTORNEY BORELLI: My objection stands.

THE WITNESS: I haven't read the entire policy. I have seen that within the documents that you have presented, so I can't accurately state if it is true.

BY ATTORNEY BROOKS:

Q. Have you, yourself, ever submitted any grant proposal that was subject to that NIH policy?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I have submitted NIH grants.

BY ATTORNEY BROOKS:

Q. And in that connection did you take some steps to assure that your grant proposal would comply with that policy?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: All of my grants applications had sex assigned at birth as a variable that we report.

BY ATTORNEY BROOKS:

Q. Let me show you another more recent Endocrine Society policy statement. This is tab eight. It will be Exhibit 7.

(Whereupon, Adkins Exhibit 7, 2021 Endocrine Society Scientific Statement, was marked for identification.)

THE WITNESS: Before we start this questioning is it possible for me to take a break?

ATTORNEY BROOKS: It certainly is. At any time that you want to, you just say so.

VIDEOGRAPHER: Going off the record. The current time reads 10:08 a.m.
OFF VIDEO

(WHEREUPON, A PAUSE IN THE RECORD WAS HELD.)

ON VIDEOTAPE
VIDEOGRAPHER: We're back on the record. Current time reads 10:21 a.m. Eastern Standard Time.
ATTORNEY BROOKS: And this is Roger Brooks resuming the questioning. I have put in front of the witness what is marked Exhibit 7, which is a, quote, scientific statement from the Endocrine Society that is entitled Considering Sex as a Biological Variable in Basic and Clinical Studies: An Endocrine Society Scientific Statement, closed quote. Do you see that?
A. Pardon me. Yes.
Q. So this is --- document, this statement is from 2021, just last year. And four more years --- recent four more years of science available as compared to the 2017 guidelines we looked at earlier.
Correct?
A. It is that --- yes, as far as the date goes, I mean, one would think they would be up-to-date.

Q. And let me just ask, obviously the Endocrine Society is a large organization, but do you know, either personally or by reputation, any of the authors listed on this document?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Excuse me. Walter Miller by reputation.
BY ATTORNEY BROOKS:
Q. And Walter Miller is at the University of California, San Francisco, according to the footnote there?
A. Let's see. That's what it looks like.
Q. And just looking down, the University of California, San Francisco, is a highly prestigious research institution, is it not?
A. It has a good reputation.
Q. And farther down, halfway down the block of institutions that these authors are associated with, I see University of California, Los Angeles. Do you see that?
A. Yes.
Q. And UCLA, to use its abbreviation, is also a highly respected research university, is it not?
A. You know, there is some variability there. And yes, there are some folks there who do a nice job.

Q. And maybe four lines from the bottom of that block I see a reference to the National Institute of Mental Health.
Do you see that?
A. Yes.
Q. And that's a highly respected governmental research laboratory.
Correct?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Yes.
BY ATTORNEY BROOKS:
Q. And let me ask you to turn here in this document to the second page, which is page 220. And this is, in fact, the beginning of the text after the abstract on the previous page. And there it begins, quote, sex is an important biological variable that must be considered in the design and analysis of human and animal research. The terms sex and gender should not be used interchangeably. Sex is dichotomous with sex determination in the fertilized zygotes stemming from unequal expression of sex chromosomal genes, closed quote.
Do you see that language?

A. I do.
Q. Do you understand the meaning of the word dichotomous?
A. I do.
Q. What does it mean?
A. Two options.
Q. There are two options. And do you think you understand the significance of the statement that, quote, sex is an important biological variable?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: I understand that it --- yes.
BY ATTORNEY BROOKS:
Q. In fact, I believe you testified earlier that in the human body every body part, every cell either has XX chromosomes or XY chromosomes depending on the chromosomal sex of the individual.
Is that right?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Some individuals have a mixture.
BY ATTORNEY BROOKS:
Q. And those would be genetic abnormalities.
Am I correct?

ATTORNEY BORELLI: Objection, form.
THE WITNESS: Again, I don't like the word abnormalities. It is a variation in presentation of a human.
BY ATTORNEY BROOKS:
Q. You would agree, would you not, that any deviation from having either XX or XY chromosomes is widely considered to be an abnormality?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Again, I don't prefer that language.
BY ATTORNEY BROOKS:
Q. Dr. Adkins, I didn't ask you what you prefer. I understand your preference. My question is you would agree, would you not, within the scientific community it is widely held view that any chromosomal arrangement other than having XX or XY is abnormal?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Not in my experience in my group of people that I practice with, they would not describe it that way.
BY ATTORNEY BROOKS:
Q. Would you agree that sex is determined to use the language that I have directed you to, quote, in the

fertilized zygote, closed quote?
A. I'm sorry. Can you re-read the question or repeat the question?
Q. Yes. I'm referring to the language that references sex determination in the fertilized zygote. And my question is do you agree that the sex of an individual is determined, quote, in the fertilized zygote, closed quote?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Again, they're not being very specific in that particular sentence about what they mean by sex.
BY ATTORNEY BROOKS:
Q. You're not able to say whether this opening language in this 2021 statement from the Endocrine Society is in your view accurate or in accurate?
ATTORNEY BORELLI: Objection to form.
THE WITNESS: Taking one statement, I can't. This is a very long document.
BY ATTORNEY BROOKS:
Q. I'm asking you now, do you agree or disagree the sex is determined in the fertilized zygote?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: XX and XY components are

determined in fertilized zygote. That doesn't necessarily equal sex that's assigned at birth.
BY ATTORNEY BROOKS:
Q. Absent any disorder of sexual development, the determination the zygote that you just described will, in fact, dictate 100 percent reliability the sex observed at birth.
Correct?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Well, I can't --- you know, in medicine we don't say anything is 100 percent. If you use the absent any --- any difference of sex development even an unknown one that we might not know about, that --- that is what we know to be true.
BY ATTORNEY BROOKS:
Q. You mentioned earlier that dichotomous means there are two alternatives and only two alternatives.
Right?
ATTORNEY BORELLI: Objection, form.
BY ATTORNEY BROOKS:
Q. That's just what the word means?
ATTORNEY BORELLI: Same objection.
THE WITNESS: That's what the word means.
BY ATTORNEY BROOKS:

Q. And in this important statement from the Endocrine Society published just last year drafted by a whole committee of prominent endocrinologists they say that sex is an important biological variable, closed quote. Do you disagree with this statement from the Endocrine Society?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: In reading that particular statement I would agree if they had used the word sex assigned at birth or something more precise in that sentence.
BY ATTORNEY BROOKS:
Q. Well, what they said precisely is sex is a biological variable. Do you see that language?
A. Yeah.
Q. Do you agree with that?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: So in the context of medicine, when we're talking about sex and we're talking about --- that's very imprecise. I really think that it is --- I would --- it's hard for me to use that word because it is imprecise, as I have mentioned before.
BY ATTORNEY BROOKS:
Q. So you think this statement from last year from

the Endocrine Society in its opening language is so imprecise that you can't tell me whether you think it is accurate or not?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I would have to read the entirety of the report and take it within context as I would with any other language used.

BY ATTORNEY BROOKS:

Q. Sitting here right now, you're unable to answer my question as to whether you think it is an accurate statement that sex is a biological concept?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Sex is a biological concept, yes.

BY ATTORNEY BROOKS:

Q. And let me take you, in fact, to page 221 of this document, first column. And there you will see a heading that begins biological sex, the definition of male and female.

Do you see that?

A. Yes.

Q. And it begins sex is a biological concept. And you just said that you think that's a scientifically true statement.

Right?

ATTORNEY BORELLI: Objection, form. Could --- could she have an opportunity to read this section before we continue questioning?

ATTORNEY BROOKS: Yes. But I'll ask you not to coach the witness. I have not denied any requests, but the witness should make them, not counsel.

ATTORNEY BORELLI: The objection stands. It is appropriate to ask that a witness be able to read a section of a document before being asked to opine about the larger meaning of the document.

ATTORNEY BROOKS: I believe the witness threw some more language in this paragraph so that's a good idea.

BY ATTORNEY BROOKS:

Q. If you will tell us when you have read that paragraph.

A. Yes. Sorry.

Q. You have?

A. No, I will tell you.

ATTORNEY TYRON: Jake, could you scroll down a bit, please?

THE WITNESS: Okay.

BY ATTORNEY BROOKS:

Q. In the first paragraph under the heading biological sex, directing your attention to the statement did you discuss the statement sex is a biological concept. Do you see that language?

A. I do.

Q. And you believe that to be a scientifically accurate statement?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: Yes.

BY ATTORNEY BROOKS:

Q. And in the next sentence this Endocrine Society statement tells us that, quote, all mammals have two distinct sexes, closed quote. Do you believe that is true or scientifically inaccurate?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Excuse me. I'm sorry. I'm trying to find that language.

BY ATTORNEY BROOKS:

Q. Third line of that paragraph, all mammals have two distinct sexes. My question is do you believe that is inaccurate or accurate scientific ---?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I still think it is imprecise.

BY ATTORNEY BROOKS:

Q. Have you finished your answer?

A. Yes. Sorry. My allergies are making me ---.

Q. Any time you need a drink.

A. Yeah. Sorry about that.

Q. Few lines down it says, quote, the classical biological definition of the two sexes is that females have ovaries and make larger female gametes, eggs, whereas the males have testes and male smaller gametes, sperm. Do you see that language?

A. I do.

Q. Do you agree that is a fair statement of the classical biological definition of the two sexes?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: When you use the word classical it describes what you would see typically, so I agree with that statement. It allows for there to be some variations that may not be classical.

BY ATTORNEY BROOKS:

Q. And it is accepted as a classical definition because it is accurate in the overwhelming percentage of cases.

Is that true?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So you know, as I mentioned before in my papers that I submitted, it --- you know, the percentage of people with differences of sex development is low and those would be the individuals that would not follow typically within this.

BY ATTORNEY BROOKS:

Q. And those individuals are the overwhelming majority.

Correct?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: They are the majority.

BY ATTORNEY BROOKS:

Q. Well more than 99 percent.

Correct?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I would have to do the math but that sounds accurate.

BY ATTORNEY BROOKS:

Q. Let me ask you to turn to page 228. In the second column, the final paragraph begins on that page, it reads, quote, sex is an essential part of vertebrate biology, but gender is a human phenomenon, semicolon. Sex often influences gender, but gender cannot influence sex. Do you see that language.

A. What is the first word in the sentence again so I can find it?

Q. It's on the second column, the final paragraph.

A. Okay.

Q. I'm really just calling your attention to the first sentence.

A. Yep, read it.

Q. Is there anything in that sentence that you believe to be inaccurate scientifically?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Again, I think they're imprecise as primates have gender roles and gendered activity, so it's not exactly precise.

BY ATTORNEY BROOKS:

Q. Anything else about that statement that you want to say is less than scientifically accurate?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: You know, again they use the word sex without being very specific as to sex assigned at birth. That's my only other caveat.

BY ATTORNEY BROOKS:

Q. If we read that to refer to what the Endocrine Society determined used in the 2017 Endocrine Society statement that we looked at, that is, quote, genetic/gonadal sex, then do you you consider this statement to be accurate?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: That's not what it says, so I'll ask you to repeat the question for me.

BY ATTORNEY BROOKS:

Q. If we assume hypothetically --- I will ask you to assume that sex as used in this Endocrine Society 2021 document, has the meaning that you, in fact, explained from the term used in the 2017 Endocrine Society document that is, quote, genetic/gonadal sex, closed quote, then you believe this to be --- the language that I have read to you from the 2021 document to be accurate?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So I believe when I answered that question --- I believe when I answered that question sex, gonadal, you know, those are two parts of it. They have not included the full range of hormonal or external genitalia to be specific. In my line of work I would need all of that information to really pin down things.

BY ATTORNEY BROOKS:

Q. So your testimony now is that the term genetic/gonadal '17 guidelines is too imprecise for you really to understand?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I think you asked that question before.

BY ATTORNEY BROOKS:

Q. And I thought you had said you did understand. You seem to be changing your testimony.

ATTORNEY BORELLI: Objection.

THE WITNESS: You can read it back to me if you --- I think that there's multiple things that are left out of that particular phrase to describe, you know, individuals. I can't say something that is, you know, in my experience and in the literature and in patients with intersex conditions that are --- that could be different from that. There --- yeah.

BY ATTORNEY BROOKS:

Q. If we for a moment focus on individuals who do not suffer from any disorder of sexual development, then do you believe the following quote from Endocrine Society 2021 document is true, and that is, quote, sex is an essential part of vertebrate biology, but gender is a human phenomenon, semicolon, sex often influences gender, comma, but gender cannot influence sex, closed

quote?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Trying to think, make sure --- I can't think of an instance right now that makes me disagree with that statement.
BY ATTORNEY BROOKS:
Q. Let me take you to the first column on page 228 and there's a heading there that says considering sex and/or gender as variables in health and disease.
Do you see that?
A. No. What page are you on?
Q. 228 ---
A. Yes.
Q. --- first column, the heading towards the bottom of the page.
A. Okay.
Q. And here they're specifically mentioning sex on one hand and gender on the other. Do you see that? This paragraph begins, quote, women and men differ in many physiological and psychological variables.
Do you see that?
A. Yes.
Q. Do you believe that to be a scientifically accurate statement?

ATTORNEY BORELLI: Objection, form.
THE WITNESS: I think if I were to add typical, it's saying there is variability.
BY ATTORNEY BROOKS:
Q. Well, it is saying specifically that women and men differ from each other in physiological and psychological ways.
Correct?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: That's what it says.
BY ATTORNEY BROOKS:
Q. And do you believe that to be a scientifically true statement?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Again, you know, you have to interpret these in their context of what they are saying. Statements.
BY ATTORNEY BROOKS:
Q. Do you believe it to be true or false that women and men differ in many physiological and psychological variables?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: All people are different.
BY ATTORNEY BROOKS:

Q. Dr. Adkins, do you believe it to be true or false that women and men as women and men differ from each other in many physiological and psychological variables?
ATTORNEY BORELLI: Objection to the form.
THE WITNESS: So women and men are a gender assignment, not the biological sex which you mentioned before. And gender is not necessarily a way that I would necessarily think is a scientifically precise way to place that if you're talking about this particular statement.
BY ATTORNEY BROOKS:
Q. Is it your belief that the Endocrine Society in this document in the terms women and men is referring to gender identity other than biological --- what does the word physiological mean to you as a doctor?
A. The method of function and interaction of all the parts of the body.
Q. It refers to biology, not to the statement of mind or identity.
Correct?
ATTORNEY BORELLI: Objection to form.
THE WITNESS: I would just agree with that statement.

BY ATTORNEY BROOKS:
Q. Let me ask you to turn to page 229.
Q. The first full paragraph begins, quote, despite the fact that biological sex is such a fundamental source of interest specific variation in anatomy and physiology, much basic and clinical science has tended o focus studies on one sex, typically male, closed quote.
Do you see that language?
A. I do.
Q. And do you understand what is meant by intraspecific variation? Let me offer a suggestion. Do you understand it to refer to variations within the human species?
ATTORNEY BORELLI: Objection to form.
THE WITNESS: I think you know again in context I would need to intraspecific --- intraspecific could be between me and you. Isolated in this one sentence, I would need to take a moment to see if it better explains it if I were to read further.
BY ATTORNEY BROOKS:
Q. Do you disagree or agree that biological sex is a fundamental source of variation in anatomy and physiology within the human species?
ATTORNEY BORELLI: Objection, form.

THE WITNESS: I'm sorry. I got sidetracked in my brain. Could you please read the question?

BY ATTORNEY BROOKS:

Q. Yes, I can. Do you agree or disagree that biological sex is the fundamental source of variation in anatomy and physiology within the human cease species?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: There is lots of other parts of physiology that are completely unrelated to your reproductive system that is more fundamental.

BY ATTORNEY BROOKS:

Q. Dr. Adkins, do you agree or disagree that biological sex is a fundamental source of variation in anatomy and physiology with human species?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: It is one of the variables within variations.

ATTORNEY BROOKS: Let me mark as Exhibit 8 an infographic, if I can use that term. Exhibit 8?

VIDEOGRAPHER: Excuse me, Counsel. You cut out right after Exhibit 8. I didn't hear which document that was.

ATTORNEY BROOKS: It is tab 9 and it is a

one page infographic, if I may, put out by the National Institute of Health titled How Sex and Gender Influence Sex and Disease.

(Whereupon, Adkins Exhibit 8, NIH Sex/Gender Infographic, was marked for identification.)

BY ATTORNEY BROOKS:

Q. And first let me ask, Dr. Adkins, are you familiar with the National Institute of Health as an organizations?

A. Yes.

Q. That is a government research institute?

A. Yes.

Q. And major grant --- major source of grants, grant making in the health sciences?

A. Yes.

Q. And are you --- were you aware that it has within it an Office of Research on Women's Health?

A. No.

Q. Do you see that this is published by the National Institute of Health, Office of Research on Women's Health?

A. Okay.

Q. In the box at the top it says, and I quote, sex is a biological classification included in our DNA. Males have XY chromosomes and females have XX chromosomes. Sex makes us male or female. Do you see that language?

A. I do.

Q. And it continues, every cell in your body has a sex making up tissues and organs like your skin, brain, heart and stomach. Each cell is either male or female depending on whether you are a man or a woman, closed quote.

Do you see that?

A. I do.

Q. And then it continues under that with a definition of gender. So my question is --- begins here, the opening statement in this NIH publication says that sex is a biological classification. Do you agree or disagree with that?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: You know, there is a whole literature on --- on this --- the differences in --- in sex. I --- so biological as opposed to another type of classification, I agree with that statement.

BY ATTORNEY BROOKS:

Q. It says a little further along that, quote, every cell in your body has a sex, closed quote. Do you agree or disagree with that?

ATTORNEY BORELLI: Objection to the form.

THE WITNESS: I agree. And each cell can be different.

BY ATTORNEY BROOKS:

Q. Are you saying that within an individual --- a specific individual each cell can have a different sex?

A. Yes.

Q. This NIH publication tells us that, quote, each cell is either male or female, closed quote. And I take it you simply believe the NIH is wrong about that?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I think that the nuances are something that you can't publish in a one-page documentation when they're not talking about an entire population.

BY ATTORNEY BROOKS:

Q. Under this initial box is a heading that says examples of sex and gender influences. Do you see that?

A. I do.

Q. And it has various categories of things that may

be influenced on one end by sex, which is defined in this document as a biological classification, and gender. Do you see that structure of this document?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Yeah.

BY ATTORNEY BROOKS:

Q. And it says if we go down to cardiovascular risk one of the differences that is identified as based on sex is that, quote, blood vessels in a woman's heart are smaller in diameter and much more intricately branched than those of a man, closed quote. Do you see that?

A. Under cardiovascular risk, yeah. Okay.

Q. And the NIH gives this as an example of a physical measurable biological difference that depends on biological sex.

Correct?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Well, actually the words they're using are gender --- gender words, not the words we would use for sex, you know, female or male or a variation in between. So I would --- if I were editing this document, I probably wouldn't have used the word woman.

BY ATTORNEY BROOKS:

Q. You would have said a female?

A. Typical female.

Q. Because what --- how the blood vessels in your heart are structured depend on your sex, not on your gender identity. Am I correct?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: There is many variables that can affect these things and what --- that is one of them.

BY ATTORNEY BROOKS:

Q. To your knowledge, gender identity is not a variable that affects how the blood vessels in one's heart are structured, does it?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Not that I'm aware of.

BY ATTORNEY BROOKS:

Q. Under the last item here is knee arthritis. Do you see that heading?

A. Yes.

Q. I'm sure we'll have the same terminology discussion, but the language there says, quote, women and girls are more likely to injure their knees when playing sports, closed quote. Do you see that language?

A. I do.

Q. And if we use the term --- substitute the term females for women and girls and say females are more likely to injure their knees when playing sports, do you believe that to be a scientifically accurate statement?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: You have to leave some room. Again, in medicine we're not like 100 percent. But I agree that portions of females that are typical in research have been reported to have more frequent knee injuries.

BY ATTORNEY BROOKS:

Q. Okay.

Let me ask you to find your report, Exhibit 1, and let's turn to paragraph 15. And there you wrote, quote, a person's gender identity refers to a person's inner sense of belonging to a particular gender such as male or female. And you continue every one has a gender identity, closed quote. Do you see that language?

A. I do.

Q. Let me direct your attention to the Endocrine Society guidelines from 2007, which is Exhibit 4. And we're going to come back --- if you can make a stack of most of these, but the 2017 guidelines we will come back to with some frequency. But we're ---

A. Keeping it on top?

Q. --- keeping it on top.

A. Okay.

Q. And there I want to call your attention to page 3873.

A. 3873.

Q. Right. And in the second column there's a section headed introduction. And it begins with a historical review of the concept of gender. And I'm going to ask you a question beginning with the language that is two inches from the bottom, two and a half inches from the bottom that begins these early researchers. So if you want to kind of glide through what comes before that, let me know and I'll begin my questioning.

A. Yes, I'll look over it. Thank you.

I have read that section.

Q. I want to call your attention to a sentence which my understanding is contrasting against or the history that begins, quote, some experience themselves as having both a male and female gender identity whereas others completely renounce any gender classification, closed quote. Do you see that language?

A. I do.

Q. And in your expert opinion, is that an accurate statement?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: In my clinical experience I have met individuals who are --- identify as agender which would in my mind be similar to this definition, but I typically ask the patient what their gender means to them.

BY ATTORNEY BROOKS:

Q. Well, do you have any opinion as to whether some individuals experience both a male and female gender identity?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I have patients that do that, yes.

BY ATTORNEY BROOKS:

Q. And I think you said that --- I don't want to puts words in your mouth. Do you have an opinion whether some individuals report not having any gender, not fitting any gender classification?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I do have patients that match that description.

BY ATTORNEY BROOKS:

Q. And this goes on the next sentence to say, quote, there are also reports of individuals experiencing a continuous and rapid involuntary alternation between a male and female identity, closed quote.

Do you see that?

A. I do.

Q. And do you believe that to be an accurate statement?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I have not had that clinical experience. I would have to rely on the, you know, medical report with that in particular, and I would probably look at the evidence that was available

---

BY ATTORNEY BROOKS:

Q. Well ---

A. --- prior to making a decision.

Q. --- do you as a practitioner consider it reasonable to rely on that assertion in this 2017 Endocrine Society statement guideline?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I would rely on it to be something I should at least consider.

ATTORNEY BROOKS: Let me mark as Exhibit 9 what is tab 10, and that is a one-page statement from a World Health Organization's website titled Gender and Health.

(Whereupon, Adkins Exhibit 9, World Health Organization Webpage, was marked for identification.)

THE WITNESS: Thank you.

BY ATTORNEY BROOKS:

Q. Are you familiar with the World Health Organization as an organization?

A. I am.

Q. And do you consider the World Health Organization to be generally a respected source of information on medical and health topics?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: My general experience so far to date is they're reliable.

BY ATTORNEY BROOKS:

Q. Well, I will represent to you that this document came off of a World Health Organization website and the web address is at the bottom of the page. I see on the

copy in front of you --- I'll stand by my representation of why mine has it ---.

A. Okay.

Q. This document titled Gender and Health begins gender refers to the characteristics of women, men, girls and boys that are socially constructed, closed quote. Do you see that?

A. I do.

Q. And is that a definition of gender per se that's consistent with how you are used to seeing the term used?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So you know, social constructs change regularly, so I would say that, you know, that wouldn't be completely inclusive of current socially constructed genders, in my experience.

BY ATTORNEY BROOKS:

Q. Well, let me direct --- why don't you read that whole first paragraph, which is just three sentences, because I think the World Health Organization raises exactly that point. So I'll ask you to read that?

A. Sure. Sure.

(WHEREUPON, WITNESS REVIEWS DOCUMENT.)

THE WITNESS: Okay.

BY ATTORNEY BROOKS:

Q. So extending into that paragraph, that three-sentence paragraph, just that explanation of the concept of gender fit with how you are used to seeing the term used in your professional experience?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So in reading that, my understanding of what they are using those specific words, men, women, girls and boys are examples. They don't comment on other societies. Just so --- in that assessment, yes.

BY ATTORNEY BROOKS:

Q. All right.

If we skip down to the third paragraph it begins gender interacts with but is different from sex, which refers to the different biological and psychological characteristics of females, males and intersex persons, such as chromosomes, hormones and reproductive organs, closed quote. Do you see that language?

A. I would like to read it, too, though, if you don't mind.

Q. Sure.

A. Yeah. Okay. I have read it.

Q. So first, backing up to the statement, opening paragraph, that gender is socially constructed, do you believe that to be an accurate statement?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Gender is a social construct, yes.

BY ATTORNEY BROOKS:

Q. And then in the third paragraph it states that gender identity refers to a person's deeply felt internal and individual experience of gender. Do you see that?

A. I do.

Q. So gender identity refers to an individual's experience in relation to gender, which is a social construct.

Right?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I see it, and I would ask you to read the question one more time. I just want to make sure I'm answering you accurately.

BY ATTORNEY BROOKS:

Q. As I think I see in this document really the question is as you understand it ---.

A. I think that you have to also include ---.

COURT REPORTER: Excuse me. I need to interrupt. Excuse me. I'm sorry to interrupt, but Counsel, your full question didn't come through on this end.

ATTORNEY BROOKS: I'll re-ask it. Pardon me.

ATTORNEY BORELLI: Actually, why don't we just address one housekeeping matter. Would you be able to identify for the record the URL that appears on your copy and whether there is a date of the document or date of access just so we have it on the record?

ATTORNEY BROOKS: There is no date of access. That access is within the last two months. The address is www.who.int/health-topics/gender#tabequalstab, underline one.

ATTORNEY BORELLI: Thank you.

ATTORNEY BROOKS: I'm glad it wasn't one of these four line ones.

BY ATTORNEY BROOKS:

Q. And I will re-ask my question.

A. Okay.

Q. The question is, Dr. Adkins, is it consistent with your understanding that gender identity refers to a person's individual experience of gender, which is in turn a social construct?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: That doesn't sound to me to be a full explanation. Just doesn't sound accurate to me. I'm having a hard time.

BY ATTORNEY BROOKS:

Q. Then let me not take more time on that.

A. Okay.

Q. You would agree that gender is a social construct that can change over time.

Am I right?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Gender --- so it's a social construct, it's true. Gender is, you know, how you --- I mean, it's complicated. It involves more things than --- and so, you know, if you're talking about gender expression, that's different. Someone's gender as they understand it for their gender identity is different. I mean, I have patients who are assigned a particular sex and the family and the physicians assign a gender that is more typically correlated with that sex. And then

over time those individuals sometimes don't identify with that gender, and they may change their gender marker, for example, because their identity really just doesn't match what we assigned them at birth. I'm not sure how to give a clearer answer. I'm trying.

BY ATTORNEY BROOKS:

Q. Well, so if an individual comes into your office and asserts a gender identity of, let's say, man or both, either one of those, how can a clinician verify whether that individual is accurately understanding his own or their own subjective feelings?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: And you know, a gender again is something that's assigned at birth and it is what you work with in your life, and so you know, I would ask them and they could tell me how they were proceeding in life with regard to their gender behaviors. That would be how I would probably asses their gender.

BY ATTORNEY BROOKS:

Q. How do you ascertain whether that individual who claims identity of man or both is telling you, the clinician, the truth?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So in general, you know, in pediatrics we have a parental report, and it depends on the clinical situation. We may or may not have another health provider's report or a mental health provider's report. If we have questions, we start to dig deeper and look at other areas.

BY ATTORNEY BROOKS:

Q. Let me call your attention to paragraph 19 in your expert report, Exhibit 1. And there you refer to DSM-V definition of gender dysphoria.

Do you see that?

A. What paragraph?

Q. Paragraph 19?

A. Yeah.

Q. And you mention that among other things the diagnostic criteria under DSM-V for gender dysphoria includes, quote, clinically significant distress. Do you see that?

A. I do.

Q. And in fact, it includes clinically significant distress that, quote, impairs important areas of functioning, closed quote.

Am I correct? Do you recall that in DSM-V?

ATTORNEY BORELLI: Objection. Objection

to form.

THE WITNESS: That is how I recall that.

BY ATTORNEY BROOKS:

Q. Paragraph right?

A. Yeah. I want to reserve the right to look at it to be certain. That sounds correct to me at this moment.

Q. And what does clinically significant distress that impairs important areas of functioning look like in a child?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Yeah. So you know, it depends on what they are coming in with. I mean, for some of my patients, you know, who are, you know, hyperthyroid, for example, their brain's run really fast, they can't focus during school, and that would be impairment in their ability to do their main job, which is to be in school and learn. So that's one area where you can have some impairment in their --- it varies from patient to patient and in each thing we're talking about.

BY ATTORNEY BROOKS:

Q. The example you just gave was impairment resulting from a hyperthyroid condition.

Am I correct?

A. Correct.

Q. What I asked was impairment due to --- attributable to what gender dysphoria looks like in a child.

A. Oh.

ATTORNEY BORELLI: I don't want to interrupt. I think there may have been a misreading of the language in the paragraph, and I just want to make sure the record is correct that the final sentence of that paragraph says in order to be diagnosed with gender dysphoria, incongruence must persist for at least six months and be accompanied by clinically significant distress or impairment in social, occupational or other important area of functioning.

BY ATTORNEY BROOKS:

Q. I, on the other hand, will ask a question that i believe is more closely tracked to the DSM-V language, which is what is clinically significant distress that impairs important area of functioning look like in a young child?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Okay. I misheard you. I'm sorry. I didn't hear the gender dysphoria part. I

apologize. So in patients with gender dysphoria sometimes it can be anxiety that keeps them from going to school. Sometimes it can be anxiety that keeps them from using public restrooms. Sometimes it is depression so that they can't get out of bed to function. Sometimes it's just feeling really uncomfortable and --- with how they are being treated and what they're allowed to do in a way that makes it more difficult for them than a person without gender dysphoria.

BY ATTORNEY BROOKS:

Q. In your practice is a full diagnosis of gender dysphoria under the DSM-V criteria a precondition for recommending or supporting social transitioning?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So in my practice the majority of my patients have socially transitioned before they come to see me in order to improve their gender dysphoria. In general, that is something that their family and their mental health provider decides. Each individual patient is different and we talk through whether that is appropriate for each patient.

BY ATTORNEY BROOKS:

Q. In your practice is a full DSM-V diagnosis of gender dysphoria a precondition for recommending social

transition?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: No.

BY ATTORNEY BROOKS:

Q. And in your practice is a full DSM-V gender dysphoria diagnosis a precondition for prescribing puberty blockers?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I use puberty blockers for more than one indication.

BY ATTORNEY BROOKS:

Q. Let me ask a better question. In your practice is a full DSM-V gender dysphoria diagnosis a precondition for prescribing puberty blockers as a treatment for gender dysphoria?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So my patients are evaluated by mental health providers outside the clinic and inside the clinic. The objective of using puberty blockers can be used to relieve dysphoria and give them time to consider their gender identity.

BY ATTORNEY BROOKS:

Q. In your practice is a full diagnose of gender dysphoria under the DSM-V criteria a precondition for

prescribing puberty blocker for believed gender dysphoria?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: Well, in the way that you stated it, you're saying that the patient already has gender dysphoria, so yes.

BY ATTORNEY BROOKS:

Q. In your practice is the full diagnosis of gender dysphoria under the DSM-V criteria a precondition for prescribing puberty blockers as a therapy for gender dysphoria or gender incongruity?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Yes.

BY ATTORNEY BROOKS:

Q. And in your practice is a full diagnosis of gender dysphoria according to the DSM-V criteria a precondition for prescribing cross sex hormones?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: They are used to relieve dysphoria. Typically that would be what we would use them to do, is to relieve that dysphoria so they would have that diagnosis. On occasion in my practice the incongruence does not necessarily cause dysphoria per se, and yet they still have significant issues that are

impairing their ability to move forward in their lives in a happy, healthy way. And I might use medications such as gender-affirming hormones in those cases.

BY ATTORNEY BROOKS:

Q. So if I understand correctly, you're saying that at least some cases in your practice you are willing to prescribe cross sex hormones for individuals who do not suffer from gender dysphoria according to the criteria spelled out in DSM-V?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Every patient is different. Most of my patients have gender dysphoria. All of them have a transgender identity, and I would treat either of those.

BY ATTORNEY BROOKS:

Q. I think this question can be answered yes or no. Do you prescribe cross sex hormones for some patients who do not suffer from gender dysphoria according to the DSM-V criteria?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I don't think so. I mean, gender-affirming hormones --- I use hormones for a lot of different things. Whether you call them gender affirming or not is --- you know, what is kind of a

thing here. I mean, for people with Klinefelter's, who are clinically significantly depressed because they have low testosterone, I prescribe testosterone to improve their mood, their libido, their muscle strength. For people who have dysphoria or who have a transgender identity, I do prescribe those medications. I think that to be precise in my answers I cannot say it as a yes or no answer.

Q. Let me ask you to turn to paragraph ten of your report. There you say I have treated approximately 500 transgender and intersex young people in my career.

Do you see that?

A. No, that's not how it's written.

Q. I apologize. I was reading to you the second sentence of paragraph ten, and I believe I read that ---.

A. Okay.

I'm sorry. I was starting at the beginning.

Q. I understand.

A. Yes.

Q. And let's break that out. Of those 500, approximately how many suffered from some form of DSD?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So the --- that I know of,

because we don't evaluate every person necessarily for an intersex condition, probably --- gosh, it's hard to estimate. So I think at least 60 in my clinic and then probably in the hospital at least 10, 15 a year. At least one a month or so.

BY ATTORNEY BROOKS:

Q. Of the 500 transgender intersexual young people that you treated in your career, how many would you estimate suffered from some form of disorder of sexual development?

ATTORNEY BORRELLI: Objection, form.

THE WITNESS: Off the top of my head I can think of one. I have reviewed a referral for a second one. Gosh. With that many patients, that's the best I can do. Sorry.

BY ATTORNEY BROOKS:

Q. And I take it then that the overwhelming majority, almost all the children that you have seen and treated for gender dysphoria did not suffer from any disorder of sexual development?

A. So at the time of my evaluation of them they weren't showing any signs of an intersex condition. I don't necessarily test for intersex conditions on every person that comes in. Insurance is really kind of funny

about paying for that sort of thing because they don't think it is appropriate to do. So I can't evaluate them unless they have a symptom of an intersex condition. Those can present even into your 30s and not be evident until you are trying to get pregnant. So I think to be accurate, that's ---.

Q. To your knowledge, almost all of the children that you have treated for gender dysphoria did not show signs of any intersex condition or disorder of sexual development?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: To best of my knowledge.

BY ATTORNEY BROOKS:

Q. Let me call your attention to page three of your report, which is on page five. And you say there in the second sentence, quote, all of my patients have suffered from persistent gender dysphoria.

Do you see that?

A. Uh-huh (yes).

Q. Now, I just don't understand that because a few minutes ago you explained to me that some of your patients suffer from gender dysphoria and some of them don't. So can you explain to me what you meant by that statement?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Yeah. I learn more and more every day about the patients who come into my clinic. I did state that most of my patients have gender dysphoria. I am finding individuals currently in my practice who aren't necessarily to the point of having that clinically significant criteria that is mentioned in the --- for dysphoria that have a transgender identification. The majority I would say do have dysphoria.

BY ATTORNEY BROOKS:

Q. You would now say the majority rather than all?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I can't think of --- yeah, I would say the majority. There would be a very rare instance and that's why I mentioned it before.

ATTORNEY BORELLI: Counsel, just a quick question about timing and a potential break because we've been going for a little while.

ATTORNEY BROOKS: Right. I'm inclined to go --- like from my experience, if you stop early for lunch, then it's an awful long afternoon. So I'd be inclined to go until 12:30 or so and then break for lunch.

ATTORNEY BORELLI: Does that work for you? Would you like a break now before we later break for lunch or what is best for you, Dr. Adkins?

THE WITNESS: Well, since I'm not a breakfast eater, I would prefer to go a little bit earlier if we can.

ATTORNEY BROOKS: We can do it. I just warn you it gets to be a long afternoon.

THE WITNESS: I understand.

ATTORNEY BROOKS: Let me finish up the line of questioning. Well, should we target noon to stop for lunch?

THE WITNESS: That's fine. Thank you.

BY ATTORNEY BROOKS:

Q. Let me take you back to the Endocrine Society statement on --- back to the biological variable, which is Exhibit 7. If you would find that, please. And I'll ask you to turn to page 225, second column towards the bottom with the heading that reads biological basis of diversity and sexual/gender development and orientation.

Do you see that?

A. I do.

Q. And it reads at the beginning given the complexities of the biology of sexual determination and

differentiation, comma, it is not surprising that there are dozens of examples of variations or errors in these pathways associated with genetic mutations that are now well known to endocrinologists and geneticists. In medicine these situations are generally termed disorders of sexual development or differences in sexual development, closed quote.

Do you see that?

A. Yes.

Q. Now, in your opinion, a transgender identity is not a disorder.

Am I right?

A. It is a normal variation, in my opinion, of huma --- of humans in general.

Q. It's not a mental disorder?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So you know, they have in the past included it in the DSM, which is categorized as those sorts of things. As far as like psychological, there's such over lap between psychological and the physical --- I guess the best word I can use, but that it's hard to --- it's hard to say. You know, I think people are moving more towards that it is more of a medical problem that is occurring within the person that

is giving them psychological symptoms that we see, which is really common in medicine. We see lots of different medical conditions caused psychological symptoms. I already mentioned one with hypothyroidism.

Q. In the overwhelming number of cases, transgender identification is not associated with any physical disorder that you as a doctor have become aware of?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I'm sorry. I got distracted. Can you repeat it?

BY ATTORNEY BROOKS:

Q. Yes. In the overwhelming majority of patients that you have seen, the transgender identity is not associated with any physical disorder that you are aware of.

Correct?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I mean, I'm going to need a minute to think because I have seen so many patients that I don't --- I guess it sort of depends on how you define that, right. I am --- distress is physical and psychological. The difference is physical in that they're biologically assigned sex and those characteristics associated are different from their

gender identity. So it's a bit of a mixture.

BY ATTORNEY BROOKS:

Q. Many individuals who suffer from disorder of sexual development do not experience gender identity that is discordant with their chromosomal sex.

Correct?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Some do, yes. That is true for some.

BY ATTORNEY BROOKS:

Q. Many individuals who experience a transgender identity --- I'm sorry. Many individuals who suffer from a disorder of sexual development do not experience a gender identity that is discordant with their chromosomal sex.

Correct?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: So there's, you know, like 100 different variations. Some are more likely to have questions about their gender identity than others. It varies by diagnosis.

BY ATTORNEY BROOKS:

Q. Okay.

But my question is a high level one. It is

true, is it not, that many individuals who suffer from a disorder of sexual development do not experience gender identity that is discordant with their chromosomal sex?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: In the medical literature the reports vary. Some of the conditions are 90 of them their identity matches with their chromosomal sex and in some cases it's like 30 to 40 percent.

BY ATTORNEY BROOKS:

Q. And as you have testified, many individuals who experience transgender identity do not suffer from any identified disorders of sexual development?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I answered that question already, yeah.

BY ATTORNEY BROOKS:

Q. The answer is yes?

A. Yes, I answered the question already.

Q. For clarity I would like you to answer it again.

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Can you repeat it then?

BY ATTORNEY BROOKS:

Q. Yes. Many individuals who experience a transgender identity do not suffer from any known

disorder of sexual development?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: In my experience that is true.

BY ATTORNEY BROOKS:

Q. You have no knowledge as to the number of children who suffer from a disorder of sexual development who presently attend schools or colleges in West Virginia, do you?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I can only rely on the prevalence that's recorded in the medical literature and then assume that West Virginia has the population base that is similar to those medical reports.

BY ATTORNEY BROOKS:

Q. You, yourself, don't have any actual knowledge either way on that.

Correct?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I have not been given a list of the number of individuals, no.

BY ATTORNEY BROOKS:

Q. And you are not opining that B.P.J. suffers from any disorder of sexual development, are you?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I don't know B.P.J.. I have not evaluated B.P.J.. I can't say that about B.P.J..

BY ATTORNEY BROOKS:

Q. And in fact, you don't know whether any child who is chromosomally XY but suffers from a disorder of sexual development has ever sought to compete in female athletics in West Virginia, do you?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: There are so many people who have competed or tried to compete over the years. I have not seen a documentation specifically of West Virginia. It's common in athletics.

BY ATTORNEY BROOKS:

Q. You are not aware of a single case that has ever occurred in West Virginia of a chromosomally XY child seeking to compete in female athletics based on a --- let me ask that question again. You're not aware of any specific instance in which an X --- chromosomally XY child who suffers from a disorder of sexual development has sought to compete in female athletics in West Virginia up to the present?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: So some people die with chromosomes XY and look completely female and never knew. So I can't say that anyone could definitely say that, including myself.

BY ATTORNEY BROOKS:

Q. Well, my question was you are not aware of any case of an XY individual who suffered from a disorder of sexual development seeking to compete in female athletics in West Virginia.

Right?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: Correct.

BY ATTORNEY BROOKS:

Q. And so let me ask you --- a substantial portion of your expert report goes into all sorts of detail about disorders of sexual development.

Correct?

A. Correct.

Q. In your understanding, what is the point? What does that have to do with any opinion you are offering about issues in this case?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So the folks who have differences of sex development have really been our tool

within medicine to understand gender identity and how it developed over time, especially when there may be some difference in the effects of the chromosomes, the hormonal expression and the biological external reproductive genitalia. And it elicits --- kind of shows us that there can be some variations that identity that you might have --- I'm sorry, sex that you might assign at birth based on one of these categorical things or a mixture of them may not be exactly what a person identifies at birth.

For example, there are individuals who are born who never had any hormones, they don't have external genitalia at all when they're born, and so how do you decide what sex to assign that person and thus what gender to assign that person, and so it --- it helps us understand that there are lots of different things that go into determining a gender identity and you may not know it right at birth, certainly not at conception, but you may begin to understand it as the person grows older.

And so it's important to know that because when there are differences between those two things it can cause significant distress and harm to the individual as they get older if those two are not

matching.

BY ATTORNEY BROOKS:

Q. Let me take you to paragraph 28 of your expert report. At the end of that paragraph you state I know from experience with my patients that it can be extremely harmful for transgender youth to be excluded from the team consistent with their transgender identity. Do you see that?

A. It actually says with their gender identity.

Q. If I misspoke, I apologize. For the record, let me just do it again. Quote, I know from experience with my patients that it can be extremely harmful for transgender youth to be excluded from the team consistent with their gender identity, closed quote.

Do you see that language?

A. I do.

Q. Let me just ask were you a varsity high school or college athlete yourself?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I was.

BY ATTORNEY BROOKS:

Q. Now, let me ask what you understand to be the significance of that statement, that is are you offering an opinion in this litigation that the West Virginia law

is unreasonable to the extent that it prevents even a single transgender youth from playing in a division consistent with their gender identity?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I'm sorry. That wasn't clear. Can you ---?

BY ATTORNEY BROOKS:

Q. Are you offering an opinion that the West Virginia law is unreasonable to the extent it prevents even a single transgender youth from playing in the division consistent with their gender identity?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Yes.

BY ATTORNEY BROOKS:

Q. Are you offering an opinion that West Virginia does not have a strong interest in ensuring fair and safe competition for females in their schools and universities?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I think that would require me to have to, you know, talk with them about that and understand a little bit better. I would hope it would be every one that they were trying to keep safe.

BY ATTORNEY BROOKS:

Q. Are you offering an opinion that West Virginia law is not a reasonable measure to ensure fair and safe competition for females in schools and colleges?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Again, the language is --- it's not really clear with the female who uses the word female. It's like using the word sex. It's just not clear.

BY ATTORNEY BROOKS:

Q. Dr. Adkins, I used the word female because earlier in one of these papers where it said woman you said it would work if they said female as a sex indicator to be distinguished from gender identity.

Do you recall that testimony?

A. I do.

Q. Let me ask the question again using the term female in the way that you meant in that earlier testimony. Are you offering an opinion that the West Virginia law is not a reasonable measure to ensure fair and safe competition for females in schools and colleges in West Virginia?

ATTORNEY BORELLI: Objection, form.

THE WITNESSS: Yes.

BY ATTORNEY BROOKS:

Q. Can you tell me the examples that you had in mind when you said I know from experience that it can be extremely harmful for transgender youth to be excluded from the team consistent with their gender identity?

A. I can.

Q. Please do.

A. I have patients who have participated in sports with the teams that they identify as. Their fellow students only know them as the gender that they identify with and that they express. If they were asked to participate on a team that matched their sex assigned at birth, then these individuals would, for one, would be on the boys' team and then everyone in school would know that they were transgender. They don't have to know that. It is not any of their business.

Once they are identified as transgender, they are at high risk for being bullied, harassed, sexually assaulted, and leaving school, which leads to poor jobs, poor insurance, homelessness. There are any number of reasons that I would want my patient to be able to participate on the team that identifies with their gender identity to keep them healthy.

Q. Dr. Adkins, your answer said if they were required to play on the team corresponding to their I'll

say chromosomal sex, their natal sex, which suggests you have not actually seen it happen. Is there a single case you can point me to in which you have observed a patient harmed by being excluded from the team consistent with their gender identity?

A. Yes.

Q. Can you tell me that area?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Well, one of my patients who had been on middle school sports teams that matched their gender identity was then asked to change. And they didn't feel comfortable going with the other individuals because their identity would be discovered, their --- individuals would know that they were transgender. No one at the time knew and still to this day don't know because they chose not to participate rather than be on the team that didn't match their gender identity.

BY ATTORNEY BROOKS:

Q. And when and what state did these events occur?

A. North Carolina.

ATTORNEY BORELLI: Objection to form.

BY ATTORNEY BROOKS:

Q. That's where, when? That's your Counsel's

objection.

A. North Carolina in --- for this particular patient, three years ago. I have patients that come in every day who this applies.

Q. Dr. Adkins, given that you're testifying under oath and trying to be accurate, is it true that you have patients come in every day that this applies to?

ATTORNEY BORELLI: Objection, form.

BY ATTORNEY BROOKS:

Q. Aren't we getting a little carried away here?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I do like to be precise.

BY ATTORNEY BROOKS:

Q. Thank you.

A. In clinic, most days when I'm in clinic I see a patient who doesn't participate in athletics because of the requirement that they go to participate in an area that is for their assigned sex at birth. Most days I'm in a gender clinic.

Q. And what you state in your document, in your report here, is that you know from experience that being excluded from the team consistent with their gender identity can be, quote, extremely harmful to transgender youth. You have described to me students who choose not

to participate in athletics. Beyond that, can you give me examples of extreme harm that has resulted from such policies?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: You know, some of that would require a bit of speculation because I wouldn't know what would happen to those individuals if they remain in the sport.

BY ATTORNEY BROOKS:

Q. I'm not asking you to speculate.

A. So can you re-ask the question so I can kind of figure out how to answer it better.

Q. I'll re-ask it and maybe that you're not able to answer it, but can you identify for me specific extreme harm that individual patients have suffered as a result of not being able to participate in the team consistent with their gender identity?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So I have had patients who have no longer participated in sports, gained weight, become obese and developed type two diabetes. I have seen that around --- I can think of at least two examples. And then, you know, that's a chronic life long disease that can lead to amputation and all kinds

of other harms. And let's see, what other things.

I have seen patients with --- who were no longer happy at their school and because the time that they were identified as transgender were asked to leave their sport, their friend groups changed. And you know, it's tough in school. There are kids who have --- and that kind of can push them down the slope of suicidal ideation and depression and those sorts of things. I mean, I have to think longer for other examples. Those are two.

BY ATTORNEY BROOKS:

Q. Rather than starting something else, should we break now for lunch?

ATTORNEY BORELLI: That works.

VIDEOGRAPHER: Going off the record. The current time reads 11:54 a.m. Eastern Standard Time.

OFF VIDEO

(WHEREUPON, A PAUSE IN THE RECORD WAS HELD.)

ON VIDEO

VIDEOGRAPHER: We're back on the record. Current time reads 12:57 p.m. Eastern Standard Time.

BY ATTORNEY BROOKS:

Q. Okay.

Dr. Adkins, welcome back from lunch. On we go. We're going to have a long afternoon. Let me mark as Exhibit 10 what we have previously identified as tab 16, which is an article dated January 10, 2022 from the Washington Post entitled A Transgender College Swimmer is Shattering Records, Sparking a Debate Over Fairness.

(Whereupon, Adkins Exhibit 10, 1/10/22 Washington Post Article, was marked for identification.)

BY ATTORNEY BROOKS:

Q. Dr. Adkins, let me just ask generally, you're aware of recent events in the news involving Leah Thomas's competition in NCAA swimming.

Correct?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I am aware of various pieces of that.

BY ATTORNEY BROOKS:

Q. And I'm not going to try to turn you into an expert on Lia Thomas, but you're just aware of that narrative. Are you generally aware that at least until

recently the NCAA policy for a decade at the collegiate level was that XX --- XY individuals, males, to use that terminology, could compete based on gender identity in women's divisions only after they had suppressed testosterone for at lest a year?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I don't know the details of NCAA. I just don't.

BY ATTORNEY BROOKS:

Q. Are you aware generally that some athletic leagues have a requirement that biological males may compete in women's athletics based on gender identity only after suppressing testosterone for some period of time?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I have heard that there are individuals who are allowed to participate based on their gender identity and that there's some comment about hormone suppression.

BY ATTORNEY BROOKS:

Q. And do you have college-age transgender patients yourself?

A. I do.

Q. Does your statement that we looked at in

paragraph 28 of your report that it can be extremely harmful for transgender youth to be excluded from the team consistent with their gender identity hold true in your opinion at to collegiate level? And I was quoting from paragraph 29.

ATTORNEY BORELLI: To clarify, you just said 29 --- 28, paragraph 28?

ATTORNEY BROOKS: It is paragraph 28. I apologize.

ATTORNEY BORELLI: Thank you. I can't remember if I lodged an objection. Objection to form.

THE WITNESS: And the question was?

BY ATTORNEY BROOKS:

Q. The question was does your assertion in paragraph 28 of your report that you know from experience the patients --- that it can be extremely harmful for transgender youth to be excluded from the team consistent with their gender identity apply to college-age individuals as well as high school or younger individuals?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: In my experience, that --- yes.

BY ATTORNEY BROOKS:

Q. Do you have any opinion as to whether a policy that requires biologically male athletes to suppress testosterone for a certain period of time or to a certain level of testosterone prior to competing in women's or girls' athletics is reasonable or unreasonable?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So you're asking me if that's my opinion? I'm sorry. Could you just repeat the question?

BY ATTORNEY BROOKS:

Q. Do you have an opinion --- do you have an opinion as to whether a policy that requires biologically male athletes to suppress testosterone either for a certain period of time or down to a certain level before they can be eligible to compete in women's athletics based on gender identity is reasonable or unreasonable?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: It gets tricky. I am --- you know, when you start throwing in sort of people with PCOS and people with intersex conditions and --- it gets tricky. So it's harder for me to answer.

I think the question was do I have an

opinion if it's reasonable or not reasonable? Is that the question?

BY ATTORNEY BROOKS:

Q. That is.

A. Okay.

In some cases it might be reasonable and some cases it might not be reasonable.

Q. If we put on one side and exclude from consideration individuals who suffer from any form of disorder of sexual development, do you believe that a policy that requires biologically male athletes to suppress testosterone either for a certain period of time or down to a certain level before they can be eligible to play in women's athletics based on gender identity is reasonable or unreasonable?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So you know, for those who are assigned male at birth, it depends on where they are, you know, and what sport they're doing and what's involved. There are a number of caveats that could be thrown in there along those lines.

BY ATTORNEY BROOKS:

Q. Is it you don't know what you think about that?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: I think you misunderstood the answer that I gave. It would really depend on a specific case.

BY ATTORNEY BROOKS:

Q. Well, let's look at a specific case. I have put in front of you Exhibit 10, this Washington Post article from January 10, 2022 about Lia Thomas, who, according to the headline, is shattering records. Let me ask you to turn in that article to page three. And there it --- if we look at the third paragraph, the one that begins her fastest 200 yard freestyle, and the second sentence --- or the third sentence says that's the fastest time by any female college swimmer this year, .64 seconds faster than Olympian Torri Huske. And it continues, quote, Thomas has also posted the nation's best 500 yard freestyle, timed this season at four minutes, 34.06 seconds, nearly three seconds faster than Olympian Brooke Forde.

Do you see that?

A. Uh-huh (yes).

Q. And these records were set after Lia Thomas had qualified under the NCAA requirement of testosterone suppression for one year. So my question on the specific sport for you is, is it your view that a policy

that permits Thomas to compete in the women's division against competitors who are biologically female is fair?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So you will note in the paragraph above it also says that her time slowed down once she had this happened and she was suppressing her testosterone. You know, I --- I don't want to use that word. There are so many things that go into athletic performance and your time that's not totally related to your sex assignment at birth or your current hormonal status, practice, you know, training, whether you had an opportunity to get started at a young age, a lot of variables that aren't related to their current hormones.

BY ATTORNEY BROOKS:

Q. Do you have an opinion as to whether a policy that permits Lia Thomas to compete against those born female in swimming is fair?

ATTORNEY BORELLI: Objection to form. Counsel, I think we're starting to get outside the scope. The witness can answer this question if she can, but we're treading on that territory.

THE WITNESS: So in that there are very few transgender individuals who are involved and there are lots and lots and lots of opportunities for those

assigned female at birth to compete, I think it is fair.
BY ATTORNEY BROOKS:
Q. And let me call your attention two paragraphs down where it begins everybody wants, and quoting Michael Joyner, who identifies as a physiologist at the Mayo Clinic. Are you familiar with the reputation of the Mayo Clinic?
A. Yes.
Q. It is a high reputation.
Am I correct?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: In general, people think it has a good reputation.
BY ATTORNEY BROOKS:
Q. If you read this paragraph, Dr. Joyner says, quote, everybody wants to maximize each individual's opportunity to participate and be as inclusive as possible, one of the researchers, Michael Joyner, a physiologist at the Mayo Clinic, said in an interview. And his quote continues, but how do you balance that inclusion at the individual level with the fairness to the entire field? That's really the split the baby question, closed quote.
Do you see that language?

A. I do.
Q. Do you agree that the question of fairness that Dr. Joyner addresses there is, in fact, a tough question on which reasonable people could disagree?
ATTORNEY BORELLI: Objection, form. And counsel, I need to renew my objection as to scope.
ATTORNEY BROOKS: You can have a standing objection as to scope, but I can pursue this line of questioning.
THE WITNESS: I would like to take a moment to read the whole article, please.
ATTORNEY BORELLI: Counsel, can you point me to the portion of the report where she offers opinions about things?
ATTORNEY BROOKS: She has offered the opinion in the report that denying participation is extremely harmful. She has testified on the record that in her view, a policy that permits even one transgender individual from playing according to their gender identity, that she has an opinion, but she is offering an opinion that that is an unreasonable policy. I intend to examine that thoroughly. Scope is not tightly limited on expert depositions, I assure you.
ATTORNEY BORELLI: I'm going to stand on

my objection. We'll see where the line of questioning goes and we'll confer again if we need to.
ATTORNEY TRYON: This is Dave Tryon. I would ask that if there are further speaking objections or discussions about scope, it be done outside the presence of the witness.
BY ATTORNEY BROOKS:
Q. Let me ask you this without taking the time --- without reading the entire document, do you agree or disagree with Doctor Joyner that the question of whether a biologically male individual such as Lia Thomas should be permitted to complete in the women's division against biological females is a tough question that reasonable people can differ?
ATTORNEY BORELLI: Objection to form.
ATTORNEY BROOKS: That's enough. That's all you may say.
ATTORNEY BORELLI: Excuse me. Counsel, the witness has ---.
ATTORNEY BROOKS: You may say objection to form.
ATTORNEY BORELLI: The witness has --- the witness asked to read the entire document.
ATTORNEY BROOKS: I am asking a question

free and apart from the document. And I'm entitled to do that.
ATTORNEY BORELLI: I'm not persuaded that this is free and apart from the document.
ATTORNEY BROOKS: I will make it 100 percent apart from the document.
ATTORNEY BORELLI: Can you please restate the question to do that? Thank you.
BY ATTORNEY BROOKS:
Q. Dr. Adkins, do you agree that the question of whether a biological male such as Lia Thomas should be permitted to compete against biological females in the collegiate level is a tough question on which reasonable people can differ?
ATTORNEY BORELLI: Objection, form. Counsel, you just put an article ---.
ATTORNEY BROOKS: That's enough of the speaking objection. I can take the article back away from the witness. My question makes no reference to the article.
ATTORNEY BORELLI: Your question makes reference to ---.
ATTORNEY BROOKS: Counsel, that's enough speaking objections. You are violating the Federal

Rules.

ATTORNEY BORELLI: I strongly disagree with that characterization. I don't think that's correct. You're asking questions about a subject of the article. Physically removing the article from the witness doesn't remove that question from the subject of the article.

ATTORNEY BROOKS: I don't have to show the witness every article about a topic. The witness is aware of Lia Thomas. I'm asking a question about Lia Thomas and competitive swimming. The witness can answer.

ATTORNEY BORELLI: I stand on my objection.

ATTORNEY BROOKS: You can do so.

THE WITNESS: Sorry. Thank you.

You know, everybody has their opinion based on their experience and their knowledge and they're allowed to state that and confer with others about it. Whether or not it is reasonable is a whole other question, and that involves perspective and background. So with that caveat, I could see people having different opinions on this particular matter.

BY ATTORNEY BROOKS:

Q. Thank you.

ATTORNEY BROOKS: Can we mark as Exhibit 11 a document previously identified as tab 17, article from the publication named Out Sports that is dated January 9, 2022.

(Whereupon, Adkins Exhibit 11, 1/9/22 Out Sports Article, was marked for identification.)

BY ATTORNEY BROOKS:

Q. Dr. Adkins, have you heard the name Iszac Henig?

A. No.

Q. Did you hear any news items that a transgender male competing in the female division that is genetic female, male identity, transgender male competing in the female division, beat Lia Thomas, a transgender female competing in the female division, in certain races? Have you heard that?

A. No.

ATTORNEY BORELLI: Objection, form.

BY ATTORNEY BROOKS:

Q. All right.

You stated in paragraph 28 that it can be harmful for patients, deeply harmful, for transgender youth to be excluded from the team consistent with their gender identity. In your view is a policy that requires transgender youth who are biologically male to suppress testosterone before they can be eligible to compete on a team consistent with their gender identity extremely harmful to youth?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I was trying to catch up with you with finding the page.

BY ATTORNEY BROOKS:

Q. That was a complicated question. I will ask it again.

A. Thank you.

Q. In your view is a policy that requires a biological male who experiences a female gender identity to suppress testosterone prior to becoming eligible to compete in the women's division extremely harmful?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Suppression of the testosterone for my practice isn't the --- you know, the harm. It is the exclusion that does most of the harm. I think I answered that.

BY ATTORNEY BROOKS:

Q. Let me try to --- in light of what you just said, let me ask a better question. In your view, is a policy that excludes a biological male who identifies as a woman from competition in the women's division unless and until that biological male has suppressed testosterone extremely harmful?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: So the sex assigned at birth for this person would be male and would need time to suppress testosterone, which takes time and leads to limitations in participation of sports, in competition. I think that disadvantages most athletes if they have to take time off for any kind of medical treatment for their preparation. In that fashion it would be harmful to the athlete.

BY ATTORNEY BROOKS:

Q. And I believe you testified you don't have any simple single opinion as to whether it would nevertheless be reasonable despite being harmful to that athlete?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: I don't think that's what I said.

BY ATTORNEY BROOKS:

Q. All right.

Then I'll ask a different to avoid unclarity. Do you have an opinion as to whether, despite the harm that you have described, a policy that requires suppression of testosterone in order for such an individual to be eligible to compete in a women's division is reasonable?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: That's complicated. I apologize for not answering yes or no. I just --- sometimes you get lost in your question. So I don't think it's reasonable to ask them not to participate. They need time to practice and participate like all their peers that are practicing and competing at the time.

BY ATTORNEY BROOKS:

Q. So your testimony as you sit here today is that even as a biologically male athletes, natal male athletes who have not suppressed testosterone at all, it is not reasonable to exclude them from participation in the women's division?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: To those who are assigned female at birth, you're again going to cause them harm

by not allowing them to participate and not be affirmed in their gender. That --- part of it is a big part of what it means to improve their overall health and what we do to care for these individuals. You're also marking them by saying that they are, you know, transgender and that is going to cause all kinds of kerfuffle and people are not nice to them. It can cause extreme harm to them in that way.

BY ATTORNEY BROOKS:

Q. In the beginning of your answer you referred to individuals identified as female at birth.

A. Assigned female at birth.

Q. And I think that your answer was speaking to individuals who are assigned male at birth.

A. Applies to both.

ATTORNEY BORELLI: Objection, form.

BY ATTORNEY BROOKS:

Q. Then let me re-ask my question because I asked about individuals assigned male at birth. As to those individuals, is it your opinion that a policy that requires them to suppress testosterone prior to becoming eligible for participation in the women's division or high school level girls division is unreasonable?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: For an assigned male at birth, suppressing testosterone, so we're clear because you used the word they in that particular question, I think it is unreasonable for them to be taken out of their sport. I think it causes harm. We see evidence that it causes harm with regard to depression, anxiety, suicidality. It also causes metabolic harm, changes in the performance.

ATTORNEY BROOKS: Let me mark this Exhibit 11, an article by Duke Professor Doriane Lambelet Coleman, Michael Joyner and Donna Lopiano, the Duke Journal of Gender Law and Policy.

(Whereupon, Adkins Exhibit 11, Duke Journal of Gender Law and Policy Article, was marked for identification.)

VIDEOGRAPHER: Counsel, I didn't fully catch which document that was? Did you say it was tab 19?

ATTORNEY BROOKS: It is tab 19, that's correct.

VIDEOGRAPHER: Thank you.

BY ATTORNEY BROOKS:

Q. Dr. Adkins, let me ask whether you have before now been aware of this article by Duke Professor Coleman and others?

A. I have heard of an article, yes.

Q. Do you know Professor Coleman?

A. I met Professor Coleman once.

Q. And have you ever seen this article before today?

A. I haven't looked at it.

Q. Probably my questioning about it will be very short. Let me ask you to turn to page 88. At the very bottom of page 88 is a sentence that runs over into 89 that reads as follows. If elite sport were coed or competition were open, even the best female would be rendered invisible by the sea of men and boys who would surpass her, closed quote. Do you see that language?

A. I do.

Q. Do you have the expertise to evaluate whether that is true or false?

ATTORNEY BORELLI: Object to form.

THE WITNESS: The --- well, again, you are picking one sentence out of a whole article. And I know that Dr. Coleman has actually called into question some of the information from this report in particular.

And without knowing which things I can't really rely on this document to say whether it's true. And that's not --- that's her expertise.

BY ATTORNEY BROOKS:

Q. Well, that's my question. Do you believe that it is within your expertise to evaluate that sort of question about sporting performance?

ATTORNEY BORELLI: Object to the form.

THE WITNESSS: Again, you are picking one sentence. I have some professional experience with assisting people in improving their physiology with regard to, you know, muscle mass, fat mass. Sport would be outside what I would have to say --- this specifically.

BY ATTORNEY BROOKS:

Q. I'm not sure that was a compete sentence, let me ask a follow-up question. Is it the case that it is --- you consider it outside your professional expertise to evaluate the truth or falsity of this supposed assertion that, quote, if elite sport were coed or competition were open, even the best female would be rendered invisible by the sea of men and boys who would surpass her, closed quote?

ATTORNEY BORELLI: Object to form.

THE WITNESS: That's not been my experience. That's not what we're seeing in sports. I can't say anything else about whether or not I could assess it. That would be my only way to assess it based on my experience.

BY ATTORNEY BROOKS:

Q. What is your professional training or research that qualifies you to evaluate the impact that would be experienced in athletics on biological women if sport were coed or competition were open?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: Yeah. I don't study sports.

BY ATTORNEY BROOKS:

Q. You are an endocrinologist by training. Is that correct?

A. I am.

Q. Do you have an expert opinion as to what lasting or legacy --- strength and athletic capability if any way natal males continue to enjoy over natal females after suppressing testosterone?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So there's a lack of research in this area. I feel like we need more

information regarding this. I don't think that there's a way to answer that question with the data that we have at this time.

BY ATTORNEY BROOKS:

Q. Is it true in your practice that most of your biologically male patients present at your clinic let's say after age 13?

ATTORNEY BORELLI: Object to form.

THE WITNESS: Most of my patients who are assigned which at birth did you say?

BY ATTORNEY BROOKS:

Q. Male.

A. After age what again?

Q. I chose 13.

ATTORNEY BORELLI: Same objection.

THE WITNESS: I would agree with that.

BY ATTORNEY BROOKS:

Q. And implications of that are that those individuals have already experienced --- well, let me ask it differently. In your experience or based on your training, either one, on average what Tanner stage are boys at by the time they have finished their 13th year?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So assigned male at birth?

BY ATTORNEY BROOKS:

Q. Correct.

A. The average at 13 is Tanner 3.

Q. By the end of age 13 you would say Tanner 3?

A. It is really 13 and a half is what the published literature says.

Q. So presumably by the end of their 13th year, when they're older than 13 they're either in a later stage of Tanner stage 3 or moving into Tanner stage 4?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: On average, but there is such a wide variety of --- they can present with puberty from 9 to 14. And they all move differently at different rates and different times, so there's a lot of variety in the 13 and a half year olds I see in my clinic who are assigned male at birth.

BY ATTORNEY BROOKS:

Q. And my question was about averages. So on average, by the end of the 13th year the patients you see would be towards the end of Tanner stage 3 or entering into Tanner stage 4?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: On average, yeah.

BY ATTORNEY BROOKS:

Q. And by that time those biologically male who have under gone effects on skeleton, on height, on musculature, typical of or sometimes referred to as verilization.

Correct?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So at 13 and a half the average assigned male at birth is dead center their growth spurt, so they've only gone through about half of it. They still have about half of it left.

BY ATTORNEY BROOKS:

Q. Okay.

And do you have any knowledge as to whether they have also undergone changes in heart and lung size and bone strength that are typical of male puberty?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So I can't comment about the heart and the lung. The lung size is typically proportioned to the body size. So in that way, halfway. Bone strength, however, there's more information about. And you know, people don't get their peak bone mass until they're 30, so they have a long way to go starting from 13 and a half before they reach that.

BY ATTORNEY BROOKS:

Q. Have, on average, males experienced significant bone densification by age --- by the end of their 13th year?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Depends on your definition of significant. Clinically significant, medically significant? Is it, you know, significant with regard to the biological assay. Is it you're talking about which would --- Dexus scans?

BY ATTORNEY BROOKS:

Q. I will take clinically significant.

ATTORNEY BORELLI: Objection to form.

THE WITNESS: Can you repeat your question with that?

BY ATTORNEY BROOKS:

Q. Yes. On average, have biological males experienced clinically significant bone densification by the end of their 13th year?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Over their life span they do continue to increase their bone density. The peak of bone density is much later, so every person is different as to where they are in that density scale. At the middle of puberty, I mean, I would be guessing if I said

anything specific.

BY ATTORNEY BROOKS:

Q. Well, as I tell witnesses I am defending I don't know is always a great conversation stopper. Is it your testimony that you don't actually know how much bone densification has occurred by the end of the 13th year in those in biological males?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I haven't looked at it --- I haven't looked at it recently. There are --- that's an --- interpretations that we use and it comes with our reports and I would have to look at that to rely on it.

BY ATTORNEY BROOKS:

Q. Have you heard the name Joanna Harper?

A. No.

Q. Let me see tab 24.

ATTORNEY BROOKS: Marking 13, what was previously designated tab 24, article published December 2020 by Emma Hilton and Tommy Lundberg, titled Transgender Women in the Female Category of Sport: Perspectives on Testosterone Suppression and Performance Advantage.

(Whereupon, Adkins Exhibit 13, 2020

Hilton and Lundberg Article, was marked for identification.)

BY ATTORNEY BROOKS:

Q. And Dr. Adkins, let me ask again whether you know the name Emma Hilton or Tommy Lundberg.

A. No.

Q. Can I take it then you have not seen this article before?

A. I wouldn't say that one equals the other. I'm terrible with names, to be quite honest.

Q. Let me ask --- therefore, I retract that question. Do you recall seeing this article before today?

A. No.

Q. Okay.

Then again, we will be short. You see the title. I understand you have not seen it. Let me ask you to turn to page 201. About an inch down in the first column, summarizing other research the authors of this paper write an extensive review of fitness from over 85,000 Australian children age 9 to 17 years old show that, compared with 9 year old females, 9 year old males were faster over short sprints, 9.8 percent, and

one mile, 16.6 percent. Could jump 9.5 percent further from a standing start, a test of explosive power. Quote, could complete 33 more push ups in 30 seconds and had 13.8 percent stronger grip, closed quote. Do you see that language?

A. Yeah.

Q. And my question for you is you have yourself any knowledge as to whether the facts recited there are scientifically accurate or inaccurate?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So whenever I'm reviewing an article, and again, I have not seen the full article, it's reporting on population from Australia, which I usually use the population that I'm talking about when I am using that information to help guide my practice. So I'm not completely sure that would be a thing that would come into my mind when looking at this. Is this the same population in Australia you we're seeing here? That's one of my first questions about it.

BY ATTORNEY BROOKS:

Q. And I understand that everybody in Australia is upside down, but my question simply was do you have any knowledge as to whether, as a matter of science, these assertions are true or false?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: They have published it in a peer reviewed journal I think. I would have to look if this is a peer reviewed journal because some are not. If those things are true, the assumption we make in medicine is that they are true.

BY ATTORNEY BROOKS:

Q. You are a very trusting person to peer reviewed journals.

A. They get redacted all the time. So again, my previous thing is you got to look at all of the pieces, et cetera.

Q. In general --- in general, do you consider that your expertise extends to the question of how much athletic advantage biological males enjoy over biological females prior to puberty, if any?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I know limited amount of that information. We all learn a little bit, but I wouldn't say that I could say, you know, I know everything that exists.

BY ATTORNEY BROOKS:

Q. What is your source of information in that area?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Generally education in medical school and then looking at hormonal effects in muscle and bone and those things. But not in particular these specific tests.

BY ATTORNEY BROOKS:

Q. Do you have any opinion as to whether prior to puberty natal males have strength, speed or other athletic advantages over natal females on average?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Gosh, there's such a wide variety of humans. And I know you are asking on average. I don't think I feel comfortable answering the question.

BY ATTORNEY BROOKS:

Q. All right.

You have offered the opinion --- we can go back to paragraph 28, I keep referring to the same, that refusing to permit a transgender individual to participate in a sport category corresponding to their gender identity can be or is extremely harmful. From your medical point of view, what do you consider to be the implications of that opinion when it comes to individuals who claim both a male and a female gender identity?

ATTORNEY BORELLI: Objection, form.

BY ATTORNEY BROOKS:

Q. Must they be permitted to play in either category according to their choice.

ATTORNEY BORELLI: Objection, form.

THE WITNESS: That is a good question. I would have to talk to the individual person to really know what harm they might think --- feel that they are having if they were kept from one versus the other. I think that would be a very individualized question. I can't answer it with my experience.

BY ATTORNEY BROOKS:

Q. All right.

Would you have the same answer with regard to an individual who experiences neither gender identity, neither male or female?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So people who identify as a agender, you know, there is such a wide variety there of their life experience, their pubertal experience, their current hormones and what things they might be taking or not taking, where their levels are. I think it --- and you know, again, I think --- you would have to look at the individual person.

BY ATTORNEY BROOKS:

Q. Is it your opinion, Dr. Adkins, that the only reasonable policy for schools, colleges or athletic leagues would be to consider eligibility for transgender individuals on a case by case basis, taking into account all of the types of complexities you just described?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I think that that is completely possible for them to do given the small population that we're talking about. And I think it is reasonable for them to take the time to do that with each individual human.

BY ATTORNEY BROOKS:

Q. Do you think that such a policy is the only reasonable policy?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Yeah, I'm going to venture that, yes.

BY ATTORNEY BROOKS:

Q. In your view --- as you've testified earlier a bit about the category of gender fluid individuals. You mentioned the term. Are you familiar with that category, concept of gender fluid individuals?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I'm aware of the concept.

BY ATTORNEY BROOKS:

Q. Can you explain for the court what the concept of --- what a gender fluid individual is or what that person experiences?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: So my experience is that every gender fluid person is different, and I have to actually dig deep when I'm talking to someone who is gender fluid as to what that means. It could mean a wide variety of different experiences.

BY ATTORNEY BROOKS:

Q. You're not able to describe at all what it mean to be gender fluid?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I can give you an example. I can give you more than one example.

BY ATTORNEY BROOKS:

Q. I'll take an example.

A. Okay.

For a patient I'm bringing to mind, for that individual they generally might be expressing their gender identity variably on a particular day. Their understanding of their identity is that it shifts a

little bit. They sometimes are frilly, like me, very feminine-ish, and on days --- and feel that --- and other days they might wear a suit and tie. And that gender expression may align with their gender identity I guess, to express themselves a different way. It's just a matter that, you know, some days I feel like a girl and some days I don't. And I actually also sometimes have that feeling of, you know, a more girly one day than the other. I don't know. I'm not implying that I'm gender fluid, but that particular person is an example of what might happen for someone who's gender fluid.

Q. Let me ask you to find. I told you we'd dig for it again, the Endocrine Society 2017 Guidelines, which are Exhibit 4.

A. I'm not saying my experience is the one and only, one all be all.

Q. And I'll call your attention to page five, column two?

A. I'm sorry, what is that again?

Q. Page five, column two. Language looks like this. That's on page five. That's fine.

ATTORNEY TRYON: This is Dave Tryon. I think both of you are starting to trail off at times and

speak less loudly and it's getting a little bit harder to hear you. If you can both remember to keep your voices up, it would be helpful to me.

ATTORNEY BROOKS: We will do our best. Wait until 6:30.

BY ATTORNEY BROOKS:

Q. Page 3873, column two. And towards the bottom is a discussion of the continuum and individuals who experience both or neither and then a reference that we looked at before about reports of individuals experiencing a continuous and rapid involuntary alternation between a male and female gender identity. Do you see that? It's about eight lines from the bottom.

A. On the right?

Q. Yes.

A. Yeah.

Q. And I'm going to focus you on the rapid involuntary alternation between male and female identity. And is it your view --- is it your opinion that unless school or league policy allows such gender fluid individuals to play in the league according to their present gender identity, whatever that might be, that it will do extreme harm to those individuals?

ATTORNEY BORELLI: Objection, form.
THE WITNESS: So I think that unless you are working with that individual person to do what works for them based on their gender identity, you are likely to do harm.
BY ATTORNEY BROOKS:
Q. And am I correct that it is your opinion that avoiding harm to students who experience a transgender identity, perhaps a gender fluid identity, is a higher priority than ensuring fairness in competition for those born female?
ATTORNEY BORELLI: Objection to form.
THE WITNESS: So doing a harm to individuals that are transgender can lead directly to their death. So we're talking about a life and death experience for these individuals. What you are referring to with regard to sports participation in my vision of all of the sports athletics is a rarity of someone dying, and it is not because of the harm policy --- of transgender person.
BY ATTORNEY BROOKS:
Q. What's the answer to my question?
COURT REPORTER: Excuse me.
ATTORNEY BORELLI: Objection.

COURT REPORTER: I just want to interrupt because the witness cut out during her answer.
BY ATTORNEY BROOKS:
Q. Well, I'm going to re-ask the question. And we'll both try to speak up and perhaps to some extent the transcript will have to be, you know, cleaned up from the recording. We'll do the best we can. Is it your opinion that avoiding harm to transgender individuals, potentially including gender fluid individuals, is a value that is more important than protecting the fairness and safety for girls and women for those born female in sport?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: So when we're talking about life and death, that is the ultimate outcome. And I still say that if you're talking about a policy that could cause the death of a human being, that, in my judgment, does rank higher than fairness at that time.
BY ATTORNEY BROOKS:
Q. And you talked earlier about your assertion that you had patients who have experienced harm as a result of not being permitted to play according to their gender identity. Do you recall that testimony?
ATTORNEY BORELLI: Objection, form.

THE WITNESS: I do.
BY ATTORNEY BROOKS:
Q. And do you have specific examples of such patients who experienced increased suicidal ideation specifically as a result of not being permitted to play in athletics according to their gender identity?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: I do.
BY ATTORNEY BROOKS:
Q. Tell us about that.
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Yeah. So one of my patients, for example, had played football. This patient was assigned female at birth, identifying as male in middle school. Really wanted to play in high school and was eventually not allowed to do so, and their depression deepened. They had not had any suicidal ideation before. They had been well affirmed. They were living in their gender identity in every other aspect of their life.
And they ended up having to go on medication to make sure that --- to treat that depression in addition to all of the support in the family and teachers were giving with their gender

identity.
BY ATTORNEY BROOKS:
Q. And do you have any knowledge as to whether that individual would have faced serious safety injury risks had that individual, natal female, been permitted to play football at high school level as your patient's male peers matured into full male stature?
ATTORNEY BORELLI: Objection to form.
THE WITNESS: This particular patient was within the normal range for a male of that age as far as height, weight and BMI, so there wasn't a great disparity with regard to that. That can come up at times with regards to sports participation in consideration with injury. So this particular patient, I would not have had any concern there. Lots of assigned females at birth who are not transgender also play football in high school.
BY ATTORNEY BROOKS:
Q. Tab 25. Dr. Adkins, do you recall permitting the reporting of and being part of a WNYC podcast back in 2016?
A. Yes.
Q. Let me mark as Exhibit 14 a two-page kind of introductory page off the WNYC website describing this

podcast. The document itself, the posting is dated August 2, 2016. Give me one moment here.

(Whereupon, Adkins Exhibit 14, 2016 Podcast Summary Webpage, was marked for identification.)

ATTORNEY BROOKS: And let me also mark as Exhibit 15 the transcript of that podcast downloaded off of the WNYC website.

(Whereupon, Adkins Exhibit 15, 2016 Podcast Transcript, was marked for identification.)

BY ATTORNEY BROOKS:

Q. And that --- the title apparently of the podcast is, quote, I'd Rather Have a Living Son than a Dead Daughter. Do you see that?

A. I do.

Q. And you allowed a reporter from WNYC to come into your office and record various conversations.

Am I correct?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: With the permission of --- the --- everyone involved.

BY ATTORNEY BROOKS:

Q. To participate and they waived the privacy with regard to anything that wasn't included in the podcast.

Am I correct?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: That would be standard.

BY ATTORNEY BROOKS:

Q. At least as far as yourself, do you recall doing that?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: I don't recall. I suspect I would have.

BY ATTORNEY BROOKS:

Q. And did you yourself review the podcast before it was released for any privacy or accuracy concerns?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I don't remember. That's been so long ago.

BY ATTORNEY BROOKS:

Q. It has been a while. This was 2016. And you had been practicing in this area about how long in 2016?

A. In North Carolina?

Q. I'm sorry. In this field of treatment of gender --- of individuals suffering gender dysphoria?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I started caring for patients who are transgender in --- I think around 2013.

BY ATTORNEY BROOKS:

Q. Okay.

So between two and three years before the time this was recorded.

Okay.

Let me ask you to look at Exhibit 15, which is to say the transcript. And first page, it indicates and I'll just --- it deals with two clients with names, at least for purposes of the podcast, of Drew Adams and Mark. Do you recall that?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I would have to verify. Probably accurate, but ---.

BY ATTORNEY BROOKS:

Q. Martin shows up on page 13. A couple inches down we skip to the last patient at the end of a long day and then it says recalling this patient Martin.

A. I see that.

Q. Let's go back and just look at issues relating

to Drew Adams. Drew is, if I understand correctly, natal female, identifying at the time of this recording as ---?

A. Drew was assigned female at birth and identified as male at this time.

Q. And so far as you understand, based on your medical evaluation, Drew is somebody who was chromosomally female.

Correct?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: I don't get to verify their chromosomes. We don't do that.

BY ATTORNEY BROOKS:

Q. At the time this was recorded, you did have an understanding, did you not, that Drew had female reproductive biology?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: On my exam at that time Drew had external genitalia that appeared female and secondary sex characteristics typical of someone assigned female at birth.

BY ATTORNEY BROOKS:

Q. Well, in fact, somebody biologically female.

Correct?

ATTORNEY BORELLI: Objection.
THE WITNESS: Assigned female at birth.
BY ATTORNEY BROOKS:
Q. Well, let me ask you this. You prescribed hormones for Drew.
Am I correct?
A. Yes.
Q. And you didn't do that without a high level of confidence in your mind as to the biology of Drew's body.
Am I correct?
ATTORNEY BORELLI: Objection to form.
BY ATTORNEY BROOKS:
Q. You weren't just based on what somebody happened to be assigned at birth. You believed that Drew was biologically female, did you not?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: So at the beginning, prior to treating patients, we do look at where their baseline hormones are. So I did have that information as well as an external exam. I didn't have chromosomes or an ultrasound.
BY ATTORNEY BROOKS:
Q. My question is at the time you prescribed

hormones for Drew you believed that Drew was biologically female firmly, did you not?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: I had no reason at that time with the data in front of my to identify Drew as anything other than assigned female at birth.
BY ATTORNEY BROOKS:
Q. And you just didn't care what Drew's biology was as you chose hormones to prescribe?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: I investigated what is necessary to move ahead with that prescription and make it safe for the patient.
BY ATTORNEY BROOKS:
Q. What was necessary was to determine that biologically Drew was female.
Am I correct?
ATTORNEY BORELLI: Objection, form.
BY ATTORNEY BROOKS:
Q. You are going to tell the court that you didn't try to determine whether Drew was biologically male or female?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: I obtained baseline blood

work like I do with every patient, which is recommended by the Endocrine Society that you get baseline hormone levels. I did a physical exam. Not every patient gets to have an ultrasound, a karyotype or a full exon analysis. It's not the way you can practice medicine.
BY ATTORNEY BROOKS:
Q. Turn with me to page three of the transcript. Two, two and a half inches down, MH, who I believe is the reporter, not somebody working for you but the reporter, says, quote, this is Drew's second time here, closed quote. Do you see that, just two inches down?
A. Yeah.
Q. It's been quite a few years. Do you believe that that was accurate that what the events that were recorded here were on Drew's second visit to your clinic?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: It has been so long. To verify it is true I would have to look back at my clinic notes as well as if I even still had it recorded when they were in clinic or not.
BY ATTORNEY BROOKS:
Q. And do you know, as you sit here today, whether prior to this perhaps second meeting with Drew any

psychologist or psychiatrist associated with your new clinic had personally evaluated Drew to confirm the diagnosis of gender dysphoria?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Before we start treatment we have our mental health team do an assessment of the patient with regard to finding out their --- any psychological challenges that they may be having and confirm if they have gender dysphoria and confirm the criteria from the DSM --- God, my brain is just tired. From the DSM criteria. And in addition to that, we have a person who is a local mental health provider also perform any evaluation and develop a relationship with the patient prior to starting the treatment.
BY ATTORNEY BROOKS:
Q. Well, let me break that out. Do you require that a psychologist or psychiatrist associated with Duke confirm a diagnosis of gender dysphoria before you proceed with hormonal interventions?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: I have a team of mental health providers who work with me and do that assessment. That is part of their standard job. And every patient is evaluated by that team. Sometimes it

is a psychiatrist, psychologist. Sometimes it is a different kind of mental health provider.

BY ATTORNEY BROOKS:

Q. Well, if it is not a psychologist or psychiatrist, on what type of mental health --- what qualifications of mental health providers do you rely to make such a diagnosis before prescribing hormonal interventions?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: You know, there are Licensed Clinical Social Workers that we work with that are used by Duke in a number of capacities with regard to mental healthcare.

BY ATTORNEY BROOKS:

Q. Is it your testimony --- I want to be careful on this. Is it your testimony that you are willing to rely on a diagnosis by a social worker with no medical, psychological degree before prescribing a hormonal intervention?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So the mental health providers that I use have master's degree education in care for patients in this area and have ongoing continuing medical education with regard to their

ability to asses the mental health of a patient in front of them.

BY ATTORNEY BROOKS:

Q. That would be a --- a Master's in social work. Correct?

A. Often it's a Master's in social work. Also have people who have Master's in public health in addition I should say.

Q. And so if such any evaluations was done by a mental health professional associated with Duke, that would have been at Drew's first visit, not at the visit that was the subject of this podcast recording?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: At that time it could have been done physically at the first visit. Sometimes we have had them come on a different day than their visit with me. So it is possible it could have been a different day. I just don't remember.

BY ATTORNEY BROOKS:

Q. Okay.

Do you ever rely on the diagnosis of an individual's mental health worker not associated with Duke as an adequate basis to prescribe hormonal interventions?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Our clinic policy is to have someone outside of Duke as well as someone inside of Duke.

BY ATTORNEY BROOKS:

Q. So you may recall --- do you recall that Drew and his mother had driven up from Florida for this meetings?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I do remember that.

BY ATTORNEY BROOKS:

Q. And do you sometimes consider diagnosis given by mental --- for purposes of proceeding with hormonal interventions?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: If they are licensed to practice in that area or certified in their state, that is what we rely on.

BY ATTORNEY BROOKS:

Q. At the top of page two --- and again, this is the voice of the reporter, so I want to check it with you. It says, the end of the first full paragraph, that Drew and his mom are driving eight hours from Jacksonville, Florida, to get here because North

Carolina is also home to one of the only clinics in the south that treats transgender kids. Do you see that?

A. I do.

Q. And in your understanding was that true in 2016, that you here had one of the only clinics in the south that treated transgender kids?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: We were one of a few.

BY ATTORNEY BROOKS:

Q. And they had driven all the way to North Carolina from Florida precisely because whatever mental health providers they were seeing in Florida didn't have expertise in this area.

Is that correct?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: They didn't drive here to see a mental health provider. They drove here to see me as an endocrinologist.

BY ATTORNEY BROOKS:

Q. I apologize. Whatever professionals were advising them in Florida didn't have expertise in this area?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: With regard to hormonal

management.
BY ATTORNEY BROOKS:
Q. What steps, if any, did you take to give yourself comfort that any comorbidities that might be --- might confound the diagnosis of transgenderism had been appropriately addressed before you prescribed hormones for Drew?
ATTORNEY BORELLI: Objection to form.
THE WITNESS: I mean, I would have to look back at my notes specifically to see exactly what we had in the record. Our policy again is to have someone who has had a relationship with the patient outside of Duke Clinic that states that they have well managed issues with regard to their mental health and are prepared and safe to move forward with gender affirming hormones.
BY ATTORNEY BROOKS:
Q. As a matter of policy in your clinic do you insist on a diagnosis that will tell you whether or not this patient suffers from autism of any sort?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: We do require that they have a screening that is performed within our clinic for any potential signs or symptoms of autism.

BY ATTORNEY BROOKS:
Q. And if you identify that a patient does have some signs or symptoms of autism what significance does that have as to how quickly or whether you are willing to proceed with hormonal interventions?
ATTORNEY BORELLI: Objection to the form.
THE WITNESS: So again, every patient is different. Autism is a spectrum, as it's described autism spectrum disorder, and so you have to figure out each patient's understanding of their gender identity, what's going on in their life and if they're ready.
BY ATTORNEY BROOKS:
Q. Do you have any professional opinion as to whether autism itself can cause a patient to feel uncomfortable with their identity?
ATTORNEY BORELLI: Objection to form.
THE WITNESS: Their whole identity?
BY ATTORNEY BROOKS:
Q. Yes.
A. I ---.
ATTORNEY BORELLI: Objection ---.
THE WITNESS: Yeah, I don't know if I have seen any reports about their whole identity being called into question just because they have autism.

BY ATTORNEY BROOKS:
Q. Do you have any professional opinion as to whether autism itself can cause individuals to feel alienated from or disassociated with their gender identity ---
ATTORNEY BORELLI: Objection, form.
BY ATTORNEY BROOKS:
Q. --- or I should say the gender identity associated with their natal sex?
ATTORNEY BORELLI: Objection to form.
THE WITNESS: With the information that I have worked with on our autism team at Duke is that, you know, it can take a little longer for people with autism to truly understand their gender identity. So we do take care there. That's why we screen.
BY ATTORNEY BROOKS:
Q. I would like to play a clip from this podcast that includes your voice, the reporter's voice, Drew's voice. I think it will come through loud and clear. I'm optimistic --- for those of you ---.
ATTORNEY BORELLI: While you're settling this, will the words from the recording, do they appear in the transcription.
ATTORNEY BROOKS: They do. I was about

to say that for everybody's benefit.
ATTORNEY BORELLI: Thank you, Counsel.
ATTORNEY BROOKS: Now, I'm thinking. That has to be live. All right. So that's unmuted.
VIDEOGRAPHER: You said one?
ATTORNEY BROOKS: What's that?
VIDEOGRAPHER: You said one?
ATTORNEY BROOKS: But I need to say on the record and tell people --- can the court reporter here me.
COURT REPORTER: Yes.
ATTORNEY BROOKS: The clip that I'm about to play appears on page four of the transcript that is marked Exhibit 15 and it makes up kind of the center two-thirds of the transcript. All the words that you will hear or perhaps won't hear very well appear on the transcript. We're going to listen to clip one here.

(WHEREUPON, PODCAST AUDIO WAS PLAYED.)

BY ATTORNEY BROOKS:
Q. The narrator says that Drew's only question was, quote, when can I start testosterone, and you responded today, sound good, yeah, all right. Is that consistent

with your recollection of what happened that day?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Yes.
BY ATTORNEY BROOKS:
Q. Was that your voice?
A. That was my voice.
Q. Okay.
And did you know before you came into the room that Drew's goal was to walk out with a testosterone injection or a prescription for a testosterone injection?
ATTORNEY BORELLI: Objection to form.
THE WITNESS: You know, I don't remember. I don't remember what I knew before in walked in the door. Sometimes I do. Sometimes I don't.
BY ATTORNEY BROOKS:
Q. Now, I want to be fair. This is --- these are clips and they're carefully done, so I can't be sure whether there are things in between.
A. Correct.
Q. Do you have any recollection as to any discussion or any further evaluation that happened between, hey, how are you, and your voice, and answering the question when can I start, today?

ATTORNEY BORELLI: Objection, form.
THE WITNESS: So most typically, before I walk into a room I have reviewed the patient's medical record. I have reviewed their letter from their mental health provider. And I have reviewed any laboratory evaluation that I have received from them prior and generally review their records. So I would come into a visit with that sort of fresh in my mind.
BY ATTORNEY BROOKS:
Q. So it is consistent with your recollection that on Drew's second meeting with you, you walked into the room having made up your mind to give Drew testosterone?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Based on the words that are here, that would be --- I would have reviewed the information that I needed to know that that would be safe.
BY ATTORNEY BROOKS:
Q. And in between walking in the room and telling Drew today, yay, all right, did you make any further inquiry about whether Drew in the last --- since he last saw you had been suffering from any sort of depression?
ATTORNEY BORELLI: Objection to form.
THE WITNESS: So typically that is part

of our visit. It's not necessarily part that I would do. And we also have forms that they fill out that does an assessment of depression prior to me walking in the room.
BY ATTORNEY BROOKS:
Q. Did you ensure that an assessment had been done that evaluated the strengths and weaknesses of Drew's relationship with Drew's family?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: The mental health evaluation does include walking through parent relationships, school relationships, teacher relationships and finding out where those are.
BY ATTORNEY BROOKS:
Q. Did you feel that you, yourself, needed to have any understanding, for instance, of Drew's relationship with Drew's father before you proceeded to prescribe cross sex hormones?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: I would want to know where their relationships are.
BY ATTORNEY BROOKS:
Q. So Drew's mother attended. What steps did you take to find out what Drew's relationship with Drew's

father was?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: I don't remember. I would have to look back.
BY ATTORNEY BROOKS:
Q. And does your clinic before prescribing hormonal interventions make sure that an overall psychotherapy treatment plan has been prepared to diagnose and address any other psychological or social difficulties suffered by the patient?
ATTORNEY BORELLI: Objection to form.
THE WITNESS: So you know, I follow the guidelines that say that we should have any of the mental health issues well managed and that's why we use --- have our patients have a mental health provider and that's why we have them tell us that in writing.
BY ATTORNEY BROOKS:
Q. So I'm going to play a second clip that picks up exactly where we left off on the transcript, that is at the very bottom of page five and continuing halfway --- I'm sorry, the very bottom of page four and continuing halfway down page five. If you would.

(WHEREUPON, PODCAST AUDIO WAS PLAYED.)

ATTORNEY BROOKS: That was background noise. I thought it was coming through here. I apologize. Just start it again. My mistake.

(WHEREUPON, PODCAST AUDIO WAS PLAYED.)

BY ATTORNEY BROOKS:

Q. Dr. Adkins, do you believe that the basic narrative here accurately describes what happened, that you came in, you spoke with Drew, you went out, and while you were out one of your aides read risk disclosures for consent to Drew and Drew's mother?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: That is part of it.

BY ATTORNEY BROOKS:

Q. And the narrator said at the beginning explaining this process that there were still, as of 2016, a lot of unknowns about what these hormones will do long term. Was that an accurate statement at the time in your opinion?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: We've learned a lot more.

We have got however many more years, what, five more years at least of information since then. You can't know what every single thing that every drug is going to do forever.

BY ATTORNEY BROOKS:

Q. One of the things that you included at that time in your cautions or disclosures was that taking these cross sex hormones might prevent a patient who had --- was a natal female from ever being able to get pregnant, even if Drew stopped taking testosterone in the future.

Correct?

ATTORNEY BORELLI: Objection, form. One other just piece of clarity for the record, I want to make sure that it is clear that the transcript and recording is not a complete recording of the entire visit.

ATTORNEY BROOKS: I have made that clear I think.

ATTORNEY BORELLI: Thank you, Counsel.

BY ATTORNEY BROOKS:

Q. My question is one of your disclosures in 2016 was that the administration of testosterone to a natal female might mean that that individual would not ever be able to get pregnant even should the patient stop taking

testosterone at a future date.

Correct?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Correct.

BY ATTORNEY BROOKS:

Q. And that is still part of your disclosure today; is that correct?

A. That's part of it. We actually have more studies that show actually an equal fertility rate for our transgender males who have been on testosterone and come off and choose to get pregnant as their cisgender peers, their assigned females at birth who've never been through any testosterone treatment.

Q. Because of the present science you still make exactly the same caution in your warnings to patients before prescribing testosterone.

Correct?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: I do.

BY ATTORNEY BROOKS:

Q. And so the sequence is that you said with regard to administering testosterone, which you cautioned or clinic cautioned could be potentially sterilizing, you as the doctor said to Drew, sound good, yeah, all right.

And then you left the room while somebody else read warnings and disclosures.

Is that right?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: That doesn't --- is that what the sequence was in this report? It looks like that I also make sure that the patients have adequate time to answer questions. I usually give them this form ahead of the visit so they can review it and in case their reading is their better method versus verbal. That's why we do it in two different ways as far as their learning style. We make every effort to help make sure that our patients understand.

ATTORNEY BORELLI: We have been going a while. Can we take a break soon? I think we should.

ATTORNEY BROOKS: Fairly soon. We'll finish this line of questioning and this clip.

BY ATTORNEY BROOKS:

Q. You yourself didn't ever sit down and talk through known or potential side effects with either the child or the mother in this case, did you?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I don't remember it specifically every visit from 2016 and exactly what

happened.
BY ATTORNEY BROOKS:
Q. As a matter ---.
ATTORNEY BORELLI: Counsel, I'm sorry, I think I heard the witness say a moment ago that a break would be good. Why don't we break here? Can we come back in say ten minutes?
ATTORNEY BROOKS: We can say that or I can finish this paragraph.
ATTORNEY BORELLI: Why don't we break now. We've been going a while. Thank you.
VIDEOGRAPHER: Going off the record. The current time reads 2:27 p.m. Eastern Standard Time.
OFF VIDEO

(WHEREUPON, A PAUSE IN THE RECORD WAS HELD.)

ON VIDEO
VIDEOGRAPHER: We're back on the record. Current time reads 2:43 p.m. Eastern Standard Time.
BY ATTORNEY BROOKS:
Q. Dr. Adkins, in dealing with Drew, you have a social worker read the disclosures, the warnings. Did you, yourself, ever present to Drew options for

fertility preservation?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Yes, that is a conversation I have with my patients.
BY ATTORNEY BROOKS:
Q. You, yourself, have that conversation?
A. I do.
Q. Let's --- and did you explain --- I see that the disclosure --- we heard the disclosure that it's --- using testosterone to appear more masculine is off label use. Is that part of your standard disclosures?
ATTORNEY BORELLI: Objection, form.
BY ATTORNEY BROOKS:
Q. Do you explain to your patients that the fact that it is off label means that no studies that establish safety of use of testosterone for that purpose at the level as would be required for FDA approval have been done?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: No, that wouldn't be an accurate statement. Those studies can be done. They just haven't been presented by the company manufacturing the medication to the FDA to try and get that certification from the FDA.

BY ATTORNEY BROOKS:
Q. Have you, yourself, ever participated as a physician in a so-called phase one clinica trial?
ATTORNEY BORELLI: Objection to form.
THE WITNESS: So phase one typically is dose related. I have not done those. I have done phase two, phase three and then after market.
BY ATTORNEY BROOKS:
Q. Phase one is, among other things, required to establish safety.
Am I correct?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: That is part of the objective of a phase one study.
BY ATTORNEY BROOKS:
Q. And indeed, it is a required part of the objective.
Right?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Yes.
BY ATTORNEY BROOKS:
Q. And to your knowledge, has any study of safety of administering testosterone for the purpose of appearing more masculine in natal females ever been done

at a level of rigor that could satisfy FDA requirements?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: So I don't have the FDA standards right in front of me. I have, you know, read articles that report outcomes and side effects and safety profiles. There are other testosterone --- there are testosterone products on the market that are FDA approved for using cisgender females.
BY ATTORNEY BROOKS:
Q. Do you know whether any safety study has ever been done for administration of testosterone to natal females for the purpose of appearing more masculine at a level of rigor that could satisfy FDA requirements?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: I can't answer the question without, you know --- I would have to really look at the indications, the FDA rules.
BY ATTORNEY BROOKS:
Q. Okay.
Let's listen to a third and final clip. This one begins with a sentence the last one ended with on page five and runs just onto page six, I believe. End of page five. Let's hear that.

(WHEREUPON, PODCAST AUDIO WAS PLAYED.)

BY ATTORNEY BROOKS:

Q. All right.

My impression, correct me or tell me if you agree, that clip is just a single unbroken bit of conversation, not pieced together from different things. Is that consistent with what you heard and what you recall?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: You know, I don't remember.

BY ATTORNEY BROOKS:

Q. Okay.

You come back in the room with a prescription in your hand, the warnings have been read while you were outside. You ask, guess what I have in my hand. You heard the clip and I see what it says there. Is the voice that says happy drugs Drew's voice or your voice?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Mine. My voice.

BY ATTORNEY BROOKS:

Q. The voice that says happy drugs is your voice. And the voice that says yay, yay, s also your voice? If

you want to hear it again you can.

A. It's not labeled that way.

Q. Well, yay, yay is labeled you?

A. Yay, yay is labeled me? Okay.

Q. Doctor A?

A. It's really confusing because it's ---.

Q. Let's do this. Let's listen to this one more time.

A. There is confusion.

Q. I want you to listen --- don't trust the labels. Listen to the voice on happy drugs. They may be ---.

(WHEREUPON, PODCAST AUDIO WAS PLAYED.)

BY ATTORNEY BROOKS:

Q. Whose voice says happy drugs?

A. That sounded like Drew.

Q. Okay.

So the labeling you believe is correct. I just wanted to double check that.

Are you, as a physician, in light of all of the disclosures that have just been made about potential side effects, potential harmful effects, were you comfortable with the child referring to cross sex

hormones as happy drugs?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So if you will recall, we use the medication to decrease dysphoria, which is a discomfort, and to improve depression. So any medication that would relieve those things could be described as a happy drug. I'm okay with that.

BY ATTORNEY BROOKS:

Q. And after Drew says happy drug you said yay, yay. Are you comfortable that's consistent with your role as a doctor in light of potential downsides and side effects of this treatment and this child's life to serve the role of a cheerleader saying yay, yay?

ATTORNEY BORELLI: Objection. Counsel, I just want to note for the record it's not clear from that recording that both yays are in the same voice. That's actually not what I heard.

ATTORNEY BROOKS: If you have an objection you can raise it later.

ATTORNEY BORELLI: I need to make my record now, Counsel.

ATTORNEY BROOKS: No, you need to raise your objection now. You get to discuss it further in front of the court.

BY ATTORNEY BROOKS:

Q. I will re-ask my question. Do you consider it consistent with your role as a physician, in light of the potential downsides and side effects from cross sex hormones for this child, for you to play the role of cheerleader saying yay?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So in my job as a physician I often am helping motivate my patients improve their overall health. And in that way I often sound like I am a cheerleader and I am trying to help them believe in themselves and understand and feel good moving forward with medication treatments to have the best likelihood of success. So I may say yay.

VIDEOGRAPHER: Excuse me. You got cut out there in the middle of that --- in the middle of your answer.

THE WITNESS: Okay.

Do you want me to start over?

ATTORNEY BROOKS: Who was that?

ATTORNEY WILKINSON: That was the court reporter. I can make a recording if everyone is happy with my phone just on the table so we could refer to that later if that's useful if we're concerned about the

audio cutting out.
ATTORNEY BROOKS: There is no harm in a backup recording. Voices will be identifiable. If you want to set it there by that speaker.
ATTORNEY WILKINSON: If you're comfortable.
ATTORNEY BORELLI: I just want to check --.
COURT REPORTER: Who is talking right now. I'm sorry, who is --- who is talking about their phone. I don't understand. Like, I don't know who's speaking.
ATTORNEY BROOKS: Just now my colleague Lawrence Wilkinson is proposing to set his iPhone on record by the speaker here so there will be a backup onsite recording in case anything is dropped over the internet. And that will be made available both to those who are listening and to the court reporter service. Address some of the concerns. So let's fire that up and it will be there.
BY ATTORNEY BROOKS:
Q. I will continue with my questioning. Did it cause you any concern that in referring --- by referring to a testosterone injection as happy drugs that that was

an indication that young Drew was not taking seriously the 20 minutes' worth of cautions and warnings that had just been read?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: So given that the medication is used to decrease dysphoria and improve depressive symptoms, in that way it does make someone happier. And I have no issue with a patient who is using a general reference as happy drugs in that that is part of what will happen with the medication. I didn't have any concerns with regard to the fact that Drew may not have gotten everything he needed to understand what he was going into going forward with this medication.
BY ATTORNEY BROOKS:
Q. Let's back up to page four of the transcript. And we're not going to listen to any ore clips. Everybody will be happy to know perhaps.
ATTORNEY BORELLI: It's unstable.
THE WITNESS: There we go.
BY ATTORNEY BROOKS:
Q. Okay.
And towards the top of page four, the second paragraph, the narrator --- and this is not you speaking and it is not Drew's mother speaking. The narrator says

she doesn't like talking about what Drew's life was like before he started transitioning. But when I asked her how she knew living as a boy was the right choice for Drew, she was blunt. She said I'd rather have a living son than a dead daughter. Do you see that?
A. I do.
Q. Did you ever tell Drew's mother that that was the choice that she faced, between a living son and a dead daughter?
ATTORNEY BORELLI: Objection to form.
THE WITNESS: I would not have used that phrase. I would have discussed the risk of suicidality.
BY ATTORNEY BROOKS:
Q. Did you ever hear Drew's mother say she understood that was the choice she faced, between a living son and a dead daughter?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: You know, I have heard it since then because of the podcast, so I can't remember if I heard it before then or not. I don't recall hearing it before then.
BY ATTORNEY BROOKS:
Q. When you saw the title to the podcast did you call WNYC and express any concern that that title could

be misleading?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: I did not.
BY ATTORNEY BROOKS:
Q. Have you ever consulted research on the rate of suicide among preadolescents for any purpose?
ATTORNEY BORELLI: Objection to form.
BY ATTORNEY BROOKS:
Q. In any category?
A. Repeat the question, please.
Q. Have you ever consulted research or data about the rate of suicide among preadolescents, period?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Preadolescents, have I consulted research on suicidality on preadolescents, so before puberty. Not in a while.
BY ATTORNEY BROOKS:
Q. You are aware, are you not, that incidences of actual suicide are extremely rare in individuals of all categories before puberty?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: That sounds consistent with the leading causes that I recall for death before puberty.

BY ATTORNEY BROOKS:

Q. And you, yourself, are not aware of a single case of suicide by a preadolescent gender dysphoria patient that has come to your clinic?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: No.

BY ATTORNEY BROOKS:

Q. And have you consulted any research on the rate of actual suicide by children suffering from gender dysphoria under the age of 15?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Have I? Yes.

BY ATTORNEY BROOKS:

Q. And what did that --- what source do you have in mind when you say that?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Again, I have trouble with remembering and there is a wide variety of reports, some as --- from 25 to 30 percent, some as high as 40 percent. And those are suicide attempts, as I recall, which means that the folks that died wouldn't have even been identified.

BY ATTORNEY BROOKS:

Q. Well, you are aware that there's a very wide

statistical gap between suicide attempts and suicides. Correct?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: There is some variation between suicide attempts and what was the word, suicide ideation, yeah.

BY ATTORNEY BROOKS:

Q. No. What I said is there is a very wide gap between suicide attempts and actual completed suicide?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: There is a gap between. Not every one who attempts. Otherwise, there wouldn't be a difference in the name.

BY ATTORNEY BROOKS:

Q. In fact, you know as a matter of professional expertise that it is a very wide gap, do you not?

ATTORNEY BORELLI: Objection.

THE WITNESS: I would have to look at the literature, at what the numbers look like and describing it why is an opinion.

BY ATTORNEY BROOKS:

Q. Has any patient of the 500 under your care ever committed suicide at an age younger than 14?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Excuse me. No.

BY ATTORNEY BROOKS:

Q. Have you followed up so that you have current information about Drew's mental, physical and social health as of today, which would be about age 21?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Drew's no longer my patient, has transitioned to adult care. That's not what I do, so I don't have access to that.

BY ATTORNEY BROOKS:

Q. What procedures do you have in place, if any, in your clinic to follow up long term with those whom you have prescribed puberty blockers or cross sex hormones for?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So you know, here at Duke we have a multidisciplinary team. As --- I don't know if I mentioned them before. It includes a wide variety of individuals. And that group discusses every month our patients, any concerns or questions. In addition, that group has put together a registry that starts when they come to my clinic and we follow their health, their mental health through the time that they are in our clinic and then when --- oops. Sorry. And then when

they are adults transitioning to our adult care team. And in that way I'm able to keep up with those patients who remain at Duke for adult care.

BY ATTORNEY BROOKS:

Q. So you have been practicing this field I think you said since about 2013. And the patients that you saw let's say in 2013, 2014, 2015, I think you said most of your patients presented older than age --- I don't recall exactly. Your average presentation is older than 13?

ATTORNEY BORELLI: Object to the form.

THE WITNESS: Yes.

ATTORNEY BORELLI: You got to pause so I can get in an objection.

THE WITNESS: Oh, yeah. Yeah.

BY ATTORNEY BROOKS:

Q. So --- yeah. So those patients on average are now in their upper teens or perhaps 20?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Let's see. I have patients who are older than that. I'm not sure of an average. I have not calculated an average.

BY ATTORNEY BROOKS:

Q. Do you have any procedures in place to attempt

to monitor the mental health of your patients five years after you first prescribe puberty blockers or cross sex hormones?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: The patients that remain within our registry do have regular mental health follow-up. We have a team on the adult side as well in both of the two clinics that we work with.

BY ATTORNEY BROOKS:

Q. What percentage of your patients that you yourself have authorized cross sex hormones do you have access to data about their mental health five years after initiation of hormone treatment?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Some are still present in the clinic. I would have access to those. You know, I'm not supposed to access records specifically if they're no longer in my care. The provider can reach out to me with concerns and have a very close relationship with the adult providers and they do ask me questions about some of those. So in that way I would have access as well as when we calculate on a population base within our registry any outcomes there.

BY ATTORNEY BROOKS:

Q. As a matter of research, has --- have you or anybody associated with your clinic attempted a follow-up survey or systematic series of interviews of all patients who were prescribed hormones within, for instance, some particular time period?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So we currently are enrolling patients in that study. It's not complete.

BY ATTORNEY BROOKS:

Q. As we sit here today, you don't have any systematic reasonably thorough information on the mental health condition of let's say patients for whom you first prescribed hormonal interventions five years ago. Is that correct?

ATTORNEY BORELLI: Objection. Objection to form.

THE WITNESS: I would consider, you know, a registry with research based systematic method.

BY ATTORNEY BROOKS:

Q. A registry with research based ---?

A. That is research based is a systematic program to do that and find out follow-up.

Q. What do you mean by registry that it is research based?

A. A registry is a list of patients who are enrolled in a study, if it's done as a research protocol. And within that registry, you collect information that you choose to record that's important and then you follow that over time in a systematic way.

ATTORNEY BROOKS: Let me grab tab 29 --- let me mark as Exhibit 16 a document previously designated as tab 29, which is article entitled --- I should say a newspaper article entitled The Mental Health Establishment is Failing Trans Kids by Laura Edwards Leeper and Erica ---.

(Whereupon, Adkins Exhibit 16, 2021 Washington Post Article, was marked for identification.)

BY ATTORNEY BROOKS:

Q. And Dr. Adkins, am I correct that this in the Washington Post came out in November of 2021 stirred up quite a bit of discussion within your profession?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I understand that there was an article by Laura Edwards Leeper that there was a lot of conversation around. I don't know if it was this

one. It is possible.

BY ATTORNEY BROOKS:

Q. Did you read this?

A. I haven't read this article.

Q. There was a lot of conversation around a recent article by Dr. Edwards Leeper and Dr. Anderson but you didn't bother to read it?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: I have had discussions with my colleagues around the substance. I haven't had the time to read it.

BY ATTORNEY BROOKS:

Q. Have you had professional interactions in the past with Dr. Edwards Leeper?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: It's possible that we taught at a same conference once, but I don't recall ever having a conversation.

BY ATTORNEY BROOKS:

Q. And have you had professional interactions with Dr. Anderson?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I have not.

BY ATTORNEY BROOKS:

Q. Are you generally aware of Dr. Edwards Leeper's reputation in the field?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Yes.

BY ATTORNEY BROOKS:

Q. How would you describe that reputation at least prior to publication of this article?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: In general, I would not necessarily say that it has changed. People have respect for Dr. Edwards Leeper and her publications in general. I don't know about specific ---.

BY ATTORNEY BROOKS:

Q. People generally have respect for her publications?

A. Generally. I don't know about every one.

Q. Sure. Were you invited to participate as a member of the committee to revise the WPATH so-called standards of care relating to treatment of transgender individuals?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I was.

BY ATTORNEY BROOKS:

Q. Are you doing that?

A. No.

Q. And did you participate in the task force for the American Psychological Association, which developed guidelines for practice guidelines for work with transgender individuals?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I have not participated in that, no.

BY ATTORNEY BROOKS:

Q. Okay.

And let me mark the next one, which is an article that consists of an interview with Dr. Anderson. This I will mark as Exhibit 17?

(Whereupon, Adkins Exhibit 17, Anderson Interview, was marked for identification.)

BY ATTORNEY BROOKS:

Q. And I believe I asked if you knew her or are you familiar with the reputation of Dr. Anderson, Dr. Laura Anderson?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Actually, no.

BY ATTORNEY BROOKS:

Q. So as a representation there I know that Dr. Anderson is transgender, is a natal male who's been living with a female gender identity for many years. That you don't know about one way or the other?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I do not know that.

BY ATTORNEY BROOKS:

Q. Okay.

Let me take you back to Exhibit --- sorry, what was the first one we marked? Was it 17 and 18 or 16 and 17?

ATTORNEY WILKINSON: Sixteen (16) and 17, 16 and 17.

BY ATTORNEY BROOKS:

Q. Let me take you back to Exhibit 16. And the first paragraph contains a narrative. I have no idea whether it is a specific narrative or kind of case study narrative about this girl Patricia who told her parents she was transgender at age 13. It goes on to say that a year earlier she had been sexually assaulted by an older girl. Do you know what percentage of natal females who come to your clinic after the beginning of puberty have experienced sexual assault before they present to you?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I can't give you a percentage. It is something that we discuss with every patient in their intake assessment.

BY ATTORNEY BROOKS:

Q. Do you believe that natal females who have suffered sexual assault are disproportionately represented among the population who present experiencing gender dysphoria or gender incongruence?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So those assigned female at birth, I can't say that based on my review of my information that they are overrepresented. And I would have to have a comparison group. You know, one in four cisgender women have been attacked sexually at some point in their life. It's hard to get around that.

BY ATTORNEY BROOKS:

Q. Let me ask you to turn to page three of Exhibit 16.

A. I'm sorry ---.

Q. Page three, Exhibit 16.

A. Okay. Thank you. I just had a drink of water.

Q. Of course.

A. They're not labeled on my paper.

Q. The pages are not. You are right. I wrote them on mine. You would have to count them to be sure, but the third page.

A. I think I got it.

Q. These authors, Doctors Edwards Leeper and Anderson, state at the end of the paragraph at the top of page three that, quote, we may be harming some of the young people we strive to support, people who may not be prepared for the gender transitions they are being rushed into, closed quote.

Do you see that?

A. Where again?

Q. It's the very last sentence of the partial paragraph at the top?

A. Right. Got it. Thank you. Yeah, I see it.

Q. Do you share that concern expressed by Dr. Edwards Leeper and Dr. Anderson that is that some young people are being rushed into transitions and may be harmed rather than supported as a result?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So if you're following the recommendations there's at least six months of time. In my general experience it is years before they even present to my clinic. So I don't --- I would not say

that that's a rush.

BY ATTORNEY BROOKS:

Q. Well, and my question wasn't about your clinic now. My question was do you share the concern of these authors that looking around the practice more generally that some young people are being harmed rather than supported because they are being rushed into transitions they may not be fully prepared for?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So within research and within my conversations with my colleagues who are doing similar work, we practice similarly. I don't agree that they are rushing these kids.

BY ATTORNEY BROOKS:

Q. Let me ask you to turn over to the next page. And there in the second paragraph from the bottom is a sentence that begins in a recent study. Do you see that sentence?

A. I must not be on the right page.

Q. It is the penultimate page.

A. In the ---.

Q. In the penultimate paragraph.

A. Providers, that one?

Q. In a recent study of 100 detransitioners. I think it does, it begins ---.

A. Okay. All right.

Q. Within that you'll find the sentence that begins in recent study.

A. Got it.

Q. And it says in a recent study 100 detransitioners, for instance, 38 percent reported that they believed their original dysphoria have been caused by something specific such as trauma, abuse or mental health condition, closed quote.

Do you see that?

A. I do.

Q. Are you, yourself, aware of a recently published survey of 100 detransitioners by Dr. Litman of Brown University?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I have not seen that report.

BY ATTORNEY BROOKS:

Q. Are you aware of that?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: No, actually. Again, I don't remember names, so when you ask me about an article by Doctor Brown, I know 100 Doctor Brown. And I

have seen some articles about de-transition. So without that in front of me to really say, yes, I've seen that article --- it's possible. I do my best to keep up on the literature.

BY ATTORNEY BROOKS:

Q. All right. I'm used to wetting my fingers --- let me take you back to the previous page, the third paragraph --- and the paragraph begins comprehensive assessment. Do you see that paragraph?

A. Yes.

Q. And at the end of that the last sentence reads the messages that teens get from Tik-Tok and other sources may not be very productive for understanding this constellation of issues, referring to gender dysphoria-related issues. Do you see that sentence?

A. I do.

Q. Do you share the concern of these authors, young people are being unduly influenced on issues of gender identity by social media messages?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: As a pediatrician, I have my reservations about social media and their effects on teens. Always reminding teens in my care that they need to check their sources and that TikTok isn't, for

example, peer reviewed and that they should rely on, you know, the knowledge of their provider. And they're free to ask those questions and learn that information from a reliable person within our clinic.

BY ATTORNEY BROOKS:

Q. Do you share the concern that teens are particularly subject to peer pressure through social media?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So you know, peer pressure is a recognized phenomenon with adolescents that can affect teens.

BY ATTORNEY BROOKS:

Q. Is your clinic seeing an increasing number of older teens or young adults who are considering de-transitioning?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I'm sorry. Repeat the very first part of that.

BY ATTORNEY BROOKS:

Q. Is your clinic seeing an increasing number of older teens or young adults who are considering de-transitioning?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Increasing over time ---

BY ATTORNEY BROOKS:

Q. Yes.

A. --- or in the past? I wouldn't say the rate has increased in my clinic.

Q. Within the last --- well, let's say within 2021 or whatever of 2022 there has been, how many patients have raised with you or to your knowledge anyone in your clinic the possibility of de-transitioning?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: In that timeframe, I would have to look back exactly. Only three.

BY ATTORNEY BROOKS:

Q. Are you aware of multiple reports that the proportion of young people presenting with gender dysphoria or gender incongruence among teens has shifted heavily towards girls over the last decade?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: You will have to clarify the question because girls ---.

BY ATTORNEY BROOKS:

Q. Are you aware that the proportion of teens presenting at clinics with gender dysphoria or gender incongruence who are natal female has increased greatly over the last decade?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I have seen at least one study would suggest that. It has not been my clinical experience.

BY ATTORNEY BROOKS:

Q. That has not been the experience in your clinic?

A. No.

Q. Let me take you to paragraph 18 of your expert report. And there you express the opinion that a person's gender identity cannot be voluntarily changed and is not undermined or altered by the existence of other sexually related characteristics that do not align with it. Do you see that?

A. I do.

Q. And let me, in fact, have the Declaration --- the prelimiary injunction declaration, which is tab one.

ATTORNEY BROOKS: I'm going to mark that as Exhibit --- or did I already mark it?

ATTORNEY WILKINSON: Not marked.

ATTORNEY BROOKS: I did not. So what exhibit was that?

ATTORNEY WILKINSON: Eighteen (18).

ATTORNEY BROOKS: We will mark the

Declaration of Deanna Adkins dated 5/21/2021 as Exhibit 18.

(Whereupon, Adkins Exhibit 18, Declaration of Deanna Adkins, M.D., was marked for identification.)

BY ATTORNEY BROOKS:

Q. And in this document also I want to call your attention to paragraph 18. And in the declaration filed in May of last year in paragraph 18 you wrote a person's gender identity is fixed. Do you see that language?

A. I do.

Q. And you eliminated the word --- the assertion that a person's gender identity is fixed from your expert declaration submitted more recently. Do you see that?

A. I do.

Q. Why did you make that omission?

A. I think that it's too easy to misinterpret.

Q. Explain.

A. So when I'm talking about someone's gender identity it is what it is. And nothing that I do or they do or their family does can change that gender

identity. Their understanding of that gender identity may change over time. And that was my --- what I was trying to say was not changeable. And when you use the other word it seems that it could be misinterpreted to me.

Q. So you don't mean to say that gender identity never changes in individuals, do you?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: That's not what I said. I said gender identity is what it is. And your understanding of it may change over time.

BY ATTORNEY BROOKS:

Q. We looked in the Endocrine Society Guidelines, at the language that refers to individuals who experience a continuous and rapid involuntary alternation between male and female. Do you remember that language?

A. I do.

Q. How does that relate --- how is that consistent with your opinion that gender identity is fixed and means what it is?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So gender identity is that it moves somewhat along the spectrum. That doesn't

change. That is their identity.

BY ATTORNEY BROOKS:

Q. That doesn't change, but you have a professional opinion that individuals who experience a gender fluid identity at some period in their life inevitably remain gender fluid for the rest of their lives?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Understanding their gender identity may change, what the identity is, is under exploration throughout their lives. From the time they're young they're discovering their gender identity.

BY ATTORNEY BROOKS:

Q. Well, you consider part of your professional practice to believe what people tell you about their gender identity, don't you?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: The gender identity is something that can only be explained by a person because it is their knowledge of themselves.

BY ATTORNEY BROOKS:

Q. And if a person at one point in time feels that their gender identity is fluid and another point in time feels that it is not, on what basis do you say that their true gender identity hasn't changed?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Everyone's gender identity is how they explain it. They may understand it differently over time. Just because I say I don't like strawberries when I'm eight and I do like strawberries now doesn't meant I never liked strawberries to begin with. It means I finally had a good strawberry.

ATTORNEY BROOKS: Let me have tab 12. Let me mark as Exhibit 20.

ATTORNEY WILKINSON: Nineteen (19).

ATTORNEY BROOKS: Let me mark as Exhibit 19, an article from Herbert Health Publishing by Sadra Katz-Wise, entitled Gender Fluidity: What it Means and Why Support Matters.

(Whereupon, Adkins Exhibit 19, 2020 Herbert Health Publishing Article, was marked for identification.)

BY ATTORNEY BROOKS:

Q. First I'll ask if you have any professional contact with Doctor Sadra Katz-Wise?

A. I don't see the name spelled out. It doesn't sound familiar.

Q. It's just under the graphic here ahead of the text. You'll see the name.

A. Oh, in red. That's why I didn't see it.

Q. Yeah, exactly. Right.

A. Got it. Katz-Wise. No.

Q. I see, when I look her up, that Dr. Katz-Wise is associated with Boston Children's Hospital and Harvard Medical School. That doesn't refresh your recollection as to any previous professional interactions with her?

A. Again, I'm terrible with names.

Q. You're aware that Boston Children's Hospital has a high reputation in the area of transgender therapy?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Well, they have been involved in transgender therapy for a long time.

BY ATTORNEY BROOKS:

Q. And they have a high reputation?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: In general people feel like they do a good job.

BY ATTORNEY BROOKS:

Q. Let me ask you to turn to the second page. And down at the bottom is a heading that says what's the difference between gender fluid and transgender. Do you

see that?
A. I do.
Q. And the first sentence there says while some people develop a gender identity early in childhood, others may identify with one gender at one time and then another gender later on.
Do you see that?
A. I do.
Q. And do you agree or disagree with that statement by Dr. Sabar Katz-Wise?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: So she is not saying that their gender identity changes. You know, at different times in your life your understanding may be that this is the group that I belong with. And as you learn more about your experience and your gender, that can change.
BY ATTORNEY BROOKS:
Q. Dr. Adkins, how do you as a clinician --- if you have a patient who at one time identifies one way and another time identifies another way, how do you as a clinician determine which of those is that patient's true gender identity, given that you've said that gender identity is something that only the patient can express to you?

ATTORNEY BORELLI: Objection, form.
THE WITNESS: So you know, we're not sort of doing anything to influence that in our patients until they come to us later and have had lots of time to reflect on that. They by the guidelines need to have at least six months of identification with and understanding that gender identity is a particular way. And typically gender identity is starting to consolidate in adolescence and have a good understanding of your identity at that time.
BY ATTORNEY BROOKS:
Q. What do you understand to be meant by the term gender incongruence?
A. It is similar to the gender identity not matching your sex assigned at birth.
Q. Let me ask you to find Exhibit 4, 2007 Endocrine Society guidelines. And turn if you would to page 3879, first column under the heading evidence, it reads in most children diagnosed with GD/gender incongruence it did not persist into adolescence.
Do you see that?
A. I did.
Q. So the point here is that these children were, in fact, diagnosed with gender dysphoria or gender

incongruence which you just said means that their gender identity doesn't match their gender assigned at birth. And then the Endocrine Society goes on to say that that identity, that sense of incongruence does not persist into adolescence.
Do you see that?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: I do.
BY ATTORNEY BROOKS:
Q. And how do you reconcile that with your previously expressed opinion that gender identity is, quote, fixed?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: So this is a random piece out of this whole publication. They are talking --- as far as I can tell right here, and again I would be speculating, that it is about a particular piece of medical evidence. And medical evidence in this area has varied. It's based on the different groups and the way they were recruited, et cetera.
BY ATTORNEY BROOKS:
Q. Well, you're --- never mind on a particular piece. You're well aware, are you not, that there are multiple studies that indicate the substantial majority

of children who are diagnosed with gender dysphoria desist from experiencing gender dysphoria by some stage in adolescence?
ATTORNEY BORELLI: Objection, form.
BY ATTORNEY BROOKS:
Q. You discuss that in your report, do you not?
A. I'm sorry. Can you repeat the question?
Q. You are aware that there are multiple studies that have found that children diagnosed with gender dysphoria, the large majority of those individuals desist from experiencing gender dysphoria by some time in adolescence?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: And I don't typically see those patients in my clinic.
BY ATTORNEY BROOKS:
Q. But you're aware of the science that is described though.
Right?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: There are patients --- there are studies that were done in the past that were not well done and had a bias with the recruitment that overlapped with other issues. I'm aware of those

studies. And children are not being treated in my clinic for gender dysphoria. Adolescents are who we treat in our clinic.

BY ATTORNEY BROOKS:

Q. Well, the study that the Endocrine Society chose to cite for this proposition just a little lower in that paragraph it says as follows. And this is 2017 Endocrine Society Guidelines. They say a large majority, about 85 percent of prepubertal children with a childhood diagnosis did not remain gender dysphoric/gender incongruent into adolescence.

Do you see that language?

A. I see that language.

Q. And this Endocrine Society considered that science worth citing rather than dismissing it as poorly done, as you just attempted.

Correct?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: In your goals in creating guidelines you want to be presenting the information that's available. This study is available.

BY ATTORNEY BROOKS:

Q. And the study in question is one by some of the most highly respected researchers in the field.

Am I correct?

ATTORNEY BORELLI: Objection.

BY ATTORNEY BROOKS:

Q. I see you looking at the footnote?

A. Right.

Q. Those are among the most highly respected researchers in the field.

Correct?

A. They are some of the --- they're some of the original researchers.

Q. And to this very day they are among the most highly respected in the field.

Am I right?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: In general, they are doing good research and publications. I can't say everything they do is beautiful.

BY ATTORNEY BROOKS:

Q. Dr. Adkins, do you refuse to acknowledge that Dr. Steemsma, DeVries and Cohen-Kettenis are among the most highly respected researchers in your field?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Of their work that I have read and seen in general it is based on standards of

medical literature done well, though I have not read every study. I'm not going to comment on everything that they have done. A lot of the things I'm aware of are done well.

BY ATTORNEY BROOKS:

Q. I didn't ask you to comment on a single one of their articles. I asked you isn't their reputation among the highest in your field?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: If --- for gender-affirming care, yes.

BY ATTORNEY BROOKS:

Q. Thank you. How does their finding in large majority of children diagnosed with gender dysphoria desist from experiencing gender dysphoria by some stage in adolescence square with your opinion that gender identity is, quote, fixed?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I'm sorry. Where are you reading from and what was that again?

BY ATTORNEY BROOKS:

Q. How does their finding that large majority of children diagnosed with gender dysphoria before puberty desist from experiencing gender dysphoria by some stage

in adolescence fit with your expressed opinion that gender identity is fixed?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So they are talking about prepubertal children. Prepubertal children haven't gone through their real under --- development of understanding of their gender identity or their consolidation of gender identity at that time. It's kind of a false endpoint to put it that way because we're not really again treating these young children and we're not changing anything about them. These patients wouldn't even come to my clinic.

BY ATTORNEY BROOKS:

Q. You don't see prepubertal children at your clinic?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Very rarely.

BY ATTORNEY BROOKS:

Q. And?

A. Gender clinic?

Q. Patients you treat in any capacity?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: I see all kinds of patients from birth until --- I'm credentialed to 30.

BY ATTORNEY BROOKS:

Q. Do you in your professional work deal with prepubertal children who are experiencing gender dysphoria?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Some.

BY ATTORNEY BROOKS:

Q. Okay.

And do you want to revise the statement in your report to say instead that after puberty gender identity is fixed?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Will you point that out to me?

BY ATTORNEY BROOKS:

Q. I'm sorry, point what out to you?

A. That particular statement in my report.

Q. I misspoke. You asserted in your declaration that gender identity was fixed and my question is on consideration would you prefer to say that gender identity is fixed after puberty has occurred?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So I didn't put that in a way that --- again, we eliminated the word fixed because

of the easy ability to misconstrue that. People undergo a period of time in life where they understand their gender better than other times. And puberty is part of --- part of the mix.

BY ATTORNEY BROOKS:

Q. So --- and this is the opportunity --- you're here, so we're not going to misunderstand your words. You signed and swore to an affidavit last year in which you said gender identity is fixed. I'm giving you an opportunity if you want to clarify or qualify that. And my question to you is, is it now your testimony that gender identity is fixed once puberty has occurred?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Again, I think we have another document here that doesn't use the word fixed. Would you like me to go back and read that part? I can read through it and find it for you.

BY ATTORNEY BROOKS:

Q. No. I would like to work with your sworn document from May of last year in which you said it was fixed.

A. When we update documents we try to clarify anything that might be confusing.

Q. Dr. Adkins, in May of 2021, which is not so long

ago, you swore under oath that it was your professional opinion that gender identity was fixed. I'm entitled to ask you about that. The fact that you wanted to change a later document is interesting. It doesn't deprive me of the right to ask you questions about that document.

My question for you now is do you want to revise that statement to express the opinion that gender identity is fixed after puberty?

ATTORNEY BORELLI: Objection, form. I apologize, Counsel. Can we --- I'm sorry, just lost track. Have you introduced the PI declaration?

ATTORNEY BROOKS: I have.

ATTORNEY BORELLI: What exhibit number is it?

ATTORNEY BROOKS: It is 18. Paragraph 18.

ATTORNEY BORELLI: Paragraph 18. Thank you. Objection to form.

THE WITNESS: So I don't think that my description of people's understanding of gender identity and the way that we understand its development has changed. I can't do anything to change their identity. You can't do it. Their parents can't do it. And in that way I still agree with the fact that in the way

that that was meant to be stated, that it can't be changed. Fixed is a similar word. I use that word.

BY ATTORNEY BROOKS:

Q. So and I didn't ask you about our ability to change somebody else. Let me ask you a different question. At which developmental stage in your professional opinion does gender identity become fixed?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Again, I believe I said already that gender identity is what it is from the time you are young. Your understanding of that develops over time based on your path through life. That --- in that way you can't change it.

BY ATTORNEY BROOKS:

Q. Does that mean that if, according to Steemza and Cohen-Kettenis, 85 percent of prepubertal children who are diagnosed with gender dysphoria ultimately desist from experiencing dysphoria, that their original diagnoses were wrong?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: So there are a lot of individuals who have looked at that information and felt that the original group of individuals didn't have a transgender identity. In a young group that's hard to

assess at times. And so I would say in that way, you know, we --- it's just not the same. And you can repeat the question for me, please.

ATTORNEY BORELLI: We have been going an hour. I'd like to take a break.

ATTORNEY BROOKS: Let me repeat the question since I was just invited to do so.

BY ATTORNEY BROOKS:

Q. I believe you testified that it is your view that one's gender identity never changes from infancy to adulthood although one's understanding of it may change over time. My question for you now is does that mean that in every case in which a child is diagnosed as gender dysphoric and they subsequently desist from gender dysphoria that the original diagnosis was wrong?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So you know, at the time that their understanding of their identity was different from their sex assigned at birth when they were a child, if that was the case, and it is not clear in that study that that was necessarily the case, that the individuals felt dysphoria about that, that is what happened to them. Their understanding of their identity, if it changed over time, it may relieve some of that gender

dysphoria. I guess that's the best way I can state it.

ATTORNEY BROOKS: Let's take that break.

THE WITNESS: Thank you.

VIDEOGRAPHER: Going off the record. The current time reads 3:43 p.m. Eastern Standard Time.

OFF VIDEO

(WHEREUPON, A PAUSE IN THE RECORD WAS HELD.)

ON VIDEO

VIDEOGRAPHER:

We're back on the record. The current time is 3:59 p.m. Eastern Standard Time.

ATTORNEY BROOKS: I'm just --- sorry. I'm just moving that so --- make sure it's still recording and I didn't muck it up. I just wanted to not hit it with papers.

ATTORNEY WILKINSON: Yes, it's still recording.

BY ATTORNEY BROOKS:

Q. Let's --- Dr. Adkins, if I can ask you to find Exhibit 4 again, which is the 2017 guidelines. We are again on page 3879 where we just were. And there after the discussion that we looked at about desistance of

childhood gender dysphoria, the next sentence reads right after where we stopped if children had completed socially transition, the may have great difficulty in returning to the original gender role upon entering puberty. And it continues social transition is associated with the persistence of GD/gender incongruence as a child progresses into adolescence.

Do you see that?

A. Uh-huh (yes).

Q. At the very end of the paragraph it reads social transition in addition to GD/gender incongruence has been found to contribute to the likelihood of persistence.

Do you see that?

A. Uh-huh (yes).

Q. Now, what the Endocrine Society Committee, considering all the available research, says is that social transition has been found to contribute to the likelihood of persistence. Is that how you read their language here?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: That's how I read it.

BY ATTORNEY BROOKS:

Q. And social transition has to do with how the

people around the child treat him or her, what pronouns they use, what names they use, what clothing they provide, correct, is that consistent with your understanding of social transition?

ATTORNEY BORELLI: Objection, form.

BY ATTORNEY BROOKS:

Q. It has to do with how society, how the people around you treat you.

Correct?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Yes.

BY ATTORNEY BROOKS:

Q. And therefore, what this is saying is how parents and those around the child treat that child can affect whether that child ends up identifying as transgender or identifying with a gender identity congruent with his or her biology.

Correct?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: One more time.

BY ATTORNEY BROOKS:

Q. What this is saying is that how parents --- when it says that social transition has been found to contribute to the likelihood of persistence what that

tells us is how parents and others around the child treat that child can affect whether the child ends up identifying as transgender or cisgender?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: That is the way that reads. I would say that, you know, I don't recommend necessarily --- I recommend we follow the child and watch their gender developments.

BY ATTORNEY BROOKS:

Q. This Committee says that by assisting a child to socially transition the available science suggests that adults are contributing to the likelihood of persistence rather than desistance. That's what it says. Right?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I'm sorry. I'm going to make you say it one more time, please. I apologize. I'm just getting tired.

BY ATTORNEY BROOKS:

Q. I know the feeling. This says that by assisting a child to socially transition the available science suggests that adults are, quote, contributing to the likelihood of persistence rather than desistance.

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Gosh. So I'm not sure what you say sounds right to me. That is what it says on the paper.

BY ATTORNEY BROOKS:

Q. And I will give you a chance to tell us whether you agree or disagree with it, because my understanding is that you, in contrast, believe that external influences can't affect gender identity. Correct?

ATTORNEY BORELLI: Objection to form.

BY ATTORNEY BROOKS:

Q. Cannot?

A. So you know, all of your life influences your identity development. You can't change what it is. You can --- it can change your experience. I don't think that these children were likely to have had a different outcome.

Q. So your view is that gender identity can't change and therefore any child whose gender identity appears to change must have been mistaken at some state of their understanding. Correct?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So their understanding of

their gender identity can develop over time.

BY ATTORNEY BROOKS:

Q. Do you agree or disagree with this statement in the Endocrine Society Guidelines that social transition has been found to contribute to the likelihood of persistence?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: You know, they --- I answered that question.

BY ATTORNEY BROOKS:

Q. I'm sorry. I perhaps didn't correctly understand. So if you would answer it again, that would be helpful.

A. So kids who --- now I've forgotten the question.

Q. This one is a simple one. Do you agree or disagree with the statement from this committee, the Endocrine Society, that social transition has been found to contribute to the likelihood of persistence?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: You know, this --- it's hard for me to agree with that. As a pediatrician I know that people --- prepubertal children, young children, explore their gender identity in a lot of different ways over time, and so I don't know that I can

agree necessarily that the way that it's written --- that I necessarily agree with the specific terms.

BY ATTORNEY BROOKS:

Q. I don't mean to suggest to you by word or tone that this document was handed down on Mount Sinai. I understand that there's room for scientists to disagree. I am just trying to get clear on your opinion. I'm pretty sure this document was not handed down on Mount Sinai.

Let me find a copy of your rebuttal report, which I believe was marked as Exhibit 3. Exhibit 3, the rebuttal report. Let me ask you to turn to page 11 of your rebuttal report. We can hand you another copy if need be. We should have one more.

A. I think this is it.

Q. No, we're looking for your rebuttal report. It's going to be a typewritten kind of something or other.

A. Like this, right?

Q. Exhibit 3.

A. I'm sorry. No that's not --- sugar.

Q. I'm just going to hand you another one.

A. Okay. Thank you.

Q. No hard feelings.

A. I --- I know it's here because I -- there's so many papers. You warned me there would be so many papers.

Q. I did. I tried to warn you.

Let me ask you to turn to paragraph 11 of your rebuttal report.

A. Oh, okay. Yeah.

Q. Page five.

A. I'm sorry, the number --- one of the numbers skipped and it was just a labeling of a reference, so again 11.

Q. Yes. The second sentence there you wrote --- and this is of course a recent submission, adolescents with persistent gender dysphoria after reaching Tanner stage two almost always persist in their gender identity in the long term. Do you see that language?

A. I do.

Q. So --- and the basis that you cite for that rather specific factual proposition is an article or actually a chapter by Turban, DeVries and Zucker.

Correct? I'm just looking at footnote three.

A. Yes.

Q. So Tanner stage two, as I understand --- or we can look at the Endocrine Society note, but this is ---

Tanner stage two is when children first begin to exhibit physically recognizable changes in puberty.

Right?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Yes.

BY ATTORNEY BROOKS:

Q. So Tanner stage one, there's nothing observable. And the beginning of Tanner stage two is the first observable changes?

A. Yes.

ATTORNEY BORELLI: Objection, form.

BY ATTORNEY BROOKS:

Q. And I think you testified, but if you could just remind us kind of the timespan that that tends to begin for boys and girls.

ATTORNEY BORELLI: Objection, form.

THE WITNESSS: Tanner two. Tanner two, for those assigned female at birth can range in the normal, typical development between the ages of 8 and 12. It does fall outside of that at times and is considered early and could be a marker of a problem as well as delayed could be a marker of a problem.

Q. For boys?

A. For those assigned male at birth, so usually

between 9 and 14. Anything earlier or later again might trigger some questions that something is going on.

Q. So age eight is generally girls turn eight in second or third grade? Third grade roughly?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: That would be --- you know, it varies because early starters, late starters. But ---.

BY ATTORNEY BROOKS:

Q. And so for nine, for boys would be fourth grade?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: That would be the typical.

BY ATTORNEY BROOKS:

Q. So we're talking grade school kids here, not even the end of grade school?

ATTORNEY BORELLI: Objection, form.

BY ATTORNEY BROOKS:

Q. And if the type of changes that mark the beginning of Tanner stage two are generally at least to the layman's eye not visible on a clothed child.

Correct?

ATTORNEY BORELLI: Objection, form.

BY ATTORNEY BROOKS:

Q. That mark the beginning Tanner stage two?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I would say that some assigned females at birth, especially if they're lean, you can see their breast development.

BY ATTORNEY BROOKS:

Q. Just a breast bud. But in general, when we speak of adolescence, we don't --- in common parlance we do not include third and fourth graders, do we?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Well, the definition of adolescence is the time during puberty, so they should be included.

BY ATTORNEY BROOKS:

Q. In your experience as to how people use the term, third and fourth graders included in adolescence?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: It varies with regard to the context. Within my medical practice that's the way we use the term.

BY ATTORNEY BROOKS:

Q. At any rate, we're talking about grade school ages, not junior high or middle school ages. What is your basis for saying that those children who persist up to the beginning of Tanner stage two almost always

persist transgender identity?

ATTORNEY BORELLI: Objection. Objection, form.

THE WITNESS: I don't know which reference it is, but I can state that in my practice that's what I have seen.

BY ATTORNEY BROOKS:

Q. Let me show you the only reference you did cite for that, which I will mark as Exhibit 20, the article by Turban, DeVries and Zucker cited in footnote 20 of your rebuttal report. I'm sorry. Don't know why I said 20. I'm going to hand the witness that article now.

A. Thank you.

(Whereupon, Adkins Exhibit 20, Turban, DeVries and Zucker Article, was marked for identification.)

COURT REPORTER: Excuse me, but you're mumbling and I can't understand everything that you're saying.

ATTORNEY BROOKS: At the moment I'm just shuffling papers and handing out documents. And I will speak up now and ask a question. Sorry about that.

COURT REPORTER: Well, we are on the record and I need to be able to hear every single word that you guys are saying.

ATTORNEY BROOKS: We'll do the best we can.

COURT REPORTER: It's hard for me over here.

BY ATTORNEY BROOKS:

Q. Is this, in fact, the article that you referenced in your rebuttal report, Dr. Adkins, or the chapter I should say?

A. Yeah. I mean, I'd have to take a minute to review it.

VIDEOGRAPHER: Counsel, which tab number is this?

THE WITNESS: I'm sorry, you broke up.

VIDEOGRAPHER: Which tab number is this document?

ATTORNEY BROOKS: Tab 39. I apologize.

VIDEOGRAPHER: Thank you.

THE WITNESS: It is labeled as that.

BY ATTORNEY BROOKS:

Q. Well, do you recall recently reading this article since it was cited in this document submitted just last week?

A. I have reviewed this document. I don't remember when though.

Q. Okay.

And in here --- let's look at page 638. And there at the top of --- near the top of the first column on 638 is a discussion of follow-up studies of persisters and desisters. Do you see that discussion?

A. Yes.

Q. And it says --- four lines, five lines down it begins, quote, Restoray and Skeemsma have provided the most recent study of 10 follow up studies in which the percentage of participants classified as persisters ranged from two percent to 39 percent collapsed across natal boys and girls, closed quote. Do you see that?

A. Yeah.

Q. And further down under the heading persistence of gender dysphoria from adolescence to adulthood is a very short paragraph that reads in its entirety in contrast low rates of persistence from childhood into adolescence, it appears that the vast majority of transgender adolescents persist in their transgender identity, closed quote.

Do you see is that?

A. Yes.

Q. And was that the language that you had in mind when you cited this reference in footnote three of your rebuttal report?

A. I would have to look all the way through the article. It's consistent.

Q. And the language that I directed you to at the top summarizes studies that show --- showing of persistence of gender dysphoria among childhood dysphorics of only two percent to 39 percent.

Right?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Those are two different populations.

BY ATTORNEY BROOKS:

Q. They are. And I'm asking you now again about what it says at the top?

A. Please repeat your question.

Q. The discussion at the top summarizes studies showing persistent childhood dysphoria of only between two percent and 39 percent, depending on the study?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: I see that.

BY ATTORNEY BROOKS:

Q. And that is that the large majority consisted at some stage before adulthood.
Correct?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: More than half per this.
BY ATTORNEY BROOKS:
Q. And nothing here tells us about exactly what stage of adolescence before adulthood they desisted, does it?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: In this literature adolescence is puberty. It would have to be at least Tanner two.
BY ATTORNEY BROOKS:
Q. At least. Now, my question was nothing in the discussion up towards the top of the column about these persistence and desistance studies tells us at what stage of puberty the desisters desisted, does it?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: I would have to look at the whole study. Just in that line that detail is not listed.
BY ATTORNEY BROOKS:
Q. And similarly, looking at the discussion under

the heading persistence of gender dysphoria from adolescence to adulthood not being in that sentence tells us what stage of adolescence, whether it is Tanner stage two or three or four is being referred to when it says the majority of adolescents persist?
ATTORNEY BORELLI: Objection, form.
THE WITNESSS: It's not written right there, no.
BY ATTORNEY BROOKS:
Q. Please identify for me all studies you are aware of that show that those who desist from childhood gender dysphoria do so by no later than beginning of Tanner stage two.
ATTORNEY BORELLI: Objection, form.
THE WITNESS: I am not going to be able to remember those off the top of my head.
BY ATTORNEY BROOKS:
Q. Can you remember a single one?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: I would have to have you repeat the question, but I doubt it.
BY ATTORNEY BROOKS:
Q. I will repeat it. Identify all studies you're aware of that show that those who desist from childhood

gender dysphoria do so no later than the time they first reach Tanner stage two?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: I don't think that I recall a study that's been modeled that way.
BY ATTORNEY BROOKS:
Q. Can you tell me --- identify for me any study that has examined whether what is called in the literature watchful waiting combined with psychotherapy results in worse outcomes for children as compared to administration of puberty blockers and social outcomes?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: So the experience is that some patients have dysphoria that is significant enough once they are in puberty to be dangerous to their life. I worry about those patients. We allow them a pause with puberty blockers to continue to figure out their gender identity. I got lost in my answer, I apologize.
BY ATTORNEY BROOKS:
Q. Well, Dr. Adkins, I didn't ask what you were worried about. I asked can you identify any study that examines whether watchful waiting for children combined with psychotherapy results in better or worse outcomes on average than administering puberty blockers and

social transition?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: You know, I can't remember the exact study. We have studies that show that if you are not helping the patients relieve their gender dysphoria and psychotherapy has not been shown to do that, then we would be, you know, at an unethical point to do that study because it would increase risk of death in those patients for us to watch and wait.
BY ATTORNEY BROOKS:
Q. So your answer is at no time since the inception of this field, that is therapy for gender dysphoria, are you aware of any study comparing outcomes for gender dysphoric children of on the one hand watchful waiting accompanied by psychotherapy and on the other hand puberty blockers and social transitioning?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: There's a long history of individuals who were left untreated or treated with psychotherapy who died in hospitals or not in hospitals because they were only given those therapies which were the only ones available at the time.
BY ATTORNEY BROOKS:
Q. Dr. Adkins, you are also aware, are you not,

that there's a long history of individuals who have transitioned both socially and hormonally who have committed suicide?

ATTORNEY BORELLI: Objection to form.

BY ATTORNEY BROOKS:

Q. That's well documented in the literature, is it not?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: There are individuals who still struggle with depression and anxiety to the point that they are --- do commit suicide and they have not necessarily the reason being related to their gender dysphoria. Could be. Hard to know.

BY ATTORNEY BROOKS:

Q. In fact, Skeemsma and colleagues at the respected institute in Amsterdam, DeVry University, have documented very high rates of successful completed suicide among transgender adults, have they not?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I would have to see the study.

BY ATTORNEY BROOKS:

Q. You are not aware of that information?

A. I have not seen that study. I have read the

literature. I don't recall a study saying there was a high or why. I would need a number.

BY ATTORNEY BROOKS:

Q. You read Dr. Levine's report?

A. Yeah, it was --- yes.

Q. And do you recall that he cites multiple studies, including studies from DeVry University team documenting high rates of successful completed suicide, not studies, he's done, that clinic has done documented high rates of successful suicide among transgender adults?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I would need a number. I'm not going to classify something as high just because --- I would need a number.

BY ATTORNEY BROOKS:

Q. Have you thought that it was incumbent upon you somebody assisting young people to transition and prescribing hormones to thoroughly investigation and question suicidality among transitioned transgender individuals?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Again, yes. I read those when I can. I am not good with recalling names in

specific reports. I am aware that that is an issue with some people who have transitioned fully.

BY ATTORNEY BROOKS:

Q. Do you believe that social transition is an important part of medical care for transgender individuals?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Yes.

BY ATTORNEY BROOKS:

Q. And do you also consider puberty blockers to be part of treatment for children with gender dysphoria?

ATTORNEY BORELLI: Objection to the form.

THE WITNESS: I have seen results from a recent study that said that there was a decrease in dysphoria. I think it was anxiety and depression. I would have to double check the article, with puberty blockers. Our goal with puberty blockers is to pause and allow people to understand their identity and figure out what is going on with that understanding and what is the best care for that patient is.

BY ATTORNEY BROOKS:

Q. Is the point of administering puberty blockers to children who are experiencing gender dysphoria to prevent puberty from occurring at the time that it

naturally would occur in that child?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: In patients --- in patients who are having early puberty it is a different mechanism. For people with gender dysphoria where you are trying to pause it and we keep it within the realm of normal pubertal development.

BY ATTORNEY BROOKS:

Q. For individuals suffering --- children suffering from gender dysphoria the precise point of administering puberty blockers is to prevent puberty from occurring in that child at the time it would otherwise naturally occur.

Correct?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: It would --- our pausing the puberty and keeping it within the normal range of pubertal development.

BY ATTORNEY BROOKS:

Q. Dr. Adkins, the purpose of administering pubertal blockers to a particular child is to prevent it from happening when it would otherwise happen naturally in that child.

Correct?

ATTORNEY BORELLI: Objection, form.
BY ATTORNEY BROOKS:
Q. There is no other purpose?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: I'm sorry. I have to ask --- you used some pronounced in there that were not real clear. If you don't mind repeating the question.
BY ATTORNEY BROOKS:
Q. The purpose of administering puberty blockers to a child suffering from gender dysphoria is to prevent puberty from happening in that child at the time it would otherwise naturally occur in that child absent the blockade?
ATTORNEY BORELLI: Objection.
THE WITNESS: We are pausing their puberty once it starts, putting a pause.
BY ATTORNEY BROOKS:
Q. I get to ask the questions. That means you wanted to prevent puberty from happening when it would naturally happen for that child apart from the medication?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Yes.
BY ATTORNEY BROOKS:

Q. Thank you.
You regularly tell parents that the administration of puberty blockers for that purpose is, quote, safe?
Correct?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: I go through very specific list of side effects and effects with my patients with that medication.
BY ATTORNEY BROOKS:
Q. You regularly tell parents using the word that puberty blockers are, quote, safe, do you not?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: I am telling my patients the risks and benefits. I am telling them I feel comfortable using it.
BY ATTORNEY BROOKS:
Q. Let's find your report, which is Exhibit 1 --- no --- yes, Exhibit 1. If you can find your report. Apologize. Too much paper. Too long a day.
Dr. Adkins, do you or do you not tell parents that puberty blockers are safe?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Again, I review the effects

and side effects and my general experience and the publications that are available. Goodness gracious. Boy, that lunch is getting me.
I explain to my patients the effects and side effects and I talk with them about whether --- my experience has been I have had very few patients experience a problem with the medication.
BY ATTORNEY BROOKS:
Q. And if you are unwilling to sit here today and admit that you tell parents that puberty blockers are safe then why have you stated in your expert report to the court that treatment, including puberty blockers, are safe?
ATTORNEY BORELLI: Objection, form.
THE WITNESSS: Every patient is individual. I have to make an individual assessment for each patient. I will say it's safe for the patients that that applies to.
BY ATTORNEY BROOKS:
Q. Which patients does that apply to?
A. Most of the patients don't have a contraindication to using puberty blockers.
Q. Is safe a term of art to you as a doctor?
ATTORNEY BORELLI: Objection, form.

THE WITNESS: I'm not sure what you mean by the word art.
BY ATTORNEY BROOKS:
Q. Does it have a precise meaning? To say a pharmaceutical is safe, does that have a meaning to you as a doctor?
A. It has a meaning.
Q. What is that?
A. So in general when we're talking about safety and medicine we're talking about limiting the number of negative side effects that can cause significant issues for patients. I think that would --- I think that's what I would say.
Q. Isn't it a truism you were taught in medical school that every pharmaceutical has side effects?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: So truism is a word that --- sorry, that is unclear to me. Can you clarify?
BY ATTORNEY BROOKSS:
Q. Weren't you taught in medical school that every pharmaceutical has side effects?
ATTORNEY BORELLI: Object to form.
THE WITNESS: Yes.
BY ATTORNEY BROOKS:

Q. And do you agree or disagree that a flat assertion that any pharmaceutical is safe is not consistent with accurate medical terminology?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I would say that I work with what the information is available to me about safety profile. I apply that to each patient individually. Sometimes I feel safer using it in one patient versus another patient. Every drug is different, every side effect profile is different, every patient is different.

BY ATTORNEY BROOKS:

Q. Why then did you flatly assert to the court that treatment for transgender youth when you were discussing puberty blockers and hormone therapies is, quote, safe?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: In general I have not experienced nor have I seen published experiences of issues with using these medications that causes a significant problem for my patients.

BY ATTORNEY BROOKS:

Q. You regularly tell parents what you have said several times today, that puberty blockers act merely as a pause and are fully reversible, do you not?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I do.

BY ATTORNEY BROOKS:

Q. And you are aware, are you not, that the Endocrine Society guidelines advise that before approving puberty blockers a clinician should discuss risks to fertility and the availability, the possibility of fertility preservation.

Correct?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I'm not sure that is in the Endocrine Society guidelines with puberty blockers. It may be. That it is no part of the gender affirming hormone recommendation.

BY ATTORNEY BROOKS:

Q. Let's look at page 3879 in the guidelines, Exhibit 4.

A. What exhibit again, 4?

Q. Exhibit 4. And I'm going to call your attention to 3879. And column two is guideline 1.5 where it says, quote, we recommend the clinicians inform and counsel all individuals seeking gender affirming medical treatment regarding options for fertility preservation prior to initiating puberty suppression in adolescence.

Do you see that language?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I do.

BY ATTORNEY BROOKS:

Q. And what is your understanding as to why the Endocrine Society advises that it's important to advise about fertility preservation prior to initiating puberty suppression if puberty suppression is nearly nothing but a pause?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Well, the --- you know, puberty pausing is in my experience and in the reported data always reversible. I have not ever had a patient who didn't resume their normal puberty when they came off and were on no other treatment of a puberty blockade. I would think that this is being very careful about young individuals getting puberty blockers. Again, I haven't seen any reports. In fact, it is used to preserve fertility in cancer patients.

BY ATTORNEY BROOKS:

Q. Do you, in fact, counsel all parents and children about fertility preservation options before administering puberty blockers?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I do.

BY ATTORNEY BROOKS:

Q. And do you have a view as to whether for instance a 9 year old can even begin to understand puberty, sexual development and the possibility of becoming a parent so as to provide meaningfully informed consent?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So those individuals also have their parents who are with them to learn about these thing and weigh those things. The patient is not there in isolation. They get an option at the time where we would stop puberty blockers or any time that they are on to make a change in that. It is completely reversible.

BY ATTORNEY BROOKS:

Q. You have testified at the beginning of the day you had children of your own. Both as a professional and as a mother do you have a view as to whether a 9 year old can sufficiently understand puberty, sexual development and the possibility of becoming a parent to enable them to provide meaningfully informed consent?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So in young kids we use

these --- in five year olds --- I have treated a five year old this week with this medication for early puberty. I trust, based on the data that is available to me over the last 30 years using this medication to pause puberty for central precocious puberty that it is a safe medication and that the patient will be fertile. Can't say 100 percent because who knows what else is going on in each individual patient that may cause them to have an infertility issue.

BY ATTORNEY BROOKS:

Q. Dr. Adkins, puberty blocking drugs have gone through phase one, phase two, phase three clinical trials submitted to the FDA, reviewed. They've been approved for the indication of precocious puberty. Correct?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Yes.

BY ATTORNEY BROOKS:

Q. None of that has been done for an indication of gender dysphoria to your knowledge. Correct?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I use lots of medications that aren't FDA approved for the particular indications.

Many drugs in pediatrics are not ever tested in children. It's just within the last few years that they have made a recommendation that that happen for a medication. So there are many drugs that haven't been FDA approved that are used in pediatrics based on information for patients in a different indication or adulthood.

Q. Puberty blockers have been tested through phase one, phase two, phase three clinical trials for the purpose of postponing precocious puberty until the normal time period for puberty. Correct? That's what has been tested?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: Yes.

BY ATTORNEY BROOKS:

Q. And no such tests have been done or submitted to the FDA ---?

COURT REPORTER: Can you repeat what you said because I'm not sure that last question fully came through.

ATTORNEY BROOKS: The last question was --- and I --- I admit that my voice, as the witness's, is dropping. We're trying here. And I --- Dave's resting his voice for a few questions towards the end of the day. I'll be glad.

BY ATTORNEY BROOKS:

Q. Just to clarify, and I don't mean to harass you, but we've been asked to repeat it. Puberty blockers have been put through phase one, phase two, phase three clinical trials submitted to the FDA for the purpose of delaying precocious puberty in children until the normal time for puberty. And your answer was?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Yes.

BY ATTORNEY BROOKS:

Q. And they have not been tested for safety, for efficacy in phase one, phase two or phase three clinical trials for the purpose of delaying puberty from its naturally occurring time in children who do not suffer from precocious puberty. Correct?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: We use data that wasn't presented to the FDA to --- to look at this to see if it is safe. It's also been approved by the FDA to be used in adults. Also been used and approved for fertility preservation. Has lots of approvals that have verified its safety over time.

BY ATTORNEY BROOKS:

Q. Well, a moment ago when I asked you if you tell people they were safe you were not quite willing to say that. Do you want to revise that testimony?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I believe at the end of that I was saying to you that every patient is different. There are some that have risks. When I feel comfortable that my patient in front of me doesn't have those risks based on the medical literature I feel that they're safe to use. I have my experience. I have seen the literature. I feel --- yes.

BY ATTORNEY BROOKS:

Q. The law that's being challenged in this lawsuit doesn't restrict the use of puberty blockers so far as you understand, does it?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I don't recall that being part of the law.

BY ATTORNEY BROOKS:

Q. It doesn't exclude anyone for participation on any team based on use of puberty blockers, does it?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Not that I recall.

BY ATTORNEY BROOKS:

Q. And you have previously testified that in your view, the law is unreasonable if it excludes, prevents any individuals with a transgender identity from playing in the category that corresponds to their gender identity.

Correct?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: That sounds accurate.

BY ATTORNEY BROOKS:

Q. I don't want to mischaracterize your opinion. Okay.

So what is the relevance to your opinion that all the discussions in your report about puberty blockers?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Sorry. I need some water. And then, if you don't mind, while I'm doing that, could you please re-read the question. Sorry.

BY ATTORNEY BROOKS:

Q. Yes. I'll even wait until you've had your drink.

A. Sorry.

Q. I'm hitting the bottom myself.

A. It's pollen season. It's bad.

Q. It's just getting going.

A. I know.

Q. Given what we just walked through, ---

A. Yes.

Q. --- what is the relevance of all the discussion about puberty blockers in your expert report and rebuttal report to the opinions you're offering in this case?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So my part of this is to talk about what care is for people who are transgender and what medications they might be on and what treatments might be ideal for them.

BY ATTORNEY BROOKS:

Q. You've talked about how each --- you want to treat each patient differently. You want to be very careful about their treatment choices, their parents' treatment choices, that they understand all of the considerations.

Would it cause you concern if West Virginia put into place a law that created incentives or pressures on parents and children to make decisions about puberty blockers at an early stage?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I would not think it would be appropriate to pressure anyone.

BY ATTORNEY BROOKS:

Q. So for instance, a law that said if you take puberty blockers then you can play on the girls team and if you don't you can't, that would cause you concern as a doctor, would it not?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Ideally, they would be able to whether or not they have the puberty blockers or not play on the team that matches their gender identity.

BY ATTORNEY BROOKS:

Q. And ideally and from your perspective and in fact if the law set up an incentive that says you can only play on the girls' team if you take puberty blockers, and if you don't, you're forclosed from female athletics, that would cause you concern as a doctor as biasing the patient's and parents' decisions, would it not?

ATTORNEY BORELLI: Objection, form.

BY ATTORNEY BROOKS:

Q. That's not a law you would want to see on the books?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I don't think I would want to see that on the books. Haven't thought through every detail of that but I don't think so.

BY ATTORNEY BROOKS:

Q. You are aware, are you not, that all the recommendations in the 2017 guidelines, also in the 2009 guidelines from the Endocrine Society about the administration of puberty blockers is according to the committee that prepares those recommendation based on either low quality or very low quality evidence.

Right?

A. You know, all recommendation put together are graded with evidence, and it's in the report --- we use them --- not in the report, in the guidelines. And we use lots of guidelines that have low quality to help guide our care.

Q. Low quality evidence means that you, as a scientist, you as a doctor, can't be very confidant that the recommendation will result in beneficial results. That is kind of the meaning of low quality evidence.

Right?

ATTORNEY BORELLI: Objection to form.

THE WITNESS: I would suggest it gives us

a place to start and we need to be very mindful when using that information as to how we apply it.

ATTORNEY BORELLI:

Why don't we go ahead and take another break?

ATTORNEY BROOKS: Let me just ask the court reporter how many --- how much more time in the seven o'clock hours.

COURT REPORTER: We're at six hours and six minutes, so 54 minutes.

ATTORNEY BROOKS: Okay. We'll take that break. Absolutely.

(WHEREUPON, A PAUSE IN THE RECORD WAS HELD.)

ATTORNEY BROOKS:

All right. We will resume.

BY ATTORNEY BROOKS:

Q. Dr. Adkins, once again I will direct you to the Endocrine Society guidelines, Exhibit 4, and ask you to turn with me to page 3874 and column two --- column one, I'm sorry 3874.

A. Column ---?

Q. Column one. And towards the bottom, penultimate

paragraph begins in the future we need. Do you see that?

A. I do.

Q. And it says in the future --- this is in the preliminary section. Before the specific recommendations it says, quote, in the future we need more rigorous evaluations of the effectiveness and safety of endocrine and surgical protocols. And it goes on then to say specifically endocrine protocol --- specifically endocrine treatment protocols for GD/gender incongruence should include the careful assessment of the following. And it lists a number of things, the effective prolonged delay of puberty in adolescence on bone health, gonadal function and the brain, including effects on cognitive, emotional --- emotional, social and sexual development.

Have I, with various corrections, read that correctly?

A. Yes.

Q. So as of 2017, in the opinion of the committee that put together these guidelines ---.

COURT REPORTER: Excuse me. I don't know if you're speaking, but I lost you at cognitive.

ATTORNEY BROOKS: I'm sorry?

COURT REPORTER: I lost you at cognitive and then I didn't hear anything for like 20 seconds. So I wasn't sure if you were still talking since I can't see you.

ATTORNEY BROOKS: Of course. And I was. So, golly.

COURT REPORTER: Thank you.

BY ATTORNEY BROOKS:

Q. So I'm going to pick up that question again.

In the paragraph that we're looking at in column one of page 3874 the committee writes that things that need to be better studied include, quote, the effects of prolonged delay of puberty in adolescence on bone health, gonadal function and the brain, including effects on cognitive, emotional, social and sexual development, closed quote.

Dr. Adkins, is it your understanding that the committee here is saying that there's not yet adequate scientific evaluation of the impact of puberty blockers on the brain?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So you know, the recommendation by the same group is that in some patients this is the approach that --- that is used.

Certainly we all welcome more research. We all want to know if anything is different from the information that we have as mentioned before for use of this medication in other areas where we're not seeing any effect on these things.

BY ATTORNEY BROOKS:

Q. Is it consistent with your understanding as a doctor that the development of the brain in turn affects cognitive, emotional, social and sexual development?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: The brain has effects in all those areas.

BY ATTORNEY BROOKS:

Q. To your knowledge, it has effects that change across the course of puberty in all those areas.

Correct?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Yes, they're all interrelated and they're occurring all at the same time.

ATTORNEY BROOKS: Let me mark as Exhibit 21 a document that is titled Teenage Brain: A work in Progress, which is am information sheet that is attributes itself to the National Institute of Mental Health, which I believe we discussed earlier. Tab 32.

Yes, thank you. I'm sorry, I believe I said it, Exhibit 21.

(Whereupon, Adkins Exhibit 21, NIMH Information Sheet, was marked for identification.)

BY ATTORNEY BROOKS:

Q. So I would like to talk for a moment about the impact of puberty and therefore puberty blockade on brain development. On the second page at the more information, we see contact information at the National Institute of Mental Health. And I don't want to misrepresent, did you earlier testify that is a well known and respected source of information about mental health therapies?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Yes.

BY ATTORNEY BROOKS:

Q. And let me take you to page one. And I'm simply using this to pin down a few kind of basic points. In the second column out of three, two-thirds of the way down, three-quarters of the way down --- well, the sentence begins halfway down. In the first such

longitudinal study of 145 children. Do you see that?

A. I see that.

Q. And it goes on to describe research that discovered the second wave of overproduction of gray matter, which it refers to as, quote, the thinking part of the brain, just prior to puberty. Do you see that?

A. I do.

Q. And it goes on to say that this second overproduction peaks at around age 11 in girls and 12 in boys. Do you see that?

A. Yes.

Q. And according to your earlier testimony, that is probably a bit into --- on average a bit into Tanner stage two.

Correct?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: In general.

BY ATTORNEY BROOKS:

Q. So a little later than the beginning of Tanner stage two?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Based on averages, yes.

BY ATTORNEY BROOKS:

Q. So this second wave of development of the

thinking part of the brain happens sometime a bit after the beginning of Tanner stage two according to this description here?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So let me read it myself.

BY ATTORNEY BROOKS:

Q. Sure.

A. What you read was --- it starts before that. So I just want to read it.

Q. I did misspeak. Let me just re-ask my question ---

A. Okay.

Q. --- because I mixed up peaks and starts, right, that was the problem.

According to the description here this second wave of development of the thinking part of the brain, the gray matter, peaks at sometime after the beginning of Tanner stage two?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Peaks, yes.

BY ATTORNEY BROOKS:

Q. And is it consistent with your understanding that the gray matter in the brain is the thinking part of the brain or is that really outside your expertise

given that you're not a neurologist?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I think that that is basic enough in medical school that I can agree with that.

BY ATTORNEY BROOKS:

Q. Okay.

And in the next column, about the same distance down it reads, quote, the gray matter spurt --- growth spurt just prior to puberty --- we've already talked about the timing, predominates in the frontal lobe, which it goes on to say is the seat of, quote, executive functions, planning, impulse control, and reasoning, closed quote.

Do you see that?

A. I do.

Q. And is it within your knowledge or not within your knowledge that the frontal lobe is the seat of executive functions, including planning, impulse control and reasoning?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: That is what my education has informed me.

BY ATTORNEY BROOKS:

Q. And certainly all of us you who have raised

children have gratefully seen that planning, impulse control and reasoning improve across the years of puberty.

Right?

ATTORNEY BORELLI: Objection, form.

BY ATTORNEY BROOKS:

Q. Maybe some ups and some downs?

A. I'm am just happy that it continuously improves the whole time.

Q. I won't press --- I won't pres the question. Have you, yourself, attempted to make any study of the timing of brain gray matter development and the role of puberty hormones in promoting that development?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I have not.

BY ATTORNEY BROOKS:

Q. What study, if any, have you made of the effects of blocking puberty and the increased level of hormones associated with puberty on this growth spurt in the thinking part of the brain that otherwise peaks at around 11 in girls and 12 in boys?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I have not done that study. I don't see it here either.

BY ATTORNEY BROOKS:

Q. You said in your rebuttal report, paragraph 24, that patients with gender dysphoria who are treated with puberty delaying medication undergo hormonal puberty with all the same brain and other bodily system development. Do you recall writing that?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I'm sorry, could you ---?

BY ATTORNEY BROOKS:

Q. Right in front of you. Your rebuttal report is --- Exhibit 3?

A. I got it.

Q. Paragraph 24.

A. Thank you for your patience.

Q. Here, let me just find it. Let me see here. And the second sentence says, quote, patients with gender dysphoria treated with puberty delaying medication undergo hormonal puberty with all the same brain and other bodily system development, closed quote. Do you see that?

A. Oh, wait. I must be looking at the wrong place.

Q. Paragraph 24, second sentence. It runs over the page?

A. I see. I see. Yeah. I see that.

Q. Now, all the same brain and bodily development is a really big absolute statement, isn't it?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: There are --- you know, for the most part, people go through it in this manner. Of course, again, with medicine you can't say 100 percent.

BY ATTORNEY BROOKS:

Q. Well, specifically, as a scientist, based on the information available to you, you can't say with confidence that patients who are treated with puberty delaying medication undergo all the same brain and bodily system development, can you?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I used the medication for all of my career. I have followed patients through their --- into their puberty, in their growth. When they are done with their pubertal development, we have not seen any definable cognitive developmental issues with them. Haven't been able to identify that with any of my patients, including precocious puberty. There's not been any evidence in the literature over a year's worth of use of this medication that there's anything different happening to these individuals.

BY ATTORNEY BROOKS:

Q. Well, you also haven't done any systematic study of cognitive development of those for whom you have prescribed puberty blockers as compared to in a control group, have you?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Not personally.

BY ATTORNEY BROOKS:

Q. And the --- the Endocrine Society, 2017 --- let me ask you to turn in Exhibit 4 to page 3882. And we are in the section here that discusses a recommendation to use GRNH for purposes of puberty suppression when puberty suppression is indicated. Do you see that? That heading is on the previous page.

A. I see that.

Q. Just wanted to locate you in the discussion we're talking about puberty suppression. Now, back to 3882. And the first thing --- the first sentence under the heading side effects states that, quote, the primary risks of puberty suppression in GD/gender incongruent adolescents may include and then it lists a number of things, one of which is, quote, unknown effects on brain development, closed quote. Do you see that?

A. I do.

Q. So the committee that put together the Endocrine

Society guidelines thought that the potential effects of puberty suppression on brain development were at 2017 at least unknown. You just disagreed?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I don't have any reason to believe that there's any different effect on individuals based on the research from early puberty and the studies that --- I mean, sorry, my experience with those patients. I would want to be watchful of those individuals as I would always who use any medication for potential issues.

BY ATTORNEY BROOKS:

Q. Endocrine Society thinks the effect on brain development is unknown and you, though you have done no systematic study, are of the view that you know that is not harmful to brain development. Am I accurately summarizing your testimony?

ATTORNEY BORELLI: Objection.

THE WITNESS: No.

BY ATTORNEY BROOKS:

Q. Let me ask it a different way if that was in accurate.

A. I am trying to tell you that you are able to look at the use of this medication in early pubertal

patients and see what happens to those individuals. Those outcomes can be used to give you some inference as to what might potentially happen if you use it later on for the same purpose of delaying puberty. It doesn't --- doesn't wholly rule out something different.

Q. And indeed, simply based on observation, nonsystematic observations from one clinic, it's not possible to rule out harmful effects on brain development, is it?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I'm not sure that there's any study you could do to completely role out any effect --- any specific effect. Lots of individuals have different effects.

BY ATTORNEY BROOKS:

Q. And you in your clinic haven't attempted any study?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I have not done a study.

BY ATTORNEY BROOKS:

Q. Let me have tab 43. In your report you asserted that those treated with gender dysphoria undergo --- I'm sorry, those treated with puberty delaying medication experience all the same brain and other bodily system

developments. The only source you cite in support of that is a 2015 article by Staphorsius.

Correct?

A. I would have to look at it and verify that.

Q. Forty-three (43).

A. Which exhibit were you ---?

Q. I have not given it to you yet. I apologize.

A. No, I mean ---.

Q. Oh, it was paragraph 24 in your rebuttal report, which is ---.

A. Okay.

Q. All right.

Did you carefully read the Staphorsius article that you cited in paragraph 24 of your rebuttal report?

A. At some point in time I have read that, yes.

Q. Are you able to describe the experiment that is --- the study that was done in this Staphorsius report --- or the Staphorsius article?

ATTORNEY BORELLI: Objection.

THE WITNESS: I'm not --- familiar ---.

BY ATTORNEY BROOKS:

Q. You say also in paragraph 24 of your rebuttal report that Dr. Levine's claims with regard to concern about brain development is, quote, inaccurate for the

additional reason that some people never go through hormonal puberty such as patients with Turner syndrome and still have normal brain development with respect to cognition and executive function. Do you see that language?

A. Yes.

Q. And you don't cite anything for that. What is the basis for that assertion?

A. So when you look at the information regarding Turner syndrome within the medical literature as well as the --- my work with Marsha Gavenport at UNC who runs --- ran the biggest Turner syndrome registry, in that experience we did not see any patients that had problems with --- there may have been some that were --- had sort of issues with visual spatial skills but not cognitive issues. In fact, I have partners that are women with Turner syndrome that practice medicine.

Q. You will agree with me as a scientist, will you not, that kind of anecdotal information about a particular person you know is not very weighty evidence as to whether hormone changes associated with puberty are generally important to cognitive development of humans?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: We can delve into Turner syndrome literature.
BY ATTORNEY BROOKS:
Q. Well, Dr. Adkins, I hope you understand that your obligation to prepare an expert report was to provide your opinions and the basis of your opinions. What literature are you relying on?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Every textbook that talks about Turner syndrome with regard to these patients talks about any of the issues that go along with that. I --- and that's something we study in our training as a pediatric endocrinologists because we see these patients routinely. So that has been my experience and training.
BY ATTORNEY BROOKS:
Q. Well, can you identify --- every is not very useful. Can you identify for me a single source that reports based on statistically significant studies that individuals who never go through puberty experience all the same brain development as individuals who do go through puberty?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: I would have to look back in the literature on those reports because we treat

patients now when we realize they are not going through puberty. I can't do that off the top of my head.
BY ATTORNEY BROOKS:
Q. And are you now contending that it is not widely accepted that hormonal changes associated with puberty drive important stages of brain growth?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: I'm not saying that. What I'm saying is there are some things that are specific and you're generalizing my terms.
BY ATTORNEY BROOKS:
Q. Okay.
Well, flipping it around, you have also been taught whether or not it's --- if we're speaking in the area, I recognize you're not a neurologist.
Correct?
A. Correct.
Q. But it's your understanding that hormonal changes associated with puberty do drive important developmental stages in the human brain.
Correct?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Yes.
BY ATTORNEY BROOKS:

Q. And those are stages that, as we looked at in earlier document, include cognition, social skills, sexual development?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: So you know, that is what is --- was written there. I agree that that can be affected by those --- by puberty. I also don't see in any of the literature around people who haven't gone with --- through puberty any mention of any of the concerning cognitive delays or other issues, again visual, spatial has been mentioned.
BY ATTORNEY BROOKS:
Q. Visual spatial, can you just --- for the uninitiated, the layman, can you explain what you're referring to?
A. For the use of like driving a car, looking at something and being able to estimate where it is or those sorts of things, navigating with a map versus not.
ATTORNEY BROOKS: Let me ask the court reporter how many minutes we still have on the clock.
COURT REPORTER: We're at six hours, 31 minutes, so 29.
ATTORNEY BROOKS: Well, I had promised to hand it over with 30 minutes to go, so I have broken my

word. And I will stop and leave the remainder of the time to counsel for the State of West Virginia, Dave Tryon.

EXAMINATION

BY ATTORNEY TRYON:
Q. Hello, Dr. Adkins. Long day. I appreciate your time. My name is David Tryon and I do represent the State of West Virginia. I would like just to ---.
A. You're cutting out.
Q. Okay.
ATTORNEY BROOKS: You are going to have to speak up very clearly because you are literally disappearing half of the time and we have no work around for that.
BY ATTORNEY TRYON:
A. Okay.
I will speak very loudly. Can you hear me now?
A. Yes.
Q. Okay.
So thank you for your time my. Name is David Tryon. I am an attorney for the State of West Virginia. I would like to continue with some questions about your

rebuttal report. Do you still have that in front of you?

A. Yes.

Q. Okay.

First of all, you have indicated that you are --- I'm still here --- give me a moment --- you run a clinic.

Correct?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I have a clinic that I'm the medical director of, yes.

BY ATTORNEY TRYON:

Q. And that is --- I'm sorry, what's the name of the clinic again?

A. Duke Child and Adolescent Gender Clinic.

Q. What is a gender care clinic?

A. For our purposes in my clinic it includes patients who are transgender people who are --- also have intersex conditions as well.

Q. Are there other clinics that you consider gender care clinics elsewhere in the country?

A. Yes.

Q. Would you be able to estimate approximately how many of them there are?

A. That number is changing a lot. It would be difficult for me to say accurately.

Q. Would it be over 100?

A. I'm not sure. I'm not sure.

Q. Would it be over 50?

A. Oh, it could be definitely over 50. It could be over 100, but I'm not sure.

Q. And are you --- do you have any meetings with those other gender care clinics?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: Yes.

BY ATTORNEY TRYON:

Q. How many --- what fashion --- are those individual meetings or are they group meetings?

A. A bit of both.

Q. Are you aware of the practices of all of those other gender care clinics?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: We do talk about practice when we meet with the ones that I meet with. Can't speak to all of the others.

BY ATTORNEY TRYON:

Q. You are of course familiar with the practices in your clinic.

Correct?

A. Yes.

Q. Are you equally familiar with the practices of the other gender care clinics throughout the country?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I know a lot about them. I can't say I know everything.

BY ATTORNEY TRYON:

Q. Do you know if they have the exact same standards of care and practice that your clinic does?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: We all have discussed that we follow the Endocrine Society guidelines as well as WPATH guidelines.

BY ATTORNEY TRYON:

Q. You have disagreed with some of the guidelines in the WPATH guidelines that Mr. Brooks has shown to you.

Correct?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I don't think I've seen the WPATH guidelines today.

BY ATTORNEY TRYON:

Q. Sorry, the Endocrine Society guidelines?

ATTORNEY BORELLI: Same objection.

THE WITNESS: So the Endocrine Society guidelines are guidelines. All of us who use guidelines do vary some from those guidelines when it's appropriate for the particular patient.

BY ATTORNEY TRYON:

Q. Do you know if the other clinics have the same reservations about the policies or guidelines in those --- in the endocrine Society's guidelines that you've expressed today?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I've had some discussions with people who have some reservations along the same lines that I do.

BY ATTORNEY TRYON:

Q. How many clinics does that represent?

A. Oh, you went out. You went out. Sorry.

Q. How many clinics does that represent?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: It's difficult for me to say because it is at our annual meeting and for some of the meetings, so it could be a lot. In group meetings that we have, I have some that are one on one and I have some that are about five different groups.

BY ATTORNEY TRYON:
Q. So fair to say you don't know?
A. I'm sorry, you broke up again.
Q. Is it fair to say you do not know?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: I do not know what?
BY ATTORNEY TRYON:
Q. You do not know which ones have the same reservations that you do about the provisions you've expressed reservations about today?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: I know --- I know --- I know off the top of my head three. The others I may or may not know where an individual is from when they're talking in all of our meetings. They are big meetings.
BY ATTORNEY TRYON:
Q. What are those three?
A. So Rady Children's in Los Angeles and in Seattle, Children's and Texas, Children's.
BY ATTORNEY TRYON:
Q. Are there any gender care clinics in West Virginia?
ATTORNEY BORELLI: Objection to form.
THE WITNESS: I don't know personally any

endocrinologists that do pediatric endocrinology or gender care in West Virginia. I'm not aware.
BY ATTORNEY TRYON:
Q. In the rebuttal report, your paragraph 11, I'd like to ask you some questions about that. If you would turn there.
A. I got it.
Q. When did you --- well, did you write this paragraph 11?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Yes.
BY ATTORNEY TRYON:
Q. When did you write it?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: I don't remember.
BY ATTORNEY TRYON:
Q. Was it after you received the expert reports from the Plaintiff's experts --- excuse me, from the Defendant's experts?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: So we wrote the rebuttal after we received the expert witnesses from --- yes.
BY ATTORNEY TRYON:
Q. Who is we?

A. I'm sorry. I wrote it --- I'm sorry. I'm getting really tired. I apologize. I wrote it.
Q. In the --- I believe it is the third sentence says no medical treatment is provided to transgender youth until they have reached Tanner stage two. Do you see that?
A. I do.
Q. When you say no medical treatment, is that --- does that include affirmation therapy?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: I am not aware of anything called affirmation therapy.
BY ATTORNEY TRYON:
Q. Are you aware of the term affirmation for transgender individuals?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Gender affirming care is a term I am aware of.
BY ATTORNEY TRYON:
Q. Do you consider gender affirming care to be medical treatment?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: So it is meant to be wholistic, so part of it is medical, part of it is

social, part of it is surgical.
BY ATTORNEY TRYON:
Q. Is any gender affirming care provided to transgender youth before they reach Tanner stage two?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: So the social transition is considered part of gender affirming care and some individuals do socially transition before Tanner stage two.
BY ATTORNEY TRYON:
Q. Do you assist them in that?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Not typically. They're not usually in my clinic until they are in puberty.
BY ATTORNEY TRYON:
Q. Is there any other type of gender affirming care which is conducted or provided prior to Tanner stage two?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Before Tanner stage two generally it's -- no --- no. No.
BY ATTORNEY TRYON:
Q. What do you consider to be medical treatment which is provided once they reach Tanner stage two?

ATTORNEY BORELLI: Objection, form.
THE WITNESS: Not every patient is treated with medication. So some do, some don't. Sometimes that is puberty blockers. Sometimes it is not. Sometimes it is gender affirming hormones depending on where they're in their development.
BY ATTORNEY TRYON:
Q. What about surgery, is that considered medical treatment provided to transgender youth?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: So patients who are children aren't having surgeries.
BY ATTORNEY TRYON:
Q. What's the difference between youth and children?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Youth in general in my mind are somewhat similar to adolescents in that they have started puberty.
BY ATTORNEY TRYON:
Q. At what point are --- is --- excuse me, at what point or age is surgery, medical treatment, provided to those who have gender dysphoria or considered to be transgender?

ATTORNEY BORELLI: Objection, form.
THE WITNESS: So you cut out and could you repeat the question?
BY ATTORNEY TRYON:
Q. Yes. Let me back up and make sure I understand. Surgery is considered medical treatment.
Correct?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: So I hesitate to use those words. My surgical colleagues would take some offense at that. They consider themselves surgeons and not medicine doctors. So I think that's an opinion there. So I'm not sure that that phrase is appropriate.
BY ATTORNEY TRYON:
Q. So when you refer to medical treatment in this statement does that include or exclude surgery?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: They do not --- yeah, that would be inclusive of surgery in that particular statement.
BY ATTORNEY TRYON:
Q. At what point is surgery provided to transgender persons?
ATTORNEY BORELLI: Objection, form.

THE WITNESS: Well, not all individuals who are transgender actually have surgery. It depends on the patient. Many, many do not. Our recommendations are to wait until 18. There is a caveat in the Endocrine Society guidelines where some surgery could happen between 16 and 18, but generally 18 and up.
BY ATTORNEY TRYON:
Q. Why wait until 18?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: That is the --- as I understand it, the legal time at which a person has --- what is the word for it? You all are the legal people. I'm probably going to say it wrong, the ability to legally consent to things. Prior to that, we do get what's called an assent from the patient, but it's a little different than a consent from the patient if we're doing a general procedure.
BY ATTORNEY TRYON:
Q. Why is that legal consent different for surgery then it is for puberty blockers?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: As I mentioned before, puberty blockers aren't a permanent effect and surgery is complicated to reverse.

BY ATTORNEY TRYON:
Q. At the point in time that you prescribe puberty blockers for a natal male, that person has at that point concluded that they have a gender identity of female.
Correct?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: So for puberty blockers they may not totally be clear on their gender identity. They do have dysphoria with the changes that are happening to their body at the time and need time to get a better understanding of their gender identity.
BY ATTORNEY TRYON:
Q. At what point do we know that they have a full understanding of their gender identity?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Again, we do our best to take each patient as they get older and they are consistent for a period of time. Again, the recommendation are at least six months. Everyone is different. Most of my patients' identity isn't changing substantially. Their understanding of their identity isn't changing substantially for longer than that before one would do anything different other than puberty blockers.

BY ATTORNEY TRYON:

Q. At what point --- someone comes to you and says I am a biological male or assigned male at birth, however you want to term that, but I identify it as a --- let me rephrase that because I'm not sure I said that right.

Someone comes to you and says I was born an assigned male at birth, but I identify as a female. I have identified as a female for two years now and I want to move forward with any treatment possible so that I can feel comfortable with my true identity as a female. You accept that as their true identity?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: You didn't give an age and I do way that into consideration.

BY ATTORNEY TRYON:

Q. Let's say a ten year old?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So we as I mentioned in my earlier testimony also use assessments from other individuals with regard to the consistency of their gender identity and including family as well as their mental health providers and we would provide individualized care based on that patient.

BY ATTORNEY TRYON:

Q. At that point do you actually give a diagnosis that they are their true gender identity is female or what happens?

ATTORNEY BORELLI:

Objection, form.

THE WITNESS: Again, gender identity is a core part of their being and their understanding of it at the time is their understanding of it at the time and that is the only way that we can decide what someone's gender identity is.

BY ATTORNEY TRYON:

Q. So at that point in time where the child is 10 or 12 or 14, at that point in time where they have concluded my true gender identity is not my natal sex of male but rather my true gender identity is a female, why shouldn't that child then be able to say I want gender --- I want surgery to remove my penis?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: So we don't want to do anything that's permanent until a person is older and their cognitive development is broader. And in some cases, you know --- well, I'll stop there.

BY ATTORNEY TRYON:

Q. If that child says, this is extremely harmful to me to still have my penis at this age, I want it removed, and you said yourself that is extremely harmful to not allow this child to not play on a sports team with which that child identifies, isn't having a penis when the child doesn't want one even more harmful?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I think they're both --- those situations could cause a risk for self harm and suicide. We would not like to do something that is permanent. Playing on a sports team is not something that is unchangeable.

BY ATTORNEY TRYON:

Q. But you told me, you told us, that gender is unchangeable and that child at that point has identified as a female. And since that is not going to change what is the harm in removing that child's penis?

A. You broke up after what is the harm in removing that child.

Q. That child's penis?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I stated that their understanding of their gender identity occurs over the lifespan and so we want to be very careful with regard

to that --- any permanent treatment.

BY ATTORNEY TRYON:

Q. So you're saying you don't --- you're saying you don't believe that that child's true identity is a female, true gender identity is a female, you doubt that child?

ATTORNEY BORELLI: Objection, form.

THE WITNESS: I don't doubt what my patients tell me because --- what they tell me is their truth and their identity. I do like --- think it is important when you are making these decisions to again corroborate that with other individuals who are with the family --- I'm sorry, with the person. And we want to make sure that that is a durable place where their understanding is. Ideally, we would like for it to be as understood as it might be before making a decision that is a permanent decision like surgery.

VIDEOGRAPHER: Mr. Tryon, I sent you a chat, I didn't know if you saw that. I just wanted to give a five-minute warning.

ATTORNEY TRYON: Oh, it's five minutes left? Thank you. I did not see that. One moment.

BY ATTORNEY TRYON:

Q. You are getting paid as an expert witness in

this case right?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: Yes.
BY ATTORNEY TRYON:
Q. Are you being paid as an expert witness in connection to any other litigation or testimony or any other statutes --- similar statutes?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: I am --- have not been paid. I am involved in other --- another case, two cases.
BY ATTORNEY TRYON:
Q. What are those other two cases?
A. I'm not going to be able to tell you the name because I'm terrible with names. It involves transgender care in Arkansas as well as in sports-related issues with transgender youth in Florida.
Q. Have you testified in those cases yet?
A. I have not.
Q. You testified in other cases.
Right?
A. You broke up again. Could you repeat?
Q. You have testified in other cases.
Right?

A. Yes.
Q. Which cases are those?
A. The transgender-related cases were with Adams in Florida. Why am I blanking?
Q. Connecticut?
A. I did not actually --- I have not been deposed in --- except for Adams.
Q. Okay.
In your --- in your expert report you say that I have testified twice as an expert at trial or deposition.
A. Yeah, I was involved in another case as an expert witness and was deposed for a case involving an infant with fractures that were --- there was concern for abuse.
Q. I'm sorry, you froze on me. Can you tell me what that was again?
A. Yeah. There was a case that I was involved with where the patient's parents --- they had concern for abuse from the parents because the child had fractures.
Q. Well, I'm running out of time, so let me glance through my notes and see if there is anything else. Do you disagree with the policies of the other agents --- excuse me, of the sporting organizations which require a

delay in time before a transgender female can participate in those sports?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: I think it would be better for the patient if they did not have to delay.
BY ATTORNEY TRYON:
Q. So you --- if it was up to you, you would eliminate that delay that is required by these other sports organizations.
Is that right?
ATTORNEY BORELLI: Objection, form.
THE WITNESSS: I think it would be better for my patients. Yes.
BY ATTORNEY TRYON:
Q. And you think those organizations should change their policies to satisfy what your concern is?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: You know, there is a lot to weigh there. I am not sure that I would be able to like say for their purposes. I don't know all of the things that are there. For my patients what would be best for them is to not to have to have that delay.
BY ATTORNEY TRYON:
Q. But would you agree with me that the State of

West Virginia had a lot to weigh as well when it put in place its legislation before they passed the law?
ATTORNEY BORELLI: Objection. Objection, form.
THE WITNESS: I would hope that every piece of legislation is weighed heavily.
BY ATTORNEY TRYON:
Q. And you would agree that in this case there was a lot to weigh on a number of different issues before they passed the law.
Correct?
ATTORNEY BORELLI: Objection, form.
THE WITNESS: I would agree. And I wasn't there to know what was, so I agree there should be.
BY ATTORNEY TRYON:
Q. I'm sorry. I didn't catch that. You froze up. Can you repeat that?
A. Sure. I agree there should have been. I wasn't there to hear what happened with regard to the process, so I don't know if they actually did that.
ATTORNEY TRYON:
Thank you. Do I have any time left, Jacob?

VIDEOGRAPHER: I think that's the cap.
ATTORNEY TRYON: Okay.
Dr. Adkins, thank you very much for your time. Appreciate it.
ATTORNEY BORELLI: This is Tara Borelli for Plaintiff, B.P.J.. Plaintiff has no questions for the witness. We will read and sign.
VIDEOGRAPHER: That concludes this deposition. Current time reads 5:56 p.m. Eastern Standard Time.

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VIDEOTAPED DEPOSITION CONCLUDED AT 5:56 P.M.

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IN THE UNITED STATES DISTRICT COURT

FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA

CHARLESTON DIVISION

* * * * * * * *

B.P.J., by her next friend and Mother, HEATHER JACKSON, Plaintiff	*	Case No.
vs.	*	2:21-CV-00316
WEST VIRGINIA STATE BOARD OF EDUCATION, HARRISON COUNTY BOARD OF EDUCATION, WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION, W. CLAYTON BURCH in his official Capacity as State Superintendent, DORA STUTLER in her official Capacity as Harrison County Superintendent, PATRICK MORRISEY In his official capacity as Attorney General, and THE STATE OF WEST VIRGINIA, Defendants	*	VIDEOTAPED VIDEOCONFERENCE DEPOSITION OF ARON JANSSEN, M.D. April 4, 2022

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VIDEOTAPED VIDEOCONFERENCE DEPOSITION
OF
ARON JANSSEN, M.D., taken on behalf of the Defendant, State of West Virginia herein, pursuant to the Rules of Civil Procedure, taken before me, the undersigned, Lacey C. Scott, a Court Reporter and Notary Public in and for the State of West Virginia, on Thursday, April 4, 2022, beginning at 9:09 a.m.

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STIPULATION

(It is hereby stipulated and agreed by and between counsel for the respective parties that reading, signing, sealing, certification and filing are not waived.)

PROCEEDINGS

ATTORNEY BARHAM: Counsel has stipulated that our court reporter present this morning can swear in the witness, so I will let the court reporter take care of that.

ARON JANSSEN, M.D.,

CALLED AS A WITNESS IN THE FOLLOWING PROCEEDINGS, AND HAVING FIRST BEEN DULY SWORN, TESTIFIED AND SAID AS FOLLOWS:

VIDEOGRAPHER: My name is Jacob Stock. I'm a Certified Legal Video Specialist employed by Sargent's Court Reporting Services. The date today is April 4th, 2022. The time on the video monitor reads 9:09 a.m. This deposition is being taken remotely by

Zoom conference. The caption is in the United States District Court for the Southern District of West Virginia, Charleston Division, BPJ, et al., versus West Virginia State Board of Education, et al. Civil Action Number 2:21-CV-00316. The name of the witness is Aron Janssen. Will the attorneys present state their names and the parties they represent?

ATTORNEY BARHAM: My name is Travis Barham. I represent the intervenors in this case. And with me is Lawrence Wilkinson.

ATTORNEY CSUTOROS: Rachel Csutoros also for intervenor.

ATTORNEY TRYON: This is David Tryon of the West Virginia Attorney General's Office, representing the State of West Virginia.

ATTORNEY DENIKER: Good morning. Susan Deniker. Counsel for Defendants Harrison County Board of Education and Superintendent Dora Stutler.

ATTORNEY MORGAN: This is Kelly Morgan on behalf of the West Virginia Board of Education and Superintendent Burch.

ATTORNEY GREEN: This is Roberta Green here on behalf of West Virginia Secondary School Activities Commission.

ATTORNEY BLOCK: For Plaintiff BPJ, this is Josh Block from the ACLU.

ATTORNEY SWAMINATHAN: This is Sruti Swaminathan from Lambda Legal on behalf of Plaintiff.

ATTORNEY HARTNETT: Good morning. This is Kathleen Hartnett at Cooley on behalf of Plaintiff.

ATTORNEY BARR: Andrew Barr from Cooley on behalf of Plaintiff.

ATTORNEY PELET DEL TORO: Good morning. This is Valeria Pelet Del Toro from Cooley on behalf of Plaintiff.

ATTORNEY REINHARDT: This is Elizabeth Reinhardt from Cooley on behalf of Plaintiff.

VIDEOGRAPHER: If that's everyone, the witness has already been sworn in and we can begin.

EXAMINATION

BY ATTORNEY BARHAM:

Q. Good morning, Dr. Janssen.

A. Good morning.

Q. Have you ever had a deposition before?

A. No.

Q. All right.

I'm going to ask you a series of questions about this case and your involvement in it. Do your best to answer audibly. Just nodding the head, while it can be captured on video cannot be captured by our court reporter, and so we'll try to make her life as easy as possible.

I'm going to do my best to wait until you finish an answer before starting the next question. And I will ask that you do the same. We'll probably violate that rule a few times, but cross talk doesn't translate well on the record. So if you need to take a break at any time today, please let me know and we will do our best to facilitate that as quickly as possible. I know we need to take a break at two o'clock.

A. I think about 2:30, 2:45, something like that.

Q. Okay.

You just let us know when you need to take it. All right.

ATTORNEY BARHAM: I'm going to show you a document we're going to mark as Exhibit-1. This will be Tab 90 for online purposes.

(Whereupon, Exhibit 1, Expert Report, was marked for identification.)

BY ATTORNEY BARHAM:

Q. This is a copy of your expert report in this case.

Is that correct?

A. Yes, that is correct.

Q. If you'll turn to the first page of your CV. It's probably page 21 of this document. Do you have ---?

VIDEOGRAPHER: This is the videographer. Can I ask Counsel to speak up? You are kind of getting cutoff at the end of your sentences.

ATTORNEY BARHAM: Pardon. I will do my best.

BY ATTORNEY BARHAM:

Q. Do you have a degree in adult psychiatry?

A. There is not a degree in psychiatry.

Q. Okay.

So your academic training in psychiatry began with your psychiatry residency? Is that how it works?

A. I did a medical degree, where there is psychiatry training and then a residency in adult psychiatry and a fellowship in child psychiatry.

Q. Do you consider yourself trained and professionally competent in using the American Psychiatric Association's Diagnostic and Statistical Manual, DSM-V, to make child and adolescent metal illness or psychiatric diagnoses generally beyond just gender dysphoria?

A. Yes.

Q. Do you have any residency or fellowship in pediatrics?

A. No.

Q. Do you have any residency or fellowship in endocrinology?

A. No.

Q. Do you have any training in sports physiology?

A. No.

Q. Do you have any training in sports medicine?

A. No.

Q. Have you published any papers, conducted any research or given any lectures relating to sports physiology?

A. No.

Q. Have you published any papers, conducted any research or given any lectures relating to sports medicine?

A. No.

Q. Have you published any papers, conducted any research or given any lectures relating to male physiological advantages in athletics before, during or after puberty?

A. No.

ATTORNEY BLOCK: Objection to form. You can answer.

BY ATTORNEY BARHAM:

Q. Have you published any papers, conducted any research or given any lectures relating to the impact of any drugs or hormones on athletic performance?

A. No.

Q. Have you published any papers, conducted any research or given any lectures relating to the impact of testosterone suppression on athletic performance?

A. No.

Q. Have you published any papers, conducted any research or given any lectures relating to the effect of transsex surgeries on athletic performance?

A. No.

ATTORNEY BLOCK: Objection. Objection to terminology.

BY ATTORNEY BARHAM:

Q. Have you published any papers, conducted any

research or given any lectures relating to the safety issues and risks to women associated with transgender participation in female athletics by male athletes?

ATTORNEY BLOCK: Objection to form. Sorry, objection to form.

THE WITNESS: Yeah, I think there's a bit of a premise in there that I don't agree with, but I have not given any lectures about transgender participation in sports.

BY ATTORNEY BARHAM:

Q. Do you consider --- do you have any professional expertise related to the concept of fairness?

A. I do not.

Q. Do you have any professional expertise on the definition of fairness?

A. I do not.

Q. Would you agree that fairness is an elusive, subjective concept with malleable boundaries?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I do not have an opinion on the definition of fairness.

BY ATTORNEY BARHAM:

Q. Have you treated or personally examined BPJ?

A. I have not.

Q. You have no direct knowledge as to what Tanner stage BPJ started puberty blockers at the age.

Correct?

A. Correct.

Q. You do not know how BPJ's physiology or athletic capabilities compare with genetic females at the same age?

A. I do not.

ATTORNEY BLOCK: Objection to terminology.

BY ATTORNEY BARHAM:

Q. This report, Exhibit-1 of 20 pages sets out the complete statement of all opinions that you will testify to at trial.

Correct?

A. Which report are you referring to?

Q. The report in front of you, Exhibit-1, Tab 90.

A. And can you repeat the question? Sorry.

Q. This report sets out a complete statement of all opinions that you will testify to at trial.

Correct?

A. I do not know the answer to that. I mean, I would assume so, but I don't know. I've never been in a trial, so I don't know if there will be questions asked

outside of this document.

Q. Does this report identify all facts and data that you considered in forming the opinions that you set forth in your report?

A. I wouldn't say it has all facts because I don't think it is possible to include all facts in an expert report, but the relevant facts, yes.

Q. This includes the facts that you'll rely on in supporting those opinions.

Correct?

A. That's correct.

Q. Does your report set out all the reasons for the opinions that you propose to offer?

A. Yes.

Q. Your footnotes cite to I believe 32 scientific or professional articles and you reference some others in your CV. Are those all the articles that form the basis of the opinions you propose to offer?

A. No.

Q. What other articles form the basis of the opinions you propose to offer?

A. I guess the question is what has formed my professional expertise around gender health, and I've read a lot that aren't necessarily going to be apropos

to this specific report.

Q. But those are the articles that you cited and referenced in this document are those that you relied upon as the basis of opinions that you intend to offer.

Correct?

A. That is correct.

Q. You currently serve as the Clinical Associate Professor of Child and Adolescent Psychiatry.

Correct?

A. Yes.

Q. And what institution is that with?

A. It is with Northwestern University Feinberg School of Medicine, and Ann and Robert H. Lurie Children's Hospital of Chicago.

Q. And how much of your time in this position is related to discussing or treating gender dysphoric children and adolescents?

ATTORNEY BLOCK: Objection to terminology.

THE WITNESS: It's hard to quantify. Probably about 40 percent of my time is allocated in some way to either clinical care, research or academics around gender health.

BY ATTORNEY BARHAM:

Q. And what is your compensation for this position?
A. It is roughly $265,000 a year in salary.
Q. You also serve as the Vice Chair of the Pritzker Department of Psychology and Behavioral Health at the Ann and Robert H. Lurie Children's Hospital of Chicago.
Correct?
A. That's correct.
Q. And how much of your time in this position is related to discussing or treating gender dysphoric children and adolescents?
ATTORNEY BLOCK: Objection to terminology.
THE WITNESS: Again, it is hard to parse out what specific about my leadership role is around gender health but it is a minority of my day-to-day work in that role.
BY ATTORNEY BARHAM:
Q. Do you have an approximate percentage?
A. No.
Q. Twenty-five (25) percent, more or less?
A. Probably ten percent.
Q. Ten percent. Okay.
And what is your compensation for that

position?
A. I get a stipend of around $30,000.
Q. You currently serve as the Medical Director of Outpatient Psychiatric Services at the Lurie Children's Hospital of Chicago.
Is that correct?
A. That;s correct.
Q. And how much of your time in this position is related to discussing or treating gender dysphoric children and adolescents?
ATTORNEY BLOCK: Objection to terminology.
THE WITNESS: About 25 percent of my time is probably spent discussing or related to the health of transgender youth or transgender --- gender diverse youth.
BY ATTORNEY BARHAM:
Q. And what is your compensation for that position?
A. There is no compensation.
Q. You currently serve as the Clinical Director of the NYU Gender and Sexuality Services.
Is that correct?
A. That is not correct.
Q. When did you conclude your role in that

position? I'm referencing page one of your CV.
A. That was when I moved to Chicago a few years ago.
Q. Okay.
So where it says 2011 to present Clinical Director, NYU Sexuality Service, that is just a typo?
A. That is a typo, yes.
Q. You currently serve as the Associate Professor of Child and Adolescent Psychology at Northwestern University, and we have already discussed that. Is there a difference between Clinical Associate Professor and Associate Professor of Child and Adolescent Psychiatry?
A. No.
Q. You serve as the Vice Chair of Clinical Affairs at the Pritzker Department of Psychiatry and Behavioral Health at the Lurie Children's Hospital.
Correct?
A. That's correct.
Q. And how much time in this position is related to discussing or treating gender dysphoric children and adolescents?
ATTORNEY BLOCK: Objection to terminology.

THE WITNESS: I think I answered that one with the guess of about ten percent.
BY ATTORNEY BARHAM:
Q. Okay?
So that's the same as the Vice Chair of the Department of Psychiatry?
A. Correct.
Q. You currently serve as the Associate Editor for Transgender Health.
Correct?
A. That is correct.
Q. And what is your compensation for that position?
A. There is no compensation for that position.
Q. What is that publication's annual income?
A. I do not know.
Q. You serve as a reviewer for LGBT Health.
Correct?
A. Yes.
Q. And how much of your time is related --- in that position is related to treating or discussing transgender children and adolescents?
A. I would say 100 percent of my review time with LGBT health is around gender.
Q. Do you receive any compensation for that

position?
A. I do not.
Q. Do you receive any compensation for your role as a reviewer with the Journal of the Academy of Child and Adolescent Psychiatry?
A. I do not.
Q. You served in various positions with different professional organizations according to paragraphs 11 and 12 of your report. Do any of those positions provide you financial compensation?
A. No.
Q. You founded and directed Gender Variant Youth and Family Network.
Correct?
A. Correct.
Q. What's your compensation for that position?
A. Zero.
Q. What is the entity's annual income or budget?
A. Zero.
Q. You indicate in your report that you have seen approximately 500 transgender patients.
Is that correct?
A. That is correct.
Q. How many patients do you see per year?

ATTORNEY BLOCK: Objection to form.
THE WITNESS: I'd have to look at my report. I don't have the information in front of me right now.
BY ATTORNEY BARHAM:
Q. Do you have a ballpark of how many patients you see in a year?
A. I don't.
Q. Does this include --- and I'm assuming that your colleagues see additional patients beyond just those that you see.
Correct?
A. Correct.
Q. How frequently do you see each patients?
A. I see --- the frequency with which I see patients is dependent upon their clinical need, so between once or twice a week to once every three months.
Q. And how much are patients charged per appointment?
A. Everything is billed to their insurance, so I'm not sure.
Q. Do you receive any other income related to your work on gender dysphoria?
A. I'm being paid for my expert report for this, so

that's the only other income I receive.
Q. Do you receive any speaking fees?
A. I have received speaking fees for participation and grand rounds as an example.
Q. And how much would those speaking fees run?
A. It is typically about a thousand dollars per event.
Q. Before the last four years had you provided any expert testimony on issues related to gender dysphoria?
A. Can you clarify the difference between testimonies and reports? I've submitted a report but not ---.
Q. Okay.
So you have submitted a report?
A. Correct.
Q. Do you remember what case that involved?
A. That involves Medicaid and top surgery in Arizona.
Q. Okay.
Have you ever provided any testimony in trial or deposition before related to gender dysphoria?
A. I have not.
Q. And how much compensation have you received so far in this case?

A. This case so far, none thus far.
Q. How much are you expecting to receive so far in this case?
A. I haven't added up my invoice yet, but I imagine it's probably around $10,000.
Q. Okay.
Do you have any professional expertise related to the legal definition of relevance?
A. I do not.
Q. Do you have any legal training or education?
A. I do not.
Q. When you were preparing your report did you consult the Federal Rules of Evidence or any other legal sources as to the meaning of relevance?
A. I did not.
Q. Several people in this case have referenced disorders of sexual development. Would you agree that gender dysphoria is not a disorder of sexual development?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: Gender dysphoria has not been classified as a disorder of sexual development.
BY ATTORNEY BARHAM:
Q. Of the approximately 500 transgender patients

you had seen how many suffered from disorder of sexual development?

A. A minority of patients, less than ten.

Q. So you would agree that the vast majority of individuals with gender dysphoria or who assert a transgender identity do not suffer from a disorder of sexual development.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: The data we have speaks to the majority of people with gender dysphoria do not have a disorder of sex development.

BY ATTORNEY BARHAM:

Q. Do you have any reason to believe that BPJ suffers from a disorder of sexual development?

A. I have not reviewed BPJ's case.

Q. Are you aware of any instance in which an individual with a disorder of sexual development has attempted to play on a girls' or women's sports team in West Virginia?

A. I am not aware.

Q. Is it your opinion that a person's gender identity is durable?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Can you define durable?

BY ATTORNEY BARHAM:

Q. Unchanging.

ATTORNEY BLOCK: Objection to form.

THE WITNESS: It is my testimony that there is a concept of gender identity that remains generally fixed for most people throughout their lives.

BY ATTORNEY BARHAM:

Q. So it's your opinion that a person's gender identity cannot be changed with medical or mental health intervention.

Correct?

COURT REPORTER: Sorry, Counsel, that question one more time.

BY ATTORNEY BARHAM:

Q. So it's your opinion that a person's gender identity cannot be changed with medical or mental health intervention.

Correct?

A. Yes.

ATTORNEY BARHAM: I'm going to hand you what we're going to mark as Exhibit-2. This will be Tab 5.

(Whereupon, Exhibit-2, Endocrine Society's Guidelines, was marked for identification.)

BY ATTORNEY BARHAM:

Q. If you'll turn to page 3873 of this document. This document is the Endocrine Society's Guidelines, Endocrine Treatment of Gender Dysphoric or Gender Incongruent Persons, Endocrine Society Clinical Practice Guideline published in 2017.

Correct?

A. That is correct.

Q. On page 3873 of this document the Endocrine Society indicates that this continuum gender identity ranged from all male through something in between to all female yet such a classification does not take into account that people may have gender identities outside this continuum. For instance, some experience themselves as having both a male and female gender identity whereas others completely renounce any gender classification. There are also reports of individuals experiencing a continuous and rapid involuntary alternation between a male and female identity.

Do you see that?

A. I don't see that.

Q. Second column, towards the bottom of the page.

A. Yes, I see that.

Q. Is this consistent with your understanding of gender identity?

ATTORNEY BLOCK: Can you give him time to read?

ATTORNEY BARHAM: Gladly.

THE WITNESS: I think there is a difference between a gender identity and how people understand and express that gender identity. And in the context of this article the rapid involuntary alteration between male and female identity as an example is a case reported of single individuals subjective experience of their gender according to the reference.

BY ATTORNEY BARHAM:

Q. And by that you're referring to note ten?

A. Correct.

Q. So according to this document, someone can be one sex or the other, both, neither or in between.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I can't speak for the conclusions drawn by the author of this article.

BY ATTORNEY BARHAM:

Q. And according to the Endocrine Society a person's gender identity can change rapidly.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I'm not a part of the Endocrine Society, so I'm not sure how they discuss this.

BY ATTORNEY BARHAM:

Q. According to this document, the Endocrine Society is indicating that there are reports, plural, of individuals, plural, experiencing a continuous and rapid involuntary alternation between male and female gender identity.

Correct?

A. That is documented in the article.

Q. Okay.

A. I'm not sure of the governance of the Endocrine Society.

Q. Do you think the Endocrine Society Guidelines are wrong?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I think anything relating to gender identity has to be taken in a broader context

within both the article in and of itself but in broader practice and specifically around children and adolescents.

BY ATTORNEY BARHAM:

Q. So what is your basis for indicating that this statement is potentially inaccurate?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I think there is more context that's needed in order to understand the intent of the authors in this particular section.

ATTORNEY BARHAM: I'm going to hand you what we will mark as Exhibit-3. This is the document from the World Health Organization entitled Gender and Health.

(Whereupon, Exhibit-3, World Health Organization, was marked for identification.)

BY ATTORNEY BARHAM:

Q. Are you familiar with the World Health Organization?

A. I've heard of them.

Q. Do you agree with these World Health

Organization statements?

ATTORNEY BLOCK: Objection to form. Can he have time to read the document?

ATTORNEY BARHAM: Of course.

VIDEOGRAPHER: Counsel, is that Tab 10?

LAW CLERK WILKINSON: Tab 10.

ATTORNEY BARHAM: It is.

VIDEOGRAPHER: Okay. Thank you.

THE WITNESS: Can you repeat the question?

BY ATTORNEY BARHAM:

Q. Do you agree with these World Health Organization statements?

A. Not in their entirety.

Q. In what parts do you dispute?

A. The word gender as a concept is much more complicated and I do not agree with their characterization in this page.

Q. So the World Health Organization says that gender itself is a social construct and can change over time.

Correct?

ATTORNEY BLOCK: Objection to form. Does this document have a URL to it?

ATTORNEY BARHAM: It does, but I don't see it printed on the document.

LAW CLERK WILKINSON: We can get it.

ATTORNEY BARHAM: We can supply that.

THE WITNESS: I agree that it says on the document that gender varies from society to society and can change over time.

BY ATTORNEY BARHAM:

Q. And according to the World Health Organization, gender identity refers to a person's experience of gender which is a social construct.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I don't see in the document where it refers to gender identity or defines gender identity.

BY ATTORNEY BARHAM:

Q. It says gender interacts with different sex, which refers to the different biological and physiological characteristics of males, females, intersex persons such as chromosomes, hormones and reproductive organs.

Correct?

A. That is correctly read. I don't see gender

identity defined in this document.

Q. Gender identity refers to a person's deeply held internal and individual experience of gender. Correct?

A. That's what it says here, yes.

Q. If an individual asserts an identity of man or both, how can a clinician verify whether that individual is telling the truth?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I'm not sure what exactly that means. The process of an assessment for gender care involves a complex series of interviews, diagnostics.

BY ATTORNEY BARHAM:

Q. So how does the clinician assess whether the patient is accurately relating their experiences?

A. In the typical process, particularly around child and adolescent psychiatry, part of the assessment involves information gathered from multiple contexts.

Q. Such as?

A. Such as parents, schools, caregivers, other providers, history over time, et cetera.

Q. And if --- so how does one assess from those various contexts whether someone who's claiming to be

male or both is accurately relating what's going on?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Yeah, I guess I don't understand the question exactly. You know, my job is not necessarily to define what is accurate in someone's own experience. It's to understand how that fits into typical processes and developmental expectations for the broad range of gender diversity over time.

BY ATTORNEY BARHAM:

Q. How do you determine whether someone in that scenario is accurately understanding his own subjective feelings --- his or her subjective feelings?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: The context of the treatment is really important. If an individual is seeking specific interventions that require a mental health assessment, there are specific components of that mental health assessment that must be met.

BY ATTORNEY BARHAM:

Q. So what are the treatments that would require a mental health assessment?

A. Puberty blocking medications, hormones or surgery.

Q. And what are the interventions that would not

require mental health evaluations, in your opinion?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: It depends upon what guidelines you're talking about and what recommendations that the family is looking for.

BY ATTORNEY BARHAM:

Q. Well, what are some of the inventions? You said there's some interventions that would require a mental health evaluation, so that implies that there are some that would not. What are the interventions that would not require a mental health evaluation?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: You know, parents giving hugs to their kids is not something that a mental health assessment would require. Providing a way of helping families to understand their kids or asking questions is not something that requires a mental health evaluation and some children will socially transition prior to any assessments by any mental health professional.

BY ATTORNEY BARHAM:

Q. How do you determine --- if an individual asserts a gender identity of male or both, how do you determine whether the individual is making a statement based on societal expectations for a particular gender

rather than ---?

ATTORNEY BLOCK: Objection. Travis, I'm sorry, the male or both phrasing, is that a quote from something. I don't have the paper in front of me, so just want to clarify.

ATTORNEY BARHAM: No, that's not a question from something. That's just my question.

ATTORNEY BLOCK: Okay.

THE WITNESS: Can you repeat the question?

BY ATTORNEY BARHAM:

Q. If an individual asserts a gender identity male or both, how can a clinician verify whether the individual is making the statement based on societal expectations for a particular gender rather than his own genuine gender?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I personally never had anybody assert an identity of male or both, but part of the assessment of --- if we are diagnosing gender dysphoria is understanding the cultural and social contexts and ensuring that folks are not presenting with a gender identity that is incongruent with their sex assigned at birth because of actual or perceived

cultural advantages.
BY ATTORNEY BARHAM:
Q. And how does one go about assessing the motivations behind the claimed gender identity or transgender sex?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: For any psychiatric assessment this is through a combination of interviews, gathering history from relevant data sources and sometimes for some people structured interviews or scales.
BY ATTORNEY BARHAM:
Q. And how long does it take to conduct such an assessment?
A. There is no specific timeframe involved in this assessment. It really depends upon contextual factors that are hard to nail down.
Q. So if you were treating a child or teenager, how many relevant data sources would you need to get information from in order to make a complete assessment of the child's motivations?
A. I don't think there's ever going to be a concrete answer in terms of how many. There's not a specific answer of how many sources are necessary. It's

however many sources are necessary to gather the relevant information.
Q. So how do you determine whether you have gathered enough information to make a competent assessment?
A. It's hard to state this in a non-pithy way, but that's kind of what the process of psychiatry and child psychiatry training helps you to learn.
Q. Could you explain to someone who doesn't have the training how you come to the conclusion, okay, I've gathered enough information to make a competent assessment?
A. Sure. I can try. How accurate is the reporter in their description of their history. How much does it align with reports from other informants, how much does it match with or is deviant from expected phenotypic processes with the disorders in question and what is the impression of the evaluator about the accuracy of the statements.
ATTORNEY BARHAM: I'm going to show you what we will mark as Exhibit-4, this will be Tab 12.

(Whereupon, Exhibit-4, Harvard Medical School Study, was marked for

identification.)

BY ATTORNEY BARHAM:
Q. Are you familiar with this study? This is a study from the Harvard Medical School entitled Gender Fluidity: What it Means and Why Support Matters?
ATTORNEY BLOCK: Objection.
THE WITNESS: This looks like a popular website article and not a study.
BY ATTORNEY BARHAM:
Q. Are you familiar with the author, Dr. Sabrina Katz --- Sabra Katz-Wise?
A. Dr. Katz-Wise has published in the world of transgender health. I'm not familiar with them personally, I don't know them.
Q. Do you know Dr. Katz-Wise at least by reputation?
A. I don't. I've only read some studies.
Q. But you would agree that she is highly respected in this area.
Correct?
A. I would not be able to offer an opinion.
Q. But she is widely published in this area.
Correct?

ATTORNEY BLOCK: Objection to form.
THE WITNESS: From my recollection, yes.
BY ATTORNEY BARHAM:
Q. At the bottom of page two of this document, Dr. Katz-Wise indicates that while some people develop a gender identity early in childhood others may identify with one gender at one time and then another gender later on.
Is that correct?
A. You're reading that accurately, yeah.
Q. So according to this article, on page three a gender fluid person is one whose gender identity changes frequently.
Correct?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: I do not --- I have not read it in here that it is defined in that way and that's not how I would define gender fluidity.
BY ATTORNEY BARHAM:
Q. At least you see the statement at the first full paragraph at the top of page three, ultimately anyone who identifies as gender fluid, is a gender fluid person often the term is used for a person's gender expression or gender identity, essentially their internal sense of

self changes frequently?

ATTORNEY BLOCK: Objection. We're jumping quickly from pages. Can you give him some more time to read before answering the question?

ATTORNEY BARHAM: Certainly.

THE WITNESS: Yes. I'm not seeing where that is here. Can you point that out for me?

BY ATTORNEY BARHAM:

Q. Top of page three, just above that, how is gender fluidity related to health in child and teens?

A. Gender fluidity is a very nonspecific term that means very different things to different people. In the practice of the clinical work with transgender and gender diverse youth, kids who are self identifying as gender fluid, I want to understand what it means to them and what that definition is for that individual. I don't think there is one established definition of gender fluidity that has been agreed upon.

Q. But at least some respected professionals in this arena indicate that the term gender fluidity means that the person's internal sense of self, their gender identity changes frequently.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I can't speak to what Dr. Katz-Wise is using to define it. The way I would describe gender fluidity, again outside the context of how my patients are actually using the term, is that understanding of the expression of gender identity may change over time.

BY ATTORNEY BARHAM:

Q. So you said that their understanding of gender identity can change over time. Dr. Katz-Wise says that their gender identity changes frequently?

Is that correct?

A. That's what it stated in this popular press article.

Q. And Dr. Katz-Wise is an Assistant Professor in Adolescent and Young Adult Medicine at Boston Children's Hospital.

Is that correct?

A. I would have to take your word for that.

Q. Okay.

Are you aware that she co-directs the Harvard Sexual Orientation and Gender Identity Expression Equity Research Collaborative?

A. I do not know the term, no.

ATTORNEY BARHAM: I'm going to show you what we will mark as Exhibit-5, and this will be Tab 13.

(Whereupon, Exhibit-5, American Psychological Association Guidelines, was marked for identification.)

BY ATTORNEY BARHAM:

Q. This document is the American Psychological Association Guidelines for Psychological Practice with Transgender and Gender Non-Conforming People.

Correct?

A. That is correct.

Q. And on page 836 of this document the APA writes just as some people experience their sexual orientation as being fluid or variable, some people also experience their the gender identity as fluid.

Correct?

A. Can you show me on the page where that is?

Q. The bottom of the first paragraph in the first column of page 836.

A. Yes.

Q. So the APA Guidelines say that gender identity can be fluid or changing.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Well, I think the important piece is some people experience gender identity as fluid or variable.

BY ATTORNEY BARHAM:

Q. So it can be fluid or changing?

Correct?

ATTORNEY BLOCK: Objection to form.

BY ATTORNEY BARHAM:

Q. For at least some people.

Correct?

THE WITNESS: As I would describe it and understand it, that's the experience of expression of gender identity can be fluid over time, which is different.

BY ATTORNEY BARHAM:

Q. How is that different to say that one's gender identity changes?

A. It's getting a little complicated in terms of the concepts that we're talking about, but the identity that gender identity is something that is inherently fixed, that how people understand, experience it and express it can change over time. That's the difference.

Q. But the American Psychological Association at

least describes gender identity as being fluid.
Correct?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: In the article that you have put in front of me it describes that people's experience of their gender identity is fluid over time.
BY ATTORNEY BARHAM:
Q. Let's go back to Tab 5, which is Exhibit-2. Are you familiar with the Endocrine Society Guidelines?
A. I am.
Q. Is it your view that these guidelines were developed through rigorous scientific processes?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: I agree.
BY ATTORNEY BARHAM:
Q. Would you agree that these guidelines were developed by among the most respected researchers in the field?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: I wouldn't disagree with that, no.
BY ATTORNEY BARHAM:
Q. Do you respect Dr. Hembree of Columbia University Medical Center?

A. I do.
Q. Do you respect Dr. Cohen-Kettenis of the University of Amsterdam?
A. I would say I respect all of these clinicians and researchers, although Sabine Hannema I am not familiar personally.
Q. If you will turn to page 3879 of this document. Right under the heading evidence this article reports that the large majority, about 85 percent of prepubertal children with a childhood diagnosis did not remain GD, slash, gender incongruent in adolescence.
Is that correct?
A. That is correctly read, yes.
Q. And footnote 20 of this document cites to Dr. Steensma, de Vries, Cohen-Kettenis article in 2013?
A. That's correct.
Q. These are extensively published original peer reviewed research --- peer reviewed researchers in the field.
Correct?
A. Correct.
Q. So this committee reveals evidence that the large majority of children, about 85 percent, with a childhood diagnosis do not remain gender dysphoric in

gender adolescence.
Correct?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: Yeah, in these studies have been published primarily by the Dutch clinic the rates of dissentience of the diagnosis of gender dysphoria has been upwards of 85 percent.
BY ATTORNEY BARHAM:
Q. And at the bottom of the first column of page 3879 the committee indicates that their clinical experience suggests that the persistence of gender dysphoria or gender incongruence can only be reliably assessed after the first signs of puberty.
Is that correct?
A. That is what is written, yes.
Q. You have not offered an opinion in your report as to whether or --- whether or to what transgender identity has a biological basis.
Is that correct?
A. Let me just make sure that I'm reviewing it. I have not offered an opinion.
Q. If you will turn to page 76 of Exhibit-2, Tab 5. The committee with all of its experience and presenting all the evidence said that gender dysphoria in children,

quote, does not invariably persist into adolescence and adulthood.
Is that correct?
A. That is correct.
Q. In fact, this committee concluded that that gender dysphoria, a minority of prepubertal children appears to persist in adolescence.
Is that correct?
A. That is correct.
Q. I'm going to turn your attention to --- this will be Tab 15, Exhibit-6.

(Whereupon, Exhibit-6, Lisa Littman Study, was marked for identification.)

BY ATTORNEY BARHAM:
Q. This is a 2021 study by Lisa Littman entitled Individuals Treated for Gender Dysphoria with a Medical and/or Surgical Transition who Subsequently De-transitioned.
Is that correct?
A. That is correct.
Q. Are you familiar with this study?
A. I am.

Q. The study was based on survey responses from a hundred adult individuals who were approved for hormonal and/or surgical transition, underwent such transition, lived in a transgender identity for a period of years and then decided to de-transition or revert to a gender identity associated with their biological sex.

Is that correct?

A. That is my understanding of the study, yes.

Q. And all of the subjects had detransitioned by discontinuing their medications, having surgeries to reverse the effects of transition or both.

Correct?

ATTORNEY BLOCK: Objection to form. Are you reading something?

ATTORNEY BARHAM: I'm referencing page two, column two, at the bottom of the page.

THE WITNESS: My recollection from the study was that this was all self report, so there was no way to verify if that was correct or true.

BY ATTORNEY BARHAM:

Q. But that's at least what the participants reported.

Correct?

A. From my recollection. I'd have to reread the

entire study to say for sure but that is my recollection, yes.

Q. And if you turn to page eight of the second column, under the heading de-transition?

A. I don't have page numbers on mine.

ATTORNEY BLOCK: Do you reference the page number at the top?

ATTORNEY BARHAM: The source contains no page numbers, making it difficult.

BY ATTORNEY BARHAM:

Q. Under the heading detransition it's the page right before table four.

ATTORNEY BLOCK: I'm sorry. Can I see the heading on the document? Just for the record, this doesn't appear to be a paginated version of the article where, you know, when I pull it up I get a publication, date and pages. So I don't know if this is the final version of the article or not, but you can proceed with the questions.

ATTORNEY BARHAM: Counsel, I'll return to your concerns, Mr. Block.

BY ATTORNEY BARHAM:

Q. Do you see the one page before the page that contains Table 4?

A. I do.

Q. Do you see the heading detransition?

A. I do.

Q. And it says there that when participants decided to detransition they were a mean age of 26.4 years old.

Correct?

A. That is correct.

Q. Have you read this study before today?

A. I have.

Q. So doesn't this study at least suggest that patients may think they have a sense of belonging to the opposite sex but can be mistaken?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I think what this study does is hear experiences from a select group of individuals who are motivated to participate in the study about detransition and hear their experiences of their care.

BY ATTORNEY BARHAM:

Q. But the study still indicates that those individuals had a sense of belonging to the opposite sex and later concluded that they were were mistaken.

Is that correct?

A. You will have to forgive my clinician nature

here, but language is important when working with patients who are transitioning. I don't know if that's the language that they would use or if that is the language that was used in this particular survey.

Q. But the effect of detransitioning is that they at one time thought they belonged to the opposite sex and then later concluded that they did not?

ATTORNEY BLOCK: Objection to the form.

THE WITNESS: Again, I think we would want to know specifically what each individual person, how they described their process. I don't know what detransition means to those who are taking a relatively anonymous survey, so it's hard to draw a conclusion about the specific nature of it. The generally accepted upon definition of detransition is generally aligned with somebody who reverts back to a gender identity or gender expression that is more aligned with their sex assigned at birth.

BY ATTORNEY BARHAM:

Q. This study defines detransition as discontinuing medications, having surgeries to reverse the effect of transition or both.

Is that correct? It is on page two?

A. Show me where on page two.

Q. The second column of page two, at the bottom of the page?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Yeah. I'm not seeing that Dr. Littman is specifically defining detransition but describing the objective of the study for folks who detransitioned by those aspects that you noted.

BY ATTORNEY BARHAM:

Q. Okay.

But she notes in the last paragraph on that page the objective of the current study was to describe the population of individuals, skipping, who then detransitioned by discontinuing medications, having surgery to reverse the effects of transition or both?

A. That's correct.

Q. So she is indicating what she understands detransitioning to mean in this article.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Again I'm not sure how she specifically defines detransition. It is not necessarily made clear in that statement.

BY ATTORNEY BARHAM:

Q. Is it true that people may mistake feelings

resulting from trauma, mental illness or homophobia for a genuine sense of transgender identity?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I think there are a lot of complicated experiences that people may have that make them question their gender identity.

BY ATTORNEY BARHAM:

Q. So it's at least possible that people could mistake feelings resulting from trauma, mental illness or homophobia for genuine sense of transgender identity.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I don't disagree with that, no.

BY ATTORNEY BARHAM:

Q. You said it's complicated, so it sounds like it would be hard sometimes for a clinician to tell with certainty what's going on?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: What I would describe is that in anything related to mental health that there are complications and nuances. This is no different.

BY ATTORNEY BARHAM:

Q. Now, I believe you alluded to this a moment ago.

You mentioned that this is a self-reporting study and it obviously concerns an emotionally fraught area of gender identity. So is it your position that this does not produce scientifically meaningful results?

A. I don't know what you mean by scientifically meaningful.

Q. Do you believe that this --- the results of this article are scientifically reliable?

A. It depends upon what question is being asked. As a blanket, any kind of selection bias, particularly for this study based upon where the participants were drawn from makes us not want to draw conclusions about their generalized applicability of this study to other transgender folks, including other folks who may have detransitioned, but the goal of science is not necessarily to draw widely applicable conclusions, but to put us in a position where we can ask more questions and improve our care for our patients.

Q. Now, why do you say --- why do you highlight concerns about where the participants were drawn from?

A. I highlight that because it creates a sense of selection bias, which potentially, as I said, can reduce the why applicability of the conclusions drawn.

Q. And why do you say that there is a potential for

selection bias in this article?

A. Based upon the websites that Dr. Littman has drawn her participants.

Q. And why do you have concerns about those websites?

A. I have concerns about the websites because of the contents of those websites.

Q. And what is contents of those websites that causes you concern?

A. The content of the websites is unscientific. And I guess I'm not sure how to articulate it in a most defined way very specific to answering a set of questions that reenforces the prestudy hypotheses.

Q. So which websites that she drew participants from cause you concern?

A. As an example, Fourth Wave Now is a website that Dr. Littman had used for some of her study recruitment.

Q. And why are you concerned about the use of Fourth Wave now in the recruitment process?

A. What I would say is that when you're designing a study that presupposes the conclusion and the website is designed to attract people who presuppose that conclusion, that limits the applicability of the results. It just have to be taken into account. It

doesn't mean that there isn't data from this kind of snowball recruitment that isn't valuable and I wouldn't say that there isn't value to some of Dr. Littman's work, specifically this study as compared to the last, though you have to take it in the context with which it was developed.

Q. So are you suggesting that Dr. Littman presupposed the conclusion that she wanted to reach in designing this survey?

A. I'm less familiar with the design of this study than previous studies that she has designed, which I would say that was correct.

Q. What other websites did she use in the process to cause you concern?

A. I'm not as familiar with this study, so I don't know if she specifically identified which websites. And I can't recall right now on the others which they were.

Q. If you look at page three she discusses the method and the participants and procedures. Would reviewing that refresh your recollection as to any concerns about participants?

A. It would not because she does not describe the specific fora. She describes a closed Facebook group, Tumbler, Twitter and Reddit, but those are large

websites that have a lot of different kind of content.

Q. So is it your position that it's not possible to know whether anonymous or any results have any relation to true fact in actual case histories?

A. That is not my position.

Q. Do you have any --- you mentioned earlier something about how these were anonymous results. So is it possible to know whether they actually corresponded with true cases?

A. I think anonymous surveys, you have to really dig into the specifics of the survey design in order to draw conclusions. And again, with any study in any survey in particular you just want to make sure you have an understanding of that context how broadly to draw conclusions.

Q. Would you agree that online recruitment does not provide a statistically meaningful sample?

A. I would not agree with that.

Q. Is it your position --- how can an online recruitment produce a statistically meaningful sample?

A. I think I would need to understand the context of what you mean by statistically meaningful. There is a difference between a survey that could be potentially poorly designed and yet reach statistical significance.

You would need to understand the broader context in order to draw conclusions about what that statistical significance means and that means really digging into the specific methodology of this study. There is a vast literature about efficacy of survey data and it really depends on the specifics.

Q. We've previously referenced paragraph eight of your report where you mention you've seen approximately 500 transgender patients.

ATTORNEY BLOCK: Travis, sorry, not to avoid a pending question, but we're almost at one hour, so if this is a good time, if you're moving to a different subject maybe this would be a good time to break.

ATTORNEY BARHAM: Let me wrap up a few more and then we will do that.

ATTORNEY BLOCK: Thanks.

BY ATTORNEY BARHAM:

Q. Your clinical practice for children and adolescents started in 2013, about eight years ago.

Is that correct?

A. No, I finished medical school in 2011 and have been working with adults, children and adolescents since then.

Q. Okay.

A. Actually that's when I finished --- to go back, that's when I finished my residency and fellowship. I finished medical school in 2006. I can't believe it's been long.

Q. And when did you begin your work in child and adolescent psychiatry?

A. I had child and adolescent psychiatry experiences when I was in medical school.

Q. When did you begin practicing child and adolescent psychiatry?

A. That's not a very specific term. I practiced child psychiatry as a medical student in my training.

Q. When were you licensed, when were you first licensed to practice child and adolescent psychiatry?

A. There's no specific license to practice child psychiatry. Anybody who is --- has a medical license can practice any medical specialty. I was Board Certified in Child and Adolescent Psychiatry, which is a different process and I would have to look through to recall the date. I'm assuming that it's 2012 or 2013. 2013 is when I was Board Certified.

Q. So when did you begin --- and you finished your fellowship in child and adolescent psychiatry when?

A. 2011.
Q. 2011. When did you begin treating as a child and adolescent psychiatrist children with gender dysphoria?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: I saw children with gender dysphoria during my residency and in my fellowship.
BY ATTORNEY BARHAM:
Q. And your fellowship?
A. Between 2006 and 2009.
Q. And what proportion of those patients socially transitioned?
A. Of all of the patients that I saw in my training or in all of the patients that I've seen over my time as a physician?
Q. Let's go first with the training.
A. It was a much smaller number, so probably if I were to guess, and I'm going back, probably close to 95 percent.
Q. Ninety-five (95) percent socially transitioned when you were in training?
A. Yes.
Q. And how many of your patients overall have socially transitioned?

A. I'm not sure how to answer that question. Over the course of our time working together, before I started seeing them or --- I'm not sure how to accurately answer that question.
Q. Over the --- just in general how many of your patients socially transitioned, not just while they were being treated under your care?
A. And these are patients who are seeing me specifically through the context of gender or of those 500 transgender patients?
Q. Of the 500 transgender patients.
A. Probably --- I mean, it's a guess but probably in the order of 85 percent.
Q. And what proportion of the 500 patients used puberty blockers?
A. Probably a minority of those patients. If I had to guess, probably 20 percent or less.
Q. And what percent of those 500 transgender patients used cross sex hormones?
A. I don't have my records in front of me, so it would really just be a guess, but probably close to the same percentage that socially transitioned, probably a little bit less than that.
Q. If I recall correctly that's about 85 percent?

A. Probably somewhere on the order of that.
ATTORNEY BLOCK: Would now be a good time for that break?
ATTORNEY BARHAM: One last question.
BY ATTORNEY BARHAM:
Q. What systems do you have in place to track these patients five years after they have been in your care?
A. I have the same systems as most psychiatrists. We see the patients within our care. Folks will reach out to us after time has passed and it's one of the great pleasures of being a child psychiatrist, we get to see folks longitudinally. So there is not a specific system apart from mutual care.
Q. So you rely on them to reach out to you. Is that correct?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: It depends on context.
BY ATTORNEY BARHAM:
Q. But do you have any systematic way of tracking all patients five years after they leave your care?
A. There is no systematic way of tracking all patients.
ATTORNEY BARHAM: All right. Let's take a break. How long would you all like?

ATTORNEY BLOCK: Five minutes.
ATTORNEY BLOCK: Should we go off the record?
VIDEOGRAPHER: Going off, 10:14 a.m.
OFF VIDEOTAPE

(WHEREUPON, A SHORT BREAK WAS TAKEN.)

ON VIDEOTAPE
VIDEOGRAPHER: Back on the record. The time is 10:27 am.
BY ATTORNEY BARHAM:
Q. Moments ago we were discussing Dr. Littman's 2021 study, that was Tab 15, Exhibit 6. Are you aware of any studies that contradict Dr. Littman's data?
A. Can you be more specific?
Q. Are you aware of any studies that contradict Dr. Littman's work survey in this article in Exhibit-6 that find fault with her data?
ATTORNEY BLOCK: Objection to the form.
THE WITNESS: Yeah. I'm sorry. I don't think I understand the question. There are other articles that have been written about detransition and clinical experiences of patients that have

detransitioned who have described those experiences. There has not been a specific survey designed of detransitioners outside of this one that I'm aware of.

BY ATTORNEY BARHAM:

Q. Has anyone written an article finding fault with the way Dr. Littman interpreted the data that ---?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: For this specific data set or for previous?

BY ATTORNEY BARHAM:

Q. For this specific data set?

A. For this specific data set, from my recollection, this was studied --- or published just recently so I'm not aware of any. It doesn't mean that there aren't.

Q. Are you aware of any studies that contradict Dr. Littman's conclusions in this 2021 article?

A. If you give me a moment I will read the conclusion.

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Insomuch as Dr. Littman's conclusion is that there's no single narrative to explain the experiences of all individuals who detransitioned and we should take care to avoid painting

the population with a broad brush, I agree with that conclusion.

BY ATTORNEY BARHAM:

Q. Are you aware of any studies that contradict her conclusions not just in the conclusion section but her description of the detransitioners?

ATTORNEY BLOCK: Objection to the form.

THE WITNESS: I think it's hard to provide a specific answer to that question. We have to look at each study and judge each individual study based upon the merits. The conclusions she draws are from a subset of patients with a very specific viewpoint, and I agree with her and her conclusion that there needs to be more research to better understand the broader implications of this care.

BY ATTORNEY BARHAM:

Q. You're not aware of any article that has been published specifically critiquing this 2021 study by Dr. Littman.

Is that correct?

A. Not that I'm aware of.

ATTORNEY BLOCK: Objection to form.

BY ATTORNEY BARHAM:

Q. A few moments ago we were also talking about the

patients that you have treated, the 500 transgender patients you referenced in your report, and you mentioned that about 20 percent or less of those had used puberty blockers. I'm wondering why that percentage is so low.

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I don't know. Low compared to what? I think it's important to understand the context that in 2011, when I first started my gender program, that puberty blocking medications were not widely available, cost upwards of $3,000 a month and were not covered by most insurance. So puberty blockers were not something that were available in the same way they are now. And I also saw a fair number of adults and older adolescents for whom puberty blockers are not indicated.

BY ATTORNEY BARHAM:

Q. So of the 500 patients that you reference in paragraph eight of your report, what percentage of those are adults?

A. I would really have to go back and look. I mean, in my current practice, I see adolescents and young adults, so kind of parsing out artificially who is 18 and up, it would take some time to do that. Probably

in the order of 75 percent are children in adolescence, 25 percent adults. But of course, over 2011 to now, a lot of those folks are now adults.

Q. And when I'm asking about these percentages I mean when you were treating them. What percentage of the patients you were treating were children?

A. That's my best guess.

Q. Seventy-five (75) percent?

A. Yes.

Q. And are you distinguishing between prepubertal children and adolescents in that 75 percent or both?

A. That's both.

Q. Of that 75 --- of all the patients you've seen, at the time you saw them, how many were prepubertal children?

A. Probably --- and again, I have to give this a major caveat. I would have to go back and look through everything, but I would say probably 25 percent of that 75 percent were prepubertal at the time of initial assessment.

Q. And so then the remaining 75 percent of 75 would be adolescents.

Is that correct?

A. Correct.

ATTORNEY BLOCK: Objection to form.
BY ATTORNEY BARHAM:
Q. How many of your patients of those 500 patients have detransitioned in a year?
A. It's kind of a hard question to answer. The one patient who self identifies as having detransitioned started seeing me after she had detransitioned.
Q. Have any of your patients detransitioned while under your care?
A. Not that I'm aware of.
Q. And is the one patient who detransitioned before starting to see you, is that the only patient you're aware of of the 500 that has detransitioned?
A. That is the only one that I'm aware of, yes. But can I clarify that of those 500 patients there are certainly those who did not choose to transition.
Q. And how many of the 500 chose not to transition?
A. If I had to guess, probably about 10 to 20, probably ten percent.
Q. And did they make that decision before puberty began?
A. It was a mix.
Q. Of those who chose not to transition, how many were children when they made that decision?

A. I couldn't tell you at that point, but significantly more were the prepubertal youth than adolescents.
Q. This is a sensitive question. I mean no offense by it, but how many of the 500 patients have made the sad decision to commit suicide?
ATTORNEY BLOCK: I'm sorry. I couldn't heat that. Can you speak up?
BY ATTORNEY BARHAM:
Q. How many of the 500 patients have made the sad decision to commit suicide?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: Is your question how many have completed suicide?
BY ATTORNEY BARHAM:
Q. Correct.
A. Of those 500 patients, zero.
Q. How many of those 500 patients have been hospitalized for a psychiatric illness?
A. I do not have that information in front of me.
Q. Do you have any general idea?
A. I don't.
Q. After five or more years what percentage of your patients would be characterized as lost to follow-up?

A. Lost to follow-up is a specific term used in studies, so it's not something that I would use to describe my patients.
Q. How many patients do you lose contact with after five years?
A. Again, I don't know how to answer that question. I've been at my current role for three, so I haven't lost touch with any significant number of patients.
Q. What about patients that you saw before you were in your current position?
A. I'm not in contact with patients from my previous role.
ATTORNEY BARHAM: All right. Let's go to Tab 110. This is Exhibit-7 I believe.

(Whereupon, Exhibit-7, Study, was marked for identification.)

BY ATTORNEY BARHAM:
Q. Are you familiar with this study?
A. I am not.
Q. Have you seen it before today?
A. I have not.
Q. On page one this again has been --- it's

paginated in the top right corner or top inside corner. On page one the first sentence of the last paragraph says gender transition is as scientifically fascinating as it is socially controversial for it poses significant professional and bioethical challenges for those clinicians working in the field of gender dysphoria.
Do you agree that gender detransition poses significant professional and bioethical challenges for professionals treating gender dysphoria?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: I don't necessarily agree with the language. And certainly don't agree with the author to use something that's scientifically fascinating. What I think is that every decision that we make in child psychiatry in particular is fraught with ethical challenges. This is not any different from the ethical challenges that we face with a lot of other interventions.
BY ATTORNEY BARHAM:
Q. What challenges does detransition pose to your profession in your view?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: I don't see how it poses any challenges to my work.

BY ATTORNEY BARHAM:

Q. Page three of this article, the authors identify several things that may prompt a person's decision to detransition including understanding how past trauma, internalized sexism and other psychological difficulties influence the experience of gender dysphoria.

Correct?

ATTORNEY BLOCK: Objection. Can you give him a chance to read?

ATTORNEY BARHAM: Of course.

THE WITNESS: And can you repeat what you said?

BY ATTORNEY BARHAM:

Q. On page three the authors identify several things that may prompt a person's decision to detransition including, quote, understanding how past trauma, internalized sexism and other psychological difficulties influence the experience of gender dysphoria.

Correct?

A. Sorry. Just give me a second to look at the context here.

Q. Sure.

A. I agree that's how it is written and there

appears to be no basis from which the author has built that assertion. There is no methods described in this whatsoever.

Q. I believe the author in that instance is citing Dodsworth 2020, Gonzalez 2019, Herzog 2017, and one, two, three, four other studies.

Do you see that?

A. I see those studies. I'd have to look at the specific studies in order to understand the implications and the context.

Q. But the authors obviously seem to have a basis or at least a citation basis for what they're saying.

Is that correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Again, without knowing the specifics of those studies it's hard for me to say.

BY ATTORNEY BARHAM:

Q. The authors also indicate that solving previous psychological or slash emotional problems that contributed to gender dysphoria may prompt the decision to detransition.

Is that correct?

A. Where is that?

Q. They are citing Butler and Hutchinson, 2020,

Stella 2016. It is the same paragraph.

A. Got it. Yeah I don't know what solving a psychological or emotional problem means in this context.

Q. But these authors are at least indicating that solving these problems, however they mean the term, may prompt a decision to detransition.

Is that correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I think I've answered how I can answer that.

BY ATTORNEY BARHAM:

Q. Okay.

Let's go back to Tab 15, which is Exhibit-6. This was the Littman study that we were discussing a moment ago. On page three --- excuse me, according to Table 5, on page nine, 60 percent of the participants in this survey reported that they became more comfortable identifying as their natal sex.

Is that correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I see 65 percent of those assigned female at birth and 48 of those assigned male at birth reported that.

BY ATTORNEY BARHAM:

Q. So 45 and 15 is 60, so that would be 60 percent of the 100 participants in the study.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I believe.

BY ATTORNEY BARHAM:

Q. I'm sorry. I didn't hear your answer.

A. I trust your math, yes.

Q. Okay.

And on page 12, under the heading discussion, this survey indicates that only a small percentage of detransitioners, 24 percent, informed the clinicians and clinics that facilitated their transfer that they --- their transition that they had detransitioned.

Is that correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Yes, the participants in the study, that is correct.

BY ATTORNEY BARHAM:

Q. And you testified a moment ago, if I recall correctly, please correct me if I'm wrong, that you are aware of only one patient in your career that has detransitioned.

Is that correct?

A. That I'm aware of, yes.

Q. Let's go to Tab 116, which is Exhibit-8.

(Whereupon, Exhibit-8, Article by Vandenbussche, was marked for identification.)

BY ATTORNEY BARHAM:

Q. Are you familiar with this article?

A. I have not read this article.

Q. And this is a 2021 article by I believe a gentleman named --- or an individual named Vandenbussche, Detransitioned Related Needs in Sports.

Is that correct?

A. That is correct.

Q. Did you review this article when preparing your report?

A. I did not.

Q. If you look at page four this article examined a sample survey of 237 detransitioners.

Is that correct?

ATTORNEY BLOCK: Objection. Can you give him time to read the document he has never seen before.

ATTORNEY BARHAM: Certainly.

THE WITNESS: Can you repeat the question?

BY ATTORNEY BARHAM:

Q. This article highlights the results of a survey of 237 detransitioners.

Correct?

A. Yes, as they are defining detransitioning, yes.

Q. And on page five these authors --- these researchers report that 70 percent of participants detransitioned because they realized that their gender dysphoria was related to other issues.

Correct?

A. Correct.

Q. And that was the most common reported reason for detransitioning.

Correct?

A. As they stated, yes.

Q. In paragraph 43 of your report you cite Lisa Littman's 2018 study. Paragraph 43. And you highlight what you describe as serious methodological flaws that render the study meaningless.

Is that correct?

A. Correct.

ATTORNEY BARHAM: I want to show you Tab 117, and this will be Exhibit 9. It will be an article by Lily Durwood entitled Mental Health and Self Worth in Socially Transitioned Transgender People.

(Whereupon, Exhibit-9, Article by Lily Durwood, was marked for identification.)

BY ATTORNEY BARHAM:

Q. Are you familiar with this article?

A. I am.

Q. You cited this in footnote nine of your report as demonstrating the treatment associated with social transitions.

Correct?

A. I have to look at the specific footnote. I know I cited it, but I don't know if it was citing to that specific conclusion.

Q. By all means take a look.

A. Can you point me to where my footnote is?

Q. Footnote nine is --- let me find it myself.

ATTORNEY SWAMINATHAN: It's page 11.

THE WITNESS: Yes.

BY ATTORNEY BARHAM:

Q. The Durwood article in 2017 is a survey of children and their parents about the children's mental health.

Is that correct?

A. Correct.

Q. The children in the Durwood article were not surveyed or assessed by clinicians.

Is that correct?

A. I don't know the answer to that. I'd have to look at the specific ---.

Q. Well, if this is a self report it would be reporting what the children themselves said.

Correct?

ATTORNEY BLOCK: Objection. Let him have time to read the article.

THE WITNESS: The trans youth project was directed by Dr. Ulson involved clinicians in the assessment of the children and their families. So I'm not sure specifically. I would have to go through the methods of this one particularly for me to recall.

As you will see from the procedure on page 117 whenever possible parents and children completed the measurements in separate rooms or far enough in the same room to be out of ear shot. And so

they were researchers who were boarded who were participating in these interviews with the kids and their families.

BY ATTORNEY BARHAM:

Q. But those researchers were just recording what the students said out loud?

A. Correct.

Q. So there's no clinical assessment of the children as part of this survey.

Is that correct?

ATTORNEY BLOCK: Object to form.

THE WITNESS: I wouldn't be able to answer that question. It depends upon how it's used. In a research context you might be using the same instruments that we would use for clinical assessments, but for the sake of research purposes it's not used in that way.

BY ATTORNEY BARHAM:

Q. But the purpose of this article was just to record what the children said as a self report.

Is that correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: As far as I understand the point of this article, they utilized child self report

which is what is typically used in children mental health studies.

BY ATTORNEY BARHAM:

Q. According to page --- the second page of this article, which is page 117, the participants were recruited through word of mouth, national and local support groups, summer camps and online forums for families of transgender and gender nonconforming youth.

Correct?

A. That is correct.

Q. Frequently in your report you refer to gender-affirming care. What in your view are the components of gender-affirming care?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I think that there is no one agreed upon use of that term and it is used by different people in different context to mean whatever they want it to mean, depending upon who is asking the questions. The way that I define it, for my own practice, is that it's important for children to be heard and listened to, that any particular gender identity outcome is not better than any other and that the child and families should be directing the process with appropriate assessments and interventions.

BY ATTORNEY BARHAM:

Q. How do you handle a situation where parental desires may be differ than the child's desires?

A. That is almost a universal phenomenon of parenthood, so there's not an atypical process. When there is disagreement about specific issues in the treatment plan those interventions are going to be tailored to the individual families based upon their need.

Q. So when you use gender-affirming care what do you view as the different components or different aspects of gender-affirming care in your practice?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I think that is also going to be highly context dependent. I'm a psychiatrist and I see a lot of children with complex psychiatric needs, so my process for gender-affirming care is going to be different than what somebody else might describe as gender-affirming care, but I think I highlighted what I see as the components of it for myself.

BY ATTORNEY BARHAM:

Q. I've missed in your list of the different components, so could you explain again what do you see as the components of gender-affirming care?

A. That it should be child and family led, that listening to and understanding the child is an important aspect of the process and that there is no gender identity outcome that is privileged over another. I'm sure I said it slightly differently than the last time around but the concepts are the same.

Q. Do you consider social transition to be a component of gender-affirming care?

A. I think that understanding the risks, benefits and alternatives of social transition is a part of gender-affirming care. In that way, sometimes recommending not socially transitioning is a part of gender-affirming care.

Q. But gender-affirming care can be an approach used as part of gender-affirming care.

Is that correct?

ATTORNEY BLOCK: Objection to the form.

THE WITNESS: Can you repeat the question?

BY ATTORNEY BARHAM:

Q. Social transitioning can be a method used as part of gender-affirming care.

Correct?

A. It is an option.

Q. An available tool.
Correct?
A. Yes.
Q. Is it your belief that social transition is a type of medical or mental health treatment for gender dysphoria?
A. It's a hard question to answer. Social transition is a pretty diverse concept that's hard to get as a categorical variable to study, but the implication is that there's a lot of things that are often helpful for mental health that aren't specifically mental health treatments, right, like exercise, regular sleep. These aren't specific mental health interventions but nevertheless have impacts on mental health outcomes.
Q. Well, in paragraph 90 --- I mean paragraph 36 of your report you say that social transition is a treatment for gender dysphoria?
A. Yeah I would agree with that.
Q. So what kind of treatment is it?
A. It's a psychosocial intervention.
Q. Psychosocial. What does social transitioning include in your view?
A. I have to recall if I provided an operational

definition for it in my report. Essentially what we're talking about is an alignment of gender role and gender identity. So that's transition of name, pronouns, hair, participation in sex-segregated activities, et cetera.
Q. And so social transition in your view means the participation in girls or boys athletic teams in competitions consistent with ones gender identity.
Is that correct?
A. Again, it's going to be context dependent. It is not a yes or no question around social transition. What we're going to be doing in the context of an assessment is understanding the risks and benefits of all the various options that we have.
Q. I understand that it can differ from person to person, but participation in girls or boys athletic teams in competition consistent with one's gender identity is an aspect, a possible aspect, of social transitioning.
Correct?
A. It may be an option for some students, yes.
Q. Do you consider the use of puberty blockers to be an available tool as part of gender-affirming care?
A. I do.
ATTORNEY BLOCK: Objection to form.

BY ATTORNEY BARHAM:
Q. Do you consider the use of cross sex hormones to be an available tool as part of gender-affirming care?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: Gender-affirming care can include hormones.
BY ATTORNEY BARHAM:
Q. Are there any other available tools that you use as part of gender-affirming care?
A. Yes, there is a lot of tools that I use that are involved in gender-affirming care. Work with the family is one big piece of it. Work with the school is another. Referrals for surgery when indicated, recommendations for assessment and treatment of any co-occurring mental health disorder is a part of it.
Q. What is your role in the prescribing of puberty blockers?
A. I'm occasionally in the role of doing a mental health assessment prior to initiation of those medications.
Q. And are you the individual who would prescribe the puberty blockers?
A. I am not.
Q. What type of professional would be responsible

for the prescribing?
A. In the clinics that I have worked these are either adolescent medicine specialists or pediatric endocrinologists.
Q. And is the same true with cross sex hormones?
A. Yes.
Q. In your report you describe gender-affirming care as the prevailing model of care for transgender youth.
Is that correct? And I'm referencing paragraph 15 of your report.
A. Yes.
Q. Later on in your report you refer to prevailing standards of care, paragraph 18, paragraph 26, for example. By that are you referring to gender-affirming care?
A. Which paragraph?
Q. Eighteen (18) and 26.
A. I would say that it is a part of what I'm referring to but not the entirety of what I'm referring to.
Q. What else are you referring to in paragraph 18 and 26 when you say prevailing standards of car?
A. This would include a lot of components,

including both the Endocrine Society Guidelines, the World Professional Association for Transgender Health Guidelines as well as recommendations and ethical guiding principles of the various governing bodies that we all work with.

Q. And you would describe those various documents that you just referenced as reflecting gender-affirming care.

Correct?

A. I would have to go through, for example, the Endocrine Society Guidelines to know whether or not they use that specific term. Again, I think I just want to make sure that I'm emphasizing that gender-affirming care does not have an agreed upon definition so it's controversial and I wouldn't know how to answer that question.

Q. As you use the term and as you define the term in your practice, would you consider the WPATH standards to fall under the umbrella of gender-affirming care?

A. I would yes.

Q. And would you consider the Endocrine Society Guidelines to fall under the umbrella of gender-affirming care?

A. I would, yes.

Q. In paragraph 15 of your report you claim that gender-affirming care is endorsed by at least five professional associations.

ATTORNEY BLOCK: Objection to form.

BY ATTORNEY BARHAM:

Q. And you reference others. What other organizations are you alluding to in paragraph 15 of your report?

A. I don't want to get the name of the organization incorrect, but National Association of Social Workers and the National Association of Marital and Family Therapists have released statements about it, but I don't have specific recollection of those sitting here today.

Q. Okay.

Are there any other organizations besides those and those listed in paragraph 15?

A. There likely are but none that are coming to mind today.

Q. When you were preparing your report did you consult the standards of care articulated by any international professional organizations?

A. Yes.

Q. Which ones?

A. Both the Endocrine Society Guidelines as well as the WPATH standards of care.

Q. Any other international or professional organizations?

A. Not that I can recall, no.

Q. Are you aware that international and professional organizations have been moving away from using puberty blockers and cross sex hormones on children and adolescents under the age of 16?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I don't see that that is necessarily accurate. I'm going to have to take a break in five minutes if that is okay.

ATTORNEY BARHAM: This would be the perfect time.

THE WITNESS: I will be quick.

VIDEOGRAPHER: Going off the record. The current reads 11:01.

OFF VIDEOTAPE

(WHEREUPON, A SHORT BREAK WAS TAKEN.)

ON VIDEOTAPE

VIDEOGRAPHER: Back on the record. The

current time is 11:06 a.m.

ATTORNEY BARHAM: I'm going to show you what we will mark as Exhibit 10, this will be Tab 91.

(Whereupon, Exhibit-10, Statement by Royal Australian and New Zealand College of Psychiatrists, was marked for identification.)

BY ATTORNEY BARHAM:

Q. This is a statement from the Royal Australian and New Zealand College of Psychiatrists.

Correct?

ATTORNEY BLOCK: Objection. Can you give him a chance to look at the document?

THE WITNESS: It's what it says. I don't know what the government structure of this organization is or how they release their statements or how they are developed.

BY ATTORNEY BARHAM:

Q. This is Position Statement 103, according to the document.

Correct?

A. I will take your word for it if that's what it

says.

Q. Right below the title. And it was published in August of 2021.

Is that correct?

A. I don't know where it says that.

Q. Right below the tab.

A. Got it.

Q. The Royal Australian and New Zealand College of Psychiatrists is the professional body of psychiatrists for those two countries.

Is that correct?

ATTORNEY BLOCK: Objection.

THE WITNESS: I do not know that.

BY ATTORNEY BARHAM:

Q. I'm sorry. I didn't catch your answer.

A. I do not know.

Q. According to page three of this document, the Royal College has concluded that there are, quote, polarized views and mixed evidence regarding treatment options for people presenting with gender identity concerns, especially children and young people.

Do you see that?

A. I see that.

Q. Do you agree with their assessment?

A. Yes.

Q. So this means that professionals can disagree with each other as to how to treat children and young people with gender dysphoria.

Is that correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Yeah. I think any treatment decision, you're going to have professionals disagreeing with you about the best course of action. This isn't any different than that.

BY ATTORNEY BARHAM:

Q. And on page four of the document the Royal College says that psychiatric assessment and treatment should be both --- should be both based on available evidence and allow for full exploration of a person's gender identity. And it emphasizes the importance of the psychiatrist's role to undertake for assessment in evidence-based treatment ideally as part of a multidisciplinary team, especially highlighting distinguishing issues which may need addressing and treating. Do you agree with the Royal College's emphasis on psychiatrists' role and how it's important to ensure appropriate care for gender dysphoria?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Psychiatrists are often a useful adjunct to the team, but isn't a necessary requirement. There are many other mental health professionals who have expertise and can fill this role.

BY ATTORNEY BARHAM:

Q. And what other professionals do you think could fill this role?

A. This would be licensed clinical mental health professionals.

Q. And those would include?

A. Psychologists, social workers, marital and family therapists and there are probably other titles that are governed by their regulatory boards that I don't recall right now.

BY ATTORNEY BARHAM:

Q. And on what are you basing your disagreement with the Royal College's emphasis on the importance of the psychiatrist's role

ATTORNEY BLOCK: Objection to form and characterization of the document.

THE WITNESS: The WPATH standards of care as an example does not dictate necessary involvement of a psychiatrist. And I would have to review the Endocrine Society, but I don't believe that they

specifically --- from my guild either.

BY ATTORNEY BARHAM:

Q. Is it true that psychiatrists have training and skills that psychologists and marital therapists and social workers do not have?

A. That is correct.

ATTORNEY BARHAM: I'm going to hand you what we will mark as Exhibit-11. And this will be Tab 92 for those watching online.

(Whereupon, Exhibit-11, Policy Change Regarding Hormonal Treatment of Minors, was marked for identification.)

BY ATTORNEY BARHAM:

Q. This document is an announcement of a policy change regarding hormonal treatment of minors with gender dysphoria at Astrid Lidgren Children's Hospital. Are you aware that this is the main gender clinic in Sweden?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I don't see any specific information about this document that reports where it's from.

BY ATTORNEY BARHAM:

Q. Are you aware of Astrid Lindgren Hospital by reputation?

A. I don't know if that's the name of it. No, I don't recall the specific name of the Swedish Children's Hospital.

Q. Are you aware that the Swedish Agency for Health Technology Assessment and Assessment of Social Services published an overview of the knowledge base which showed a lack of evidence of both long-term consequences of the treatments of gender dysphoria?

A. I have heard ---.

ATTORNEY BLOCK: Objection to form and where are you quoting from?

ATTORNEY BARHAM: Halfway through the first paragraph of the background section on page one.

ATTORNEY BLOCK: I'm sorry. Where was this document obtained from?

ATTORNEY BARHAM: I can supply that information, but this is an announcement of a policy change from a Children's Hospital in Sweden.

ATTORNEY BLOCK: Just for the record, this doesn't seem to have a walk --- like --- it just looks like words on a page without other sourcing on it.

ATTORNEY BARHAM: Your objection is noted.

THE WITNESS: I mean without speaking to the providence of the document, I have heard that there was a change within the Swedish establishment in regards to prepubertal youth or prepubertal youth.

BY ATTORNEY BARHAM:

Q. And what was your understanding of that change?

A. I would have to look through the specifics to know for sure.

Q. What is your general understanding of the nature of that change?

A. My general understanding was there was a pause on some of the treatments, medical treatments available for children with gender dysphoria.

Q. And by pause, at least according to this document, it means that they had decided hormonal treatments, i.e. puberty blocking and cross sex hormones, will not be initiated in gender-dysphoric patients under the age of 16.

Correct? First bullet point in executive decisions.

A. Again, not knowing the providence of this document, that's what this document says, yes.

Q. Are you aware that the United Kingdom's National Health Service put an end to initiating hormone treatment in new cases of individuals under 16?

ATTORNEY BLOCK: Objection to form and foundation.

THE WITNESS: My understanding is that it's under litigation right now and a final decision has not been reached, but I could be wrong about that.

BY ATTORNEY BARHAM:

Q. Are you aware that that's at least a current practice to put an end to initiating hormonal treatment in new patients --- in new cases of individuals under 16?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Can you repeat the question?

BY ATTORNEY BARHAM:

Q. Are you aware that the United Kingdom's National Services' current practice is to put an end to initiating hormonal treatments in new cases of individuals under 16?

ATTORNEY BLOCK: Objection to form and foundation.

THE WITNESS: I do not have the NHS

policies in front of me, so I cannot speak to that.

ATTORNEY BARHAM: The document Exhibit --- what number are on, 11.

LAW CLERK WILKINSON: 11, yes

BY ATTORNEY BARHAM:

Q. Exhibit 11 indicates, quote, the United Kingdom's National Health Service put an end to initiating hormonal treatment in new cases of individuals under 16. Do you have any reason to believe that that statement is inaccurate?

ATTORNEY BLOCK: Just objection that this document came out at a certain time and so it's just not clear what timeframe, you know, this question is referring to. And just another objection to this document. This appears to be a translation ---.

ATTORNEY BARHAM: Your objection is noted. And we've already agreed that there are the three objections, so I will ask you to cease the speaking objections.

THE WITNESS: I have reason to doubt it. Yes.

BY ATTORNEY BARHAM:

Q. What is your reason to doubt it?

A. My understanding is that there were legal

processes involved that have changed the landscape of this care in the U.K.

Q. Are you aware of the National Health Service reinitiating hormonal treatments in new cases of individuals under 16?

A. I am unsure. That's where my doubt is.

Q. But you're aware that at one time they put an end to those treatments for individuals under the age of 16?

A. Yes.

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Yes.

ATTORNEY BARHAM: I'm going to show you what we will mark as Exhibit-12. This is a document --- an article by Lisa Nainggolan. I'm probably butchering the last name.

LAW CLERK WILKINSON: Tab 93.

ATTORNEY BARHAM: Tab 93, entitled Hormonal Treatment of Youth with Gender Dysphoria Stops in Sweden.

(Whereupon, Exhibit-12, Article by Lisa Nainggolan, was marked for identification.)

BY ATTORNEY BARHAM:

Q. In the fourth paragraph it indicates that other centers in Sweden that treat gender dysphoria youth in Loom and Licopene will follow the lead of the ALB. Are you aware that those two clinics had made the same decision as the Astrid Lindgren Children's Hospital?

A. I am not.

ATTORNEY BARHAM: I'm going to show you what we will mark as Exhibit-4 --- I mean, I'm sorry Tab 94, Exhibit 13.

(Whereupon, Exhibit-13, Study, was marked for identification.)

BY ATTORNEY BARHAM:

Q. Are you aware that Finland has similarly reversed its course issuing new guidelines that allow puberty blockers only on a case by case basis after extensive psychiatric assessment?

ATTORNEY BLOCK: Objection to form. And can you give the witness and me a chance to see this document? Can the document be scrolled down?

THE WITNESS: What I can say about this

document is that I don't --- I've not heard of what Cohere Finland is and how their recommendations impact policies on the ground in Finland.

BY ATTORNEY BARHAM:

Q. So are you not familiar with Cohere as an entity?

A. Correct.

Q. And that was a question. Are you?

A. I am not.

Q. Have you seen this document before today?

A. I have not.

ATTORNEY BARHAM: I'm going to show you what we'll mark as Exhibit 14, and this will be Tab 95 for those watching at a distance.

(Whereupon, Exhibit-14, Article Published on Medscape.com, was marked for identification.)

BY ATTORNEY BARHAM:

Q. This is an article by Betsy McCall published on Medscape.com on October 7th, 2021.

Is that correct?

A. Yes.

Q. If you look at the third paragraph from the bottom. Ms. McCall reports that Scandinavian countries, most notably Finland, once eager advocates for the gender-affirmative approach, have pulled back and issued new treatment guidelines in 2020, stating that psychotherapy rather than gender reassignment should be the first line of treatment for gender dysphoric youth. Do you see that?

A. I see that.

Q. Do you agree with that approach?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Medscape is a popular press forum for discussing issues and the language that is used by this author implies to me that this is not somebody who has a great deal of expertise or understanding in this field.

BY ATTORNEY BARHAM:

Q. Do you agree with using psychotherapy rather than gender reassignment as the first line of treatment for gender dysphoric youth?

A. The term gender reassignment in and of itself is not a meaningful term in this context, and so it's unclear what this particular author is trying to get across. And it's a false dichotomy that is being

positive that doesn't actually happen.

Q. Are you aware that Finland had issued new treatment guidelines in 2020?

A. I don't recall the specifics of when guidelines were recommended. But based upon the document that you placed in front of me it seems to be yes. But I think the description of those guidelines and what you put in front of me as the Cohere guidelines, which again I'm not sure what they actually represent in terms of their policies, there are contradictions there.

ATTORNEY BLOCK: I'm sorry. I want to put on the record this document about Finland also appears to be a translation from the original by the Society for Evidence Based Gender Medicine whose website describes it as an unofficial translation. So I just want to note that for the record.

ATTORNEY BARHAM: So noted. I'm going to show you what we will mark as Exhibit 15, Tab 96.

(Whereupon, Exhibit-15, Article in National Health Service, was marked for identification.)

BY ATTORNEY BARHAM:

Q. And I will direct your attention to page 13. This is a --- to identify the document for the record. This is an Evidence Reviewed Gonadotrophin Releasing Hormone Analogs for Children and Adolescents with Gender Dysphoria, from the National Health Service in 2021 --- or in 2020. On page 13, right at the beginning of the conclusions section the authors indicate that the results of studies that reported impact on the critical outcomes of gender dysphoria and mental health and the important outcomes of body image and psychosocial impact in children and adolescents with gender dysphoria are a very low certainty using modified grade. They suggest little change with GnRH analogs from baseline to follow-up. Do you see that?

A. I do not.

Q. First paragraph, under the conclusion.

A. Yes, I see that.

Q. Do you have any scientific basis for disputing this conclusion?

ATTORNEY BLOCK: Objection. Let him read the document.

THE WITNESS: I mean, without having seen this before, I'm not sure what the scoping was for how they defined which studies to include, which ones were

excluded, which would be required in a validated metaanalysis type approach. So without a very specific description of the methodology it's going to be hard for me to make an educated statement.

BY ATTORNEY BARHAM:

Q. If you look at page three of the document, under executive summary it highlights the nine observational studies that were included in the evidence review.

A. Yeah, in a metaanalysis or even a systematic review one of the processes that occurs is you define as the authors what you are searching for, what are the exclusionary and inclusionary criteria for each individual study and a list of every single study that was reviewed and why or why not it was included. That is missing here, so it's --- I don't know how the authors decided which ones to include or which ones not to include, which makes it hard to draw a conclusion from the report as it stands.

Q. Have you seen any other reports that suggest that the evidence being discussed on page 13 under the conclusions heading isn't anything higher than a very low certainty using modified grade?

A. I'm not 100 percent familiar with modified grade as a methodology, so I can't speak to how that would

apply to other studies.

Q. And the next paragraph the authors indicate that studies found differences in outcome could represent changes that are either a questionable clinical value or the studies themselves are not reliable and changes could be due to confounding bias or chance. Do you agree that that is possible?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Well, I agree that all things are possible, that scientific literature is not always 100 percent drawing any conclusions. But again, without knowing specifically how they included what they included or why they included what they included and why they opt to remove others, it's not possible for me to draw a specific conclusion from this.

BY ATTORNEY BARHAM:

Q. In paragraph 34 of your report you distinguish Dr. Levine's approach to treating gender dysphoria as --- or you describe it as gender identity conversion model. Do you recall that?

A. Yes.

Q. In your view are there two approaches to treating gender dysphoria in children and adolescents, the gender-affirming model and the conversion therapy

model?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I would not agree with that characterization.

BY ATTORNEY BARHAM:

Q. How many other approaches do you see? How do you categorize the different approaches for treating gender dysphoria in children and adolescents?

A. I don't agree with the premise, but there specific defined treatment paradigms that are used. I think there are --- there are elements of conversion therapy as I referred to in my report. There are elements of gender-affirming care and there is a spectrum in between that.

Q. What are the elements --- what are the elements of identity --- gender identity conversion model in your mind?

A. I think the primary element as I understand it in conversion therapy is a presupposition that a transgender outcome is an inherently negative outcome and that engagement or interventions should be put into place in order to make that outcome the least likely as possible.

Q. And in your mind gender-affirming care is care

that affirms that child's gender identity.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: As I described earlier, there are multiple components to how I would define gender-affirming therapy.

ATTORNEY BARHAM: Let's go to Exhibit 16, this will be Tab 97.

(Whereupon, Exhibit-16, Article by Roberto D'Angelo, was marked for identification.)

BY ATTORNEY BARHAM:

Q. This is an article by Roberto D'Angelo published in 2020, entitled One Science Does Not Fit All. Are you familiar with these authors?

A. Not personally, no.

Q. Are you familiar with them by reputation?

A. Looking at Dr. D'Angelo's footnotes, given that he works for the Society for Evidence Based Gender Medicine, then I might draw some conclusions from that.

Q. And what conclusions would you draw from that?

A. That there is a presupposition that transgender

identity is a negative outcome.

Q. And why would you draw that conclusion from that association?

A. Based upon the description of the care on the website. But that would be an assumption. I would never do that on any individual basis for any of these authors without knowing them.

Q. Beyond the association, do you have any reason to doubt the scholarly integrity of the authors here?

A. I think you can't really talk about scholarly integrity when it's a letter to the editor. It's not the same --- same level of evidence as another study would be.

Q. It's a letter to the editor that cites 37 different sources.

Is that correct? I'm looking at the last page.

A. The sources aren't numbered, so I don't know how many sources it has, but ---.

ATTORNEY BLOCK: Let him look at it.

BY ATTORNEY BARHAM:

Q. The references at the end are numbered. Excuse me. I apologize. I was looking at the wrong document.

A. There are 37 footnotes. I would assume that you are correct on that.

Q. We are talking about this letter to the editor --- let me clarify for the record because I was looking at the wrong document prior to questioning for which I apologize. This letter to the editor contains approximately two pages of typed materials listing the references that it uses.

Correct?

A. Yes, correct.

Q. Did you review this article when preparing your report?

A. I did not.

Q. Did you review this article before today?

A. I have not.

Q. The article reviews the document published by Turban, et al., in 2020, a study by Turban, et al, in 2020.

Is that correct?

A. It does.

ATTORNEY BLOCK: Objection to form.

BY ATTORNEY BARHAM:

Q. If you look at the last page, that article is the same article that you cited in paragraph 34 of your report.

Is that correct?

A. That's correct.
Q. This D'Angelo, et al. criticized Turban on page one for his simplistic affirmation versus conversion binary --- or I should state permeates his narrative and establishes a foundation for their analysis and conclusions. Do you see that on the first page?
A. What page?
Q. The first page, second column, middle paragraph.
A. I see that, yes.
Q. These authors state the notion that all therapy interventions for gender dysphoria can be categorically classified into this simplistic binary betrays a misunderstanding of the complexity of psychotherapy. Would you agree with that statement?
ATTORNEY BLOCK: Objection to form and asking him questions about an article he hasn't read.
THE WITNESS: The premise of that statement implies a cognition on behalf of the authors of that study that I don't think is necessarily accurate. I don't think that the authors of the Turban study would suggest that there is a simple binary of therapy interventions.
BY ATTORNEY BARHAM:

Q. And you would also say there's not a simplistic binary.
Is that correct?
A. That is correct.
Q. So in paragraph 34 of your report you're not trying to draw a --- you're not trying to draw some sort of dichotomy between Dr. Levine's approach and yours?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: It is less helpful for me to describe it as identifying a dichotomy but really more focused on the goals of treatment approach. And if the goal of the treatment approach is a conversion type goal, then I think there is a draw between that and the standard of care of the affirmative model.
BY ATTORNEY BARHAM:
Q. So that in your view are there two different treatment goals when treating gender dysphoria? We can categorize treatment approaches by the goals, conversion therapy versus the gender-affirming model that you have outlined?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: The way I would describe the goal of the gender-affirming model is to have a healthy, resilient child whatever the gender identity

ends up being, whether that is a cisgender identity or transgender identity. The difference between that and a conversion therapy is again a presupposition that a transgender identity is an inherently worse outcome which is not focused on the overall mental health and wellbeing of the child.
BY ATTORNEY BARHAM:
Q. I understand the distinction that you're making. I'm trying to understand are there --- as we assess different people's approaches to this area, can we characterize them by the goals of their approach into a gender-affirming model and a conversion therapy model and those are basically two different camps.
Is that correct?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: We cannot.
BY ATTORNEY BARHAM:
Q. And in saying that I'm not trying to say that therapeutic techniques belong in one or the other. I'm just trying to say can we categorize treatment approaches by the goals?
ATTORNEY BLOCK: Objection to form.
BY ATTORNEY BARHAM:
Q. Because that seems to be what you are doing in

paragraph 34 of your report.
A. There's a process versus an outcome question that I'm just not understanding the distinction between for as I'm defining conversion therapy here, it is a specific goal that a transgender outcome is a negative outcome. For gender-affirming therapy or interventions there is no presupposed outcome that is better than another other than building the mental health and well-being of the child.
Q. Okay.
A. And there is many different ways of approaching that question and intervening that are going to be outside of the scope of a goal-based approach.
Q. It still sounds and again I'm just trying to explore and understand what you're saying here. It still sounds like there is one approach that has a goal in your view of having the child return to comfort with the child's natal sex and then there is another approach that has a goal that says I don't care where you end up. Is that fair to say?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: Again, I think it really narrows down what's a highly complex question, so it's really hard to give an answer to that. But if we define

conversion as approach one and everything else outside of that, I can work with that if that is helpful for having further discussion or asking more questions.

BY ATTORNEY BARHAM:

Q. Is that the way you would describe this situation in the field at present?

A. It is not the way I would describe the situation in the field.

Q. On page five of this article ---.

ATTORNEY BLOCK: I'm sorry, which article?

ATTORNEY BARHAM: On Tab 97 of Exhibit 16. Dr. D'Angelo's article.

BY ATTORNEY BARHAM:

Q. It sounds to me like you are rejecting what these authors describe as a conflation of ethical non-affirming psychotherapy and conversion therapy, next to the last paragraph on the page.

ATTORNEY BLOCK: Objection. Please give him time to read the page.

THE WITNESS: I've never seen of or heard a definition for ethical non-affirmative psychotherapy, so I don't know what that means.

BY ATTORNEY BARHAM:

Q. Is it your position that there is no such thing?

A. I have never heard of such a thing.

Q. On page six, in the first column, the authors write, in fact, some homophobic societies and indeed families that reject homosexuality among their children have embraced the affirmative biomedical pathway, which poses questions as to whether, quote, affirmative care in some cases in some instances serve the role of gay conversion therapy. Do you believe that that's a legitimate concern?

A. I do not.

Q. Why not?

A. As I mentioned before, affirmative care is not presupposed any one specific outcome.

Q. Do you think that someone can have a concern that affirmative care could serve the role regardless of its dole, serve the role of gay conversion therapy?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Well, the authors appear to have that concern. It is not a concern that has been borne out by the literature in my clinical experience.

BY ATTORNEY BARHAM:

Q. Do you believe that the authors are reasonable in having that concern?

A. I can't speak to what the authors' motivations are for writing this. I do not know.

Q. Based on your knowledge of the field, do you believe that that's a reasonable concern?

A. I do not.

Q. Why not?

A. Because understanding the overlap and the interaction between gender identity and sexuality and sexual orientation is a part of the assessment process in affirming care.

Q. At the bottom of page one the authors write, if anything other than affirmation is viewed as GICE ---.

A. What page is that?

Q. On page six, I'm sorry. Same page you were on with the gay affirmative therapy or gay conversion therapy. The last paragraph in column one of page six. If anything other than affirmation is viewed as GICE, it follows that the provision of psychotherapy in these clinical scenarios can be seen as harmful conversion efforts. If these therapeutic efforts do not aim to convert or consolidate an identity but instead aim to help individuals gain a deeper understanding of their discomfort with themselves, the factors that have contributed to their distress and their motivations for

seeking transition. Is it your position that there are no therapeutic interventions that do not aim to convert or consolidate an identity?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: What I would say is that helping individuals gain a deeper understanding of their discomfort with themselves, the factors contributing to their distress and their motivations for seeking transition is a vital and inherent part of gender-affirming care.

BY ATTORNEY BARHAM:

Q. But a moment ago you indicated that you were not aware of any ethical non-affirmative psychotherapy?

A. That is not a phrase that I have heard or have heard described. What the passage that you are referring to describes is a very typical process involved in any kind of standard of care around anything really is understanding motivations and understanding distress. There is nothing --- there is nothing novel about that description of care that is not already under the umbrella of affirming care.

Q. And a little bit later in that paragraph, I believe at the top of column two of page six, the authors right both conversion and affirmative therapy

efforts carry the risk of undue influence potentially compromising patient autonomy. Do you agree that that is a possibility?

A. Again, I'm not sure what the authors are referring to when they say affirmation therapy efforts because what they're describing as ethical, non-affirmative interventions falls to me under the clear rubric of affirming care, so I don't know what they mean by this.

Q. Okay.

In paragraph 35 of your report you indicate --- you stated research indicates that social transitioning significantly improves the mental health of transgender young people.

Is that correct?

A. Yes.

ATTORNEY BARHAM: And I'm going to show you what we will mark as Exhibit 17. This is Tab 118 for those following from a distance. This is a study by Gibson, et al. published in 2021.

(Whereupon, Exhibit 17, Study by Gibson, et al., was marked for identification.)

BY ATTORNEY BARHAM:

Q. You've cited this article in footnote nine of your report.

Is that correct?

A. Let me just double check. I believe so. Yes.

Q. Under methods on page one of Exhibit-17 it indicates this a cross-sectional study.

Is that correct?

A. That is correct.

Q. Can cross-sectional studies be used to demonstrate causation?

A. Not on their own, no.

Q. So this study does not show that social transitions caused any improvement in mental health.

Correct?

A. This study demonstrated that there was a correlation between improved mental health and social transition.

Q. So it did not show causation.

Is that correct?

A. It did not show causation.

Q. I'm going to show you Exhibit 9. Let's go back to Exhibit 9.

LAW CLERK WILKINSON: Tab 117.

BY ATTORNEY BARHAM:

Q. Tab 117. This is the article by Lily Durwood, et al. published in 2017. You cited this article also in footnote nine of your report.

Is that correct?

A. That is correct.

Q. And we have previously discussed how this article reports what children and parents said about the children's mental health.

Is that correct?

A. That is correct.

Q. Really a self report.

Correct?

A. I think we went through that earlier. It was not just a self report. These were interview led evaluations.

Q. But an interview led self report.

Correct?

A. There were also parent reports that were ---.

Q. And so self reports of children, parental reports about their children.

Correct?

A. Correct.

Q. Okay.

And then in footnote nine you also cite a study by Olson, et al. in 2016, footnote nine of your report.

Correct?

A. That is correct.

Q. And in footnote nine you indicate that alleged statistical errors in that article have already been corrected in 2018.

Correct?

A. Correct.

Q. And for that assertion you cite a study by Olson, et al. in 2018.

Is that correct?

A. I don't see that.

ATTORNEY BLOCK: Objection. Where are you at?

THE WITNESS: I don't see it. If you can point to me where that is.

BY ATTORNEY BARHAM:

Q. Footnote nine, on page 11, small statistical errors in Olson 2016 had already been corrected in 2018, see Olson, et al., 2018, mental health of transgender student who are supported in their identity throughout.

A. Yes.

Q. Is that correct?

A. Yes.

ATTORNEY BARHAM: I'm going to show you what we are going to mark as Exhibit 18. This will be tab 119.

(Whereupon, Exhibit-18, Errata Sheet, was marked for identification.)

BY ATTORNEY BARHAM:

Q. This is the errata sheet that you cited in footnote nine of your report.

Is that correct?

A. That is correct.

Q. The only change in this 2018 article is the highlight and missing common from the 2016 article.

Is that correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Yes.

BY ATTORNEY BARHAM:

Q. In paragraph 40 of your report you say that studies have repeatedly documented puberty blocking medication and gender-affirming hormone therapy are associated with mental health benefits in both the short and long term.

Is that correct?

A. That is correct.

Q. And the studies that you're citing for that assertion are those listed in footnote 14 of your report.

Correct?

A. That is correct.

Q. Are there any others that you are referencing?

A. Those are the only that I'm referencing.

Q. In paragraph 41 of your report you claim that Dr. Cantor fails to discuss many of the studies documenting the benefits of puberty blocking medication. Which of the studies in footnote 14 did he fail to discuss?

A. I would need to review Dr. Cantor's report to know specifically.

Q. Do you recall now which ones he failed to discuss?

A. I do not.

ATTORNEY BARHAM: All right. I'm going to show you what we will mark as Exhibit-19, and this is Tab 98.

(Whereupon, Exhibit-19, Article by

Tordoff, et al., was marked for identification.)

BY ATTORNEY BARHAM:

Q. This is an article by Tordoff, et al, published in 2022, entitled Mental Health Outcomes in Transgender and Non-Binary Youth Receiving Gender-Affirming Care. This is one of the studies that you cited in footnote 14 of your report?

A. That is correct.

Q. According to table one on page five of this report 65 percent of the participants were also receiving mental health therapy.

Is that correct?

A. That is correct.

Q. So it's not possible to determine how much of the improvement was due to puberty blocking medication and gender-affirming hormone therapy and how much was due to the mental health therapy.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: There is a lot of questions in that one singular question about study design and what we know about the history of transgender health

outcomes prior to the existence of gender-affirming care. As this study is designed, it is not designed in such a way to be able to specifically keep that apart.

ATTORNEY BARHAM: All right.

I'm going to show you what we will mark as Exhibit-20, and this will be Tab 99.

(Whereupon, Exhibit-20, Article by Amy Green, et al., was marked for identification.)

BY ATTORNEY BARHAM:

Q. This is the second article. This is an article by Amy Green entitled ---- it says et al. entitled Association of Gender Affirming Hormone Therapy with Depression, Thoughts of Suicide and Attempted Suicide Among Transgender and Nonbinary Youth published in 2021. This is the second article that you cited in footnote 14 of your report.

Is that correct?

A. That is correct.

Q. On page six of this report, column two, the authors indicate that causation cannot be inferred due to this study's cross-sectional design.

Correct?

A. That is correct.

Q. This study also does not prove that puberty blocking medication and gender-affirming hormone therapy caused any improvements.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: This study was not designed to show a causal outcome, no.

ATTORNEY BARHAM: Let's go to Exhibit 21, this will be Tab 100.

(Whereupon, Exhibit-21, Article by Turban, et al., was marked for identification.)

BY ATTORNEY BARHAM:

Q. This is an article by Turban, et al. published in 2020 entitled Pubertal Risks for Transgender Youth and Risks of Suicide Ideation --- Suicidal Ideation?

ATTORNEY BLOCK: Objection to misreading the name of the study.

BY ATTORNEY BARHAM:

Q. This is the third article that you cited in

footnote 13 of your report.

Is that correct?

A. That is correct.

Q. And on page seven of this article the authors also indicate that limitations include the cross-sectional --- the study's cross-sectional design, which does not allow for determination of causation.

Is that correct?

A. That is correct.

Q. So this study does not prove that puberty blocking medication and gender affirming hormone therapy caused any improvements.

Correct?

A. This study was not designed to demonstrate causation.

ATTORNEY BARHAM: I'm going to show you what we will mark as Exhibit-22. This is an article by Achille, et al. entitled Longitudinal Impact of Gender Affirming Endocrine Intervention on Mental Health and Well-being of Transgender Youths, Preliminary Results published in 2020.

(Whereupon, Exhibit-22, Article by Achille, et al., was marked for identification.)

BY ATTORNEY BARHAM:

Q. You also cited this article in footnote 14 of your report.

Is that correct?

A. Yes, I did.

Q. And on page two of this report, the bottom of the first column, the authors write that most subjects --- quote, most subjects were followed by mental health professionals, closed quote, and quote, those that were not were encouraged to see a mental health professional.

Correct?

A. That is correct.

Q. And on page three, the first column, the authors say that after statistically adjusting for psychiatric medication and engagement in counseling, quote, most predictors did not reach statistical significance.

Is that correct?

A. Where are you?

Q. Page three, column one, under regression analysis.

A. Correct.

ATTORNEY BARHAM: I'm going to show you what we will mark as Exhibit-23, this is Tab 102.

(Whereupon, Exhibit-23, Article by Kuper, et al., was marked for identification.)

BY ATTORNEY BARHAM:

Q. This is an article by Kuper, et al. published in 2020, entitled Body Dissatisfaction and Mental Health Outcomes of Youth on Gender Affirming Hormone Therapy. On page six --- let me rephrase that for the record. You cited this article in footnote 14 of your report.

Is that correct?

A. That is correct.

Q. According to Table 2 on page six none of the results for those receiving puberty suppression were statistically significant.

Correct?

A. I need a few minutes.

Q. Take your time.

A. As I read the bottom of that table, there are a number of analyses that reached statistical significance.

Q. But if you look at the lines for each one under

each of the scores, body dissatisfaction, depressive symptoms, depressive symptoms QIDS, anxiety symptoms, panic symptoms, generalized anxiety symptoms, social anxiety symptoms, separation anxiety symptoms, school avoidance symptoms, the lines marked puberty suppression have no superscript on them.

Is that correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: That is correct.

BY ATTORNEY BARHAM:

Q. So none of those --- none of the specific findings regarding individuals on puberty suppression only were statistically significant.

Is that correct?

A. None of them were statistically significant as measured by their reports.

ATTORNEY BARHAM: I'm going to show you what we will mark as Exhibit-24. This will be Tab 103.

(Whereupon, Exhibit-24, Article by van der Miesen, et al., marked for identification.)

BY ATTORNEY BARHAM:

Q. This is an article by van der Miesen, et al., published in 2020 entitled Psychological Functioning in Transgender Adolescents Before and After Gender Affirmative Care Compared with Cisgender General Population of Peers. You cited this article in footnote 14 of your report.

Is that correct?

A. That is correct.

Q. The authors on page five, in column two, the authors of this study ---.

A. What page?

Q. Page five.

A. I have that in the 700s.

Q. Oh 703, sorry. 703. The fifth page, but it's paginated 703. The authors of this study indicate that, quote, due to its cross-sectional design, the present study cannot provide evidence about the direct benefits of puberty suppression over time and long-term mental health outcomes?

Correct?

A. I don't see where that is.

Q. Next to the last paragraph in the second column. The third and most important --- skipping the cross-sectional design of this study different

participants in the groups before and after puberty suppression may potentially limit the results?

A. Yes, I see that.

Q. The present study can therefore not provide evidence about the direct benefits of puberty suppression over time and the long-term mental health outcomes.

Is that correct?

A. That is correct.

Q. So the authors of this study indicate that conclusions about the long-term benefits of puberty suppression should thus be made with extreme caution, meaning prospective long-term follow-up studies with repeated measured design of individuals being followed over time to confirm.

Is that correct?

A. That is correct.

ATTORNEY BARHAM: I'm going to show you what we will mark as Exhibit-25. This will be Tab 104.

(Whereupon, Exhibit-25, Article by de Vries, was marked for identification.)

BY ATTORNEY BARHAM:

Q. This is an article by van der Miesen --- or I mean De Vries, et al --- excuse me, De Vries, et al., 2014, Young Adult Psychosocial Outcome After Puberty Suppression and Gender Reassignment. This is the last article you cite in footnote 14 of your report.

Is that correct?

A. That is correct.

Q. At the Dutch clinic patients who receive puberty blockers also receive psychotherapy.

Is that correct?

A. That is correct.

Q. So again, there is no way to determine how much of the improvement reflected in this study is due to the puberty blockers and how much is due to the psychotherapy.

Correct?

ATTORNEY BLOCK: Objection to the form.

THE WITNESS: Let me restate my response to the previous question. The Dutch clinic always recommends participation in therapy. I'm not a 100 percent certain that every participant participated in the therapy as directed.

BY ATTORNEY BARHAM:

Q. For the most part, the Dutch model combined

psychotherapy with puberty blockers.
Correct?
ATTORNEY BLOCK: Objection.
THE WITNESS: That is correct. And may I state that I think that is part of the reason that the van der Miesen study is quite important because it does start to look at the impact of being on the wait list and the impacts of just getting psychotherapy alone versus access to puberty suppression and/or hormones.
ATTORNEY BARHAM: I'm going to show you what we're going to mark as Exhibit-26. Tab 105.

(Whereupon, Exhibit-26, Article, was marked for identification.)

BY ATTORNEY BARHAM:
Q. This is an article by Michael Biggs published in 2020, Gender Dysphoria and Psychological Functioning in Adolescents Treated with GnRHa. Are you familiar with this study?
ATTORNEY BLOCK: Objection, mischaracterizes the document.
BY ATTORNEY BARHAM:
Q. Are you familiar with this letter to the editor?

A. I have not read this letter to the editor.
Q. If you look at bottom of page one continuing onto page two, the author writes an additional complication with this treatment is that the Dutch model combines GnRHa with psychological support so the two effects are inevitably conflated. Do agree with that statement?
A. I do not.
Q. Why?
A. Use of GnRH logs for this kind of intervention were first used in 1999. So every --- every transgender person prior to 1999 had no access to this kind of treatment. Between 1999 and probably about 2014 these medications were not widely available and so unavailable for use for most people. So we have the clinical experience of adults, talking retrospectively, about their experiences as well as the patients that we have treated that did versus did not have access to these interventions. So we have both clinical experience and some retrospective data that looks at this question specifically.
Q. Can retrospective data demonstrate causation?
A. In some cases it can.
Q. But retrospective data is subject to recall by

us in other drawbacks that undermind its reliability.
Correct?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: It depends upon the type of data that is being calculated.
BY ATTORNEY BARHAM:
Q. Why do you mean by that?
A. If it is qualitative interview data, yes, there is retrospective data that reviews contemporary documentation and charts, lab results, imaging results, et cetera. That is less confounded by that kind of bias.
Q. When we are talking about people recalling their experiences before hormone therapy was available that would be the qualitative type of data.
Correct?
A. Correct. And when analyzing that data you have to take that into account.
Q. So that still doesn't help me understand why you disagree with that statement because the Dutch model combines hormones with psychosocial --- psychological support, the two effects are inevitably conflated?
A. We have a long history of people receiving psychological support alone. And with the addition of

these interventions and this model of care, outcomes improve with specific measures around gender dysphoria.
Q. Over that time the psychological support would have evolved as more understanding was gained.
Correct?
A. One would hope, yes.
ATTORNEY BLOCK: Objection to form.
BY ATTORNEY BARNHAM:
Q. But for the individuals who receive treatment under the Dutch model, receiving both the hormones and the psychological support, it's impossible to determine how much improvement was due to the psychological support and how much was due to the hormones.
Correct?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: There has not been a study that has sought to identify the specific percentage of impact of those two.
ATTORNEY BARHAM: All right.
I'm going to show you what we will mark as Exhibit 27.

(Whereupon, Exhibit 27, Article, was marked for identification.)

BY ATTORNEY BARHAM:

Q. Tab 106. This is an article by Costa, et al. In 2015 Psychological Support, Puberty Expression and Psychosocial Functioning in Adolescents with Gender Dysphoria.

Is that correct?

A. That is correct.

Q. You cite this article in footnote 14 of your report.

Is that correct?

A. That's correct.

Q. Now, in this study there were two groups of adolescents, those who receive both puberty --- I mean, both therapy and puberty blockers at the outset and those who received just therapy at the outset.

Correct?

A. I'll need a minute to refresh myself.

Q. Sure. And I'm referencing pages 228, the second column over to 229, the top of the first column.

A. That's correct.

Q. And on page 2211 going over to 2212, the author's note that the difference between the immediately eligible group and the delayed eligible

group failed to reach significance.

Correct?

A. So as I read this, immediately eligible group who had a higher in psychosocial functioning did not show any significant improvement after 12 months, but after 12 months there was a statistical difference.

Q. Then it says finally, even if the end or follow-up study, plan three, immediately eligible group had a five point higher CGAS score than the delayed eligible group, this difference failed to reach significance.

Correct?

A. That's correct. What I have to point out there, is CGAS is the children's global assessment scale, and not a measure of gender dysphoria or quality of life or distress in body.

Q. Is it a measure of a child's mental health?

ATTORNEY BLOCK: Objection.

THE WITNESS: It is a rough and very precise measure of general functioning.

BY ATTORNEY BARHAM:

Q. But it is the scale that this study was using.

Correct?

A. That is correct.

ATTORNEY BARHAM: Let's go to tab 28.

(Whereupon, Exhibit 28, Article by Edwards-Leeper, was marked for identification.)

THE WITNESS:

And to clarify the CGAS is something that is clinician rated of remedy objective criteria.

BY ATTORNEY BARHAM:

Q. Do you want to take a break?

A. In a few minutes if that's okay.

Q. Are you aware of Dr. Edwards-Leeper's reputation in the field?

A. I am.

Q. Are you personally acquainted with Dr. Edwards-Leeper?

A. I am.

Q. Have the two of you worked together in the American Psychiatric Academics Association?

A. We have not worked together through the American Psychiatric Association. Dr. Edwards-Leeper is a psychologist.

Q. She served as a member of the task force to

develop practice guidelines for working with transgender individuals? Have you served in a similar capacity with the American Psychiatric Association?

A. I have. And we both worked together on the WPATH standards of care provision.

Q. You anticipated my next question. So you would agree that Dr. Edwards-Leeper is considered an international expert in this area.

Correct?

A. Yes. Dr. Edwards-Leeper is a complicated figure right now, but yes, she has a lot of expertise.

ATTORNEY BARHAM: I want to show you what we will mark as Exhibit 29. This is Tab 29.

--

(Whereupon, Exhibit 29, Article by Edwards-Leeper, was marked for identification.)

ATTORNEY BLOCK: I imagine you have a lot of questions about this next document, and I just want to make sure the witness has a chance to have a bathroom break if it's going to go on for ten minutes or more.

ATTORNEY BARHAM: I have no objection to that.

THE WITNESS: Five minutes.
ATTORNEY BARHAM: We will take five minutes.
VIDEOGRAPHER: Going off the record. The time is 12:12 p.m.
OFF VIDEO

(WHEREUPON, A SHORT BREAK WAS TAKEN.)

ON VIDEO
VIDEOGRAPHER: We are back on the record the current time reads 12:21 p.m.
BY ATTORNEY BARHAM:
Q. A moment ago we were discussing Dr. Edwards-Leeper and you commented that she is a complicated individual.
What did you mean by that?
A. What I mean is that she has published some things in popular press that have led me to be talking about her here.
Q. And would one of those be the document before you Exhibit 29?
A. That is correct.
Q. This is an article published in the Washington

Post by Dr. Edwards-Leeper and Dr. Anderson.
Is that correct?
A. That is correct.
Q. What is it --- are there any other publications that Dr. Edwards-Leeper has written recently that caused you to describe her as a complicated figure?
A. No, no.
Q. So just this one article.
Is that correct?
A. Yes.
Q. Are you familiar with Dr. Anderson?
A. I am.
Q. She is a clinical psychiatrist?
A. She is a psychologist.
Q. A psychologist. And Dr. Anderson has been working with transgender youth for a long time.
Is that correct?
A. I'm not a hundred percent familiar with Dr. Anderson's history, I don't know.
Q. Was she in the field before you?
A. I don't know.
Q. Dr. Anderson is also a transgender.
Is that correct?
A. That is correct.

Q. Dr. Anderson is a member of the American Psychological Association Committee tasked with writing guidelines and working with transgender individuals.
Is that correct?
A. I do not know.
Q. Dr. Anderson is a former president of the U.S. Professional Association for Transgender Health.
Is that correct?
A. That is correct.
Q. Dr. Anderson is a former board member for the World Professional Association for Transgender Health.
Correct?
A. I'm not sure.
Q. Beyond the committee assignments listed on page two of your CV have you held any committee assignments for the USPATH or WPATH Organizations?
A. Not additional committee assignments than WPATH or USPATH, no.
Q. In this copy published in the Washington Post Dr. Edwards-Leeper and Dr. Anderson summarizes a situation of a 13-year old natal girl with no prior history of gender dysphoria. Some issues of sexual assault and depression and then an abrupt announcement of this child of transgender identity.

Does that summarize the scenario they outline?
A. That is the scenario they outlined.
ATTORNEY BLOCK: Objection to form.
BY ATTORNEY BARNHAM:
Q. What percent of your patients first present as a team without a prior gender dysphoria diagnosis?
A. Well, first I just want to address the scenario with Patricia, this is a popular press article, so I have no idea if Patricia is a real person or an amalgam.
Q. Understood.
A. I hope it's an amalgam, because it would be unethical to not have consent to publish this story. Whether or not a child has a diagnosis of gender dysphoria before they come to see me is dependent upon if they've had previous evaluations, so it's dependent. I don't have a specific number for you.
Q. In general, how many of your patients first present as a team versus first presenting as a child?
A. That is very different, depending upon which cite that I was practicing at. So in New York I saw more prepubertal youth than I do in Chicago.
Q. So in New York, what percent of your patients first presented as adolescents versus children?
A. I think I answered that question earlier. If I

remember it was 25 percent of the 75 percent.

Q. And in Chicago how many --- what percentage of your patients present as adolescents versus as teen?

A. Probably 90 percent during adolescence.

Q. And are those all adolescents who first presented as adolescents or did they first present with gender dysphoria as a child?

A. It's a combination of both.

Q. So of your adolescent patients how many presented first as an adolescent, and how many presented as a child?

A. I don't have that information in front of me.

Q. Do you have a general ballpark idea?

A. No, I mean, the question --- I guess what I'm struggling with is that there are a lot of adolescents who I see who presented the first as adolescent, but have clear symptoms of gender dysphoria going back to childhood. So I'm not sure how to characterize those children in your question.

Q. What percent of the patients that present themselves to you first as an adolescent are natal female?

ATTORNEY BLOCK: Objection to terminology.

THE WITNESS: I would say in the clinic where I'm practicing, currently certainly over half of the children presenting in adolescence for the first time are assigned female at birth.

BY ATTORNEY BARHAM:

Q. And in New York, what percent of the patients that presented to you first as an adolescent or natal female?

A. In New York it was more even split between those assigned female and those assigned male at birth.

Q. And here when you say it's more than 50 percent are we talking 75 percent, we're talking 80 percent, 90 percent?

A. I don't have that information in front of me, so I couldn't tell you specifically. It would be a guess.

Q. Do you have a range?

A. I don't. I don't. More than 50 is the closest that I can get right now.

Q. More than 75 percent?

A. Probably not, no.

Q. So somewhere between 50 and 75?

A. That's a good guess.

Q. What proportion of teen girls presenting at your clinic have suffered sexual assault or abuse of any sort?

A. So if we're talking assigned females at birth, is that what you mean?

Q. Yes. Natal females.

A. Between one out four and one out of eight assigned females at birth who do not identify as transgender have exposure to sexual assault and trauma f some kind. What we know from the literature is that rates of sexual assault and sexual abuse of transgender youth is higher than that and my patients are relatively similar to that, so probably in the order of 25 to 30 percent.

Q. What policies do you have in place to ensure adequate counseling and therapy for that trauma before making any decisions regarding hormones?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Assessing co-occurring psychiatric disorders or stressors or traumas is an inherent part of any assessment.

BY ATTORNEY BARHAM:

Q. Beyond just it being an inherent part of any assessment, do you have any other policies or standards that you use to ensure that the trauma is addressed before making decisions regarding hormones?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I mean, I don't have a written down policy. Incorporating understanding of trauma is always going to be an important part of any informed assessment prior to moving forward with an intervention.

BY ATTORNEY BARHAM:

Q. Do you agree or disagree that before prescribing hormones to a teen girl who has suffered sexual abuse or depression, medical professionals have a responsibility to confirm that the patient has received a thorough mental health assessment, including investigating how other mental health issues and any other changes in her life might be contributing to her desire are perceived transgender identification?

ATTORNEY BLOCK: Objection to form and terminology.

THE WITNESS: So for any child regardless of gender, who we are recommending a medical or surgical intervention, we are assessing for the presence of gender dysphoria, the presence of co-occurring psychiatric disorders and their impact on that diagnosis or the capacity to consent to treatment, and a clear understanding of the risks, benefits and alternatives of

whatever that intervention may be.
BY ATTORNEY BARHAM:
Q. So then --- and that would include investigating how other mental health issues and other changes in her life might be contributing to her desire or perceived transgender identification?
A. That is correct.
ATTORNEY BLOCK: Objection to terminology and pronouns.
BY ATTORNEY BARHAM:
Q. Do you agree or disagree that the standards of care recommend mental support and comprehensive assessment for all dysphoric youth before starting medical interventions?
A. I would agree that the current recommendations, which are in the process of being updated recommend that a mental health assessment be in place. And it's not a mandate that psychotherapy is a requirement prior to initiation of medical care for gender dysphoria, and it is not indicated for every patient.
Q. And that's partly because the standards of care are guidelines not mandates.
Correct?
A. It's mostly because of the indications for the

patient's best interest that psychotherapy is not a requirement for folks who are otherwise doing well.
Q. But it's also true that the standards of care are guidelines not mandates.
Correct?
A. That is correct. They are guidelines.
Q. On page two of this article the author is --- and by this article I'm referring to tab 29. The author has indicated that a study of ten pediatric gender clinics in Canada found that half do not require psychological assessment before initiating puberty blockers or hormones.
Is that your policy?
A. Where is this in the article? I don't see it.
Q. The bottom of page two?
A. What I want to emphasize is this is an opt ed and a popular press outlet and not a study. So I have no idea where they gathered their information about this or the accuracy of the statement, nor do I know what the authors meant by a psychological assessment.
Q. I understand. I did not mean to imply that this article Exhibit --- tap 29 is a study. I was merely quoting the authors, that a study of ten pediatric gender clinics found that half do not require

psychological assessment before initiating puberty blockers or hormones. My question to you is, is that your policy?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: Again, I can't speak to the accuracy of Dr. Edwards-Leeper and Dr. Anderson's description of a study that I haven't seen.
BY ATTORNEY BARHAM:
Q. I'm not asking you to. I'm asking do you have --- is it your policy at your clinic that you do not require psychological assessments before initiating puberty blockers for hormones?
A. We require psychological assessments prior to initiation, yes.
ATTORNEY TRYON: Travis, it's Dave Tryon. You referred to this as Tab 29, I believe you mean Exhibit 29. Is that right?
ATTORNEY BARHAM: It's both Exhibit 29 and Tab 29.
BY ATTORNEY BARHAM:
Q. When patients come to you referred by a pediatrician or counselor with no expertise in gender dysphoria assessment or diagnosis, what policies do you have to ensure that the patients receive full and

adequate course of mental healthcare before prescribing life altering hormones?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: As a mental health professional I'm not the person who is prescribing those treatments.
BY ATTORNEY BARHAM:
Q. Before you recommend someone for eligibility for life-altering hormones?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: Prior to making a recommendation of hormone initiation I'm doing my own assessment and ensuring that those standards are met.
BY ATTORNEY BARHAM:
Q. So beyond your own assessments do you have any policies that guide that process?
A. Our clinic has its own policies dependent upon clinical practice or whether or not patients are enrolled in a particular trial, but it is the standard of care as laid out by both Endocrine Society and WPATH that adolescent patients have a psychological assessment. There's a lot of latitude for what that actually means.
Q. And on page three of this document, Exhibit 29,

the bottom of the first paragraph the authors write as a result we may be harming some of the young people we strive to support, people who may not be prepared for the gender transitions they are being rushed into.

Do you share the concern of these authors?

A. I don't have numbers on my end. Which --- where is it?

Q. (Indicating).

A. Got it. Can you repeat the question? Sorry.

Q. The authors express concern that we may be --- quote, we may be harming some of the young people we strive to support, people who may not be prepared for the gender transitions they are being rushed into.

Do you share the author's concern?

A. I do not. These are tested hypotheses that can be researched, and this is not what this is.

Q. You said you have no concern that people are being rushed into gender transitions?

A. This is a supposition by these two authors that people are being rushed into gender transition. I'm not sure what that means, and that has not been the clinical experience that I've had nor what the guidelines recommend.

Q. So you were not aware of people being rushed

into transitions that they are not ready for?

A. That has not been my experience, no.

Q. On page four towards the bottom of the page, the authors reference a recent study of 100 detransitioners, 38 percent of whom reported that they believe their original dysphoria had been caused by something specific such as trauma, abuse or mental health condition. Fifty-five (55) percent of whom said they did not receive adequate evaluation from a Dr. Or mental health professional before starting transition.

Are you aware of that study that authors reference here?

ATTORNEY BLOCK: Object to form.

THE WITNESS: I am --- I'm assuming because I think they have a footnote in here somewhere, but it is not in this particular article, but they are receiving to the recent 2021 Littman study detransitioners.

BY ATTORNEY BARHAM:

Q. Do you share the concern that some have been misdiagnosed as transgender when their gender dysphoria was, in fact, not innate, but cause by something specific, such as trauma, abuse or mental health condition?

A. I really don't mean to parse this, but I don't know what Dr. Edwards-Leeper or Dr. Anderson's concerns are, but the evidence that we have from the literature and from our clinical experience is that this is not a broad experience of most children.

Q. And what literature, are you referencing when you say we referenced the literature?

A. I'm referencing the literature that I cited in my report.

Q. And which specific portions of your report are you referencing?

A. Let me just take a moment. What I'm referencing is the longitudinal studies in particular that have followed these kids over time.

Q. And which ones would those be in your report?

A. Really anything from the Dutch clinic is going to have a longitudinal focus to them, but I think what's more important is that in all of these studies, which include some of the Dutch studies both in childhood and adults that have looked at regret rates or detransition have shown that this is a very infrequent occurrence, and there has been nothing I've read within the scientific literature that in, any way, tries to operationalize this idea of children being forced into

or pressured into transition.

Q. What steps do you take to ensure that gender dysphoria, the child's --- the child's or teen's gender dysphoria was not caused by something specific such as trauma, abuse or mental health condition before recommending someone for puberty blocking or cross sex hormones?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I perform a thorough evaluation.

BY ATTORNEY BARHAM:

Q. Anything beyond the thorough evaluation?

A. A very thorough evaluation. It involves multiple steps as I described earlier.

Q. So this comprehensive --- the authors actually talk about a comprehensive assessment on page three of their article. And they indicate that comprehensive assessment and gender exploratory therapy helps --- quote, helps a young person peel back the layers of their developing adolescent identity and examines factors that contribute to their dysphoria. And those include --- so what steps did you take to identify the factors that may contribute to a child's or teen's sense of dysphoria?

ATTORNEY BLOCK: Objection to form.
THE WITNESS: It is a thorough assessment and there are multiple factors within that assessment that speak to those concerns specifically.
BY ATTORNEY BARHAM:
Q. And what are those multiple factors?
A. Understanding developmental history, getting multiple performance, doing the diagnostic assessment of any co-occurring mental health conditions and ensuring that those are adequately explored and understood.
Q. What factors in a transgender identity do you identify as most often contributing to gender dysphoria?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: I think it's complicated to answer that in a short way, because not every child who identifies as transgender would meet diagnostic criteria for gender dysphoria. And specifically, if we agreed with the premise that the gender dysphoria is being caused by trauma that's specifically a rule out of the diagnosis of gender dysphoria. So that is part of what we're doing in an assessment is to understand the role of other potential factors in helping a kid explore and understand their identity.
BY ATTORNEY BARHAM:

Q. Then allow me to clarify the question. What factors other than an innate transgender identity do you identify as most often contributing to a child's transgender identification?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: The children that I have treated over my years of doing this work that describe a gender identity that is inconsistent who don't ultimately meet the criteria for gender dysphoria are often children who have been subjected to multiple types of trauma. That would be one of the factors.
BY ATTORNEY BARHAM:
Q. What other ones would you identify?
A. The other factors are around parental conflicts. That's probably the other large cohort of kids when exploration is the full come around which parents, particularly divorcing parents, are acting in conflict.
Q. So by that you mean, for example one parent supporting an affirmation approach and the other raising concerns about proceeding in that direction?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: That's not an infrequent occurrence and this is a very rare outcome to that, but in that cohort of patients who desist, I would say in

their identities that is a shared characteristic of some of the patients that I have seen.
BY ATTORNEY BARHAM:
Q. So you have not only two factors that could contribute to a child's transgender identification, other than ---?
A. Can I stop you, sir? I'm not identifying that as a cause or a causal factor in a core gender identity. It is the understanding and expression of that identity that often changes.
Q. Okay.
And that is why I was trying to talk about transgender identification more broadly. But you've identified two factors that contribute to that not necessarily causal but contribute. Are there any others that you have identified as most often contributing as ---?
A. Not that I have seen.
Q. The authors on page three express a concern about other influences that patients can be subjected to, so as in these assessments patients reflect on the duration of the dysphoria they feel they continue a gender --- the intersection of sexual orientation, et cetera, social media, internet and peer influences.

Do you share concerns that teens maybe misled by TikTok or other social media to self diagnose as transgender when, in fact, other factors have driven their gender dysphoria or their transgender identification?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: To clarify transgender isn't a diagnosis, so I'm not concerned about that specifically. And I think that's the study of all phenomenon, whether or not this is occurring, but again, as a part of a comprehensive gender assessment, we are looking at multiple factors beyond a child's self-report.
BY ATTORNEY BARHAM:
Q. So do you share concerns that teens may be misled by social media to self declare as transgender when, in fact, other factors have driven their gender dysphoria?
ATTORNEY BLOCK: Objection.
THE WITNESS: I would not characterize it in that way.
BY ATTORNEY BARHAM:
Q. How would you characterize it?
A. I would characterize it by taking exploration of

an identity via TikTok for what it is, as a normal process of adolescent development and having a child who self identifies as transgender as a result of seeing a video on TikTok is not going to be the child who meets the typical phenomenology that we would see with gender dysphoria. That is part of the assessment that we are evaluating.

Q. Okay.

So then in general, you don't agree with the concerns that the authors raise regarding the influence of social media, internet and peer influences.

Correct?

A. I would say it's a matter of degree. I don't think social media has been a particularly healthy thing for kids in general, and understanding how it impacts kids is something that we all need to be learning more about.

Q. In the last paragraph on page three, the authors talk about how the WPATH recommends collaborative approach that involves parents and take into account the complexities of adolescents.

Do you see that?

A. Yes.

Q. Do you understand the WPATH standards of care

for adolescents to call for a collaborative approach that involves both parents whenever possible?

A. There is not a specific call out within the standards of care for my recollection that say both parents need be involved, but that's certainly implied and is the general practice to include all parents or all family members who are involved in the child's life whomever is going to need to be in the room in order to both get a clear understanding of what's going on as well as make sure the child gets the adequate support to be able to thrive.

Q. So is it your understanding that the WPATH standards of care would allow treatment to proceed based on the consent of one parent?

A. As we talked about earlier, these are guidelines and not mandates. In practice within the United States almost all consent processes for puberty suppression and hormones go through a two parent consent process whenever possible, even though that is not a requirement of the law.

Q. What I'm trying to get to is what is the requirements of the guidelines, recognizing that the guidelines are not mandatory, but do the guidelines allow for treatment based on the consent of one parent?

A. I think one of the limitations of an international document is that there is not going to be that level of specificity because consent laws are going to be different from state to state, not to mention country to country.

Q. Okay.

On page two --- I'm sorry, on page three --- let me clarify again. I'm sorry I confused myself. On page two the authors write that after exploring who she was --- after a year of exploring who she was, Patricia no longer felt she was a boy, she decided to stop binding her breasts and wearing boys clothes.

What proportion of those who present at your clinic change their minds and decided to remain with or return to the gender identity of their natal sex before undergoing any hormonal treatments?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I'm one practitioner in my clinic, so I don't have the data on everybody. And I think a lot of that is going to depend upon the population that you are seeing.

BY ATTORNEY BARHAM:

Q. What proportion of your patients then changed their mind and decide to remain or return to the gender

identity of their natal sex before undergoing any hormonal treatments?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I would say a minority of patients.

BY ATTORNEY BARHAM:

Q. Do you have a range?

A. I don't. I think when you were asking those questions at the beginning about my 500 transgender patients in that cohort, and I think 75 percent pursued some things, but being that 25 percent that didn't. Somewhere in there.

Q. On page five of this document, the last page the authors report a rising a number of detransitioners that clinicians report seeing. Are you aware of this rising number of detransitioners?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I'm aware that these two authors are raising that it's a possibility. It is not something that I've seen published in the literature.

BY ATTORNEY BARHAM:

Q. Have you seen a rising number of detransitioners at your clinic?

A. I think the question is whether or not the

percentage is changing and that's not an answer we know. I think by definition the more people you see the more folks --- the detransition you're going to see. And the difference of children who had access to gender care now compared to a decade ago is just orders of magnitude different. But I don't know or there has not been any evidence that I've seen that the percentage of kids who detransition is any different now than it was a decade ago.

Q. A few paragraphs above what we were just looking at, it says only a quarter of these individuals told their doctors they had reversed their transitions making this population especially hard to track. Would you agree that this population is difficult to track?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Again, this is not a study and so it's hard to kind of make a pronouncement about a population without a defined understanding of what that population actually is. Our folks who don't talk to their medical professionals about dissatisfaction in their care, a difficult population to treat, I think, probably by definition that is true.

BY ATTORNEY BARHAM:

Q. And to be clear, I wasn't asking if they're

difficult to treat, I was just asking would you agree they're difficult to track?

A. I think by definition, yes, if they are not reaching out to their providers or dropping out of studies, yes.

Q. The next to last paragraph of this article begins by saying the pressure by activists, medical and mental health providers along with a national LGBT organizations to silence the voices of detransitioners and sabotage the discussion around what is occurring in the field is unconscionable. Do you agree that it is concerning that certain organizations are seeking to silence the voice of detransitioners?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: It is not my experience that organizations are seeking to silence the voices of folks who identify as detransitioners, no.

BY ATTORNEY BARHAM:

Q. If they were would you agree that that is unconscionable?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: My job as a psychiatrist and a child psychiatrist in particular is to understand the kid who is sitting in front of me in that very

moment. I want to understand how to best meet their needs. So anything that is going to interfere with me being able to understand that is going to be a problem for me.

ATTORNEY BARHAM: I'm going to show you what we will mark as Exhibit-30. This is also Tab 30.

(Whereupon, Exhibit-30, Interview by Lisa Selin Davis, was marked for identification.)

BY ATTORNEY BARHAM:

Q. This is an interview written up by Lisa Selin Davis of Quillette entitled Trans Pioneer Explains her Resignation from the U.S. Professional Association for Transgender Health, published at the beginning of 2022. Are you familiar with this article?

A. I am not.

Q. I'm going to direct your attention to page three. This is an interview with Dr. Anderson, the same individual who is a co-author of the Washington Post article we were just discussing.

Correct?

A. That is correct.

Q. On page three Dr. Anderson states, the data are very clear that adolescent girls are coming to gender clinics in greater proportion than adolescent boys and this is a change in the last couple of years and it's an open question, what do we make of that. We really don't know what's going on and we should be concerned about it. Does her experience match your experience?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I think it's consistent in the literature that we've seen more assigned females at birth presenting for care than in the past.

BY ATTORNEY BARHAM:

Q. And have you seen this change in balance since approximately 2015?

A. I don't know if I would say --- I could point to one specific year, but with each year it seems like that's --- I think probably that's when the data came out that that demonstrated it.

Q. When do you recall beginning to see this trend develop?

A. I think one of the challenges is that the scope of the literature is limited to a few very specific subsets of where clinical care is practiced, and so we have to just be careful not to completely generalize.

So in these specific clinics what we have seen is a preponderance and an increase of assigned females at birth. I can't speak to this being a national phenomenon, but the literature probably certainly all points in that direction. I think personally for me I just started to see more assigned females at birth presenting in adolescence I think in the mid 2010s is not unreasonable.

Q. Is there any test in scientific understanding as to why this trend in the literature is developing?

A. There is not.

Q. Do you agree that this is something that practitioners should be very concerned about before agreeing to administer sterilizing cross sex hormones to teen girls?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: The thing that's important is what are the specific factors of the child in the family that is sitting in front of you and how to ensure that that child has gotten appropriate care and that we're making a recommendation based upon the best interest of that individual child that is irrespective of population-based changes that are happening.

BY ATTORNEY BARHAM:

Q. Don't you need to assess though whether the individual in front of you is exemplar of that national --- of that trend in the literature?

A. That's where --- that's where an assessment comes in.

Q. So you would agree then that practitioners should be concerned about this trend before deciding to administer hormones.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: What I'm stating is that the guidelines for what's involved in assessment have been relatively clear and that we want to make the decisions based upon what's in the best interest and understanding of the patient and family that we are seeing. We should always be concerned. We should always be building up our understanding of the field, as well as some of the epidemiology of the field. But that doesn't change the individual experiences of the patient and the family that we're meeting with.

BY ATTORNEY BARHAM:

Q. Okay.

At the bottom of page four Dr. Anderson says that she is, quote, worried that there is a new group of

adolescents who have preexisting mental health problems and are looking for an explanation about who they are. And there's a bit of I would say fantasy about seeking to form an identity that may then explain their distress. You would agree that the adolescent years can be distressing for many teens, whether they are transgender or not.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I would wholly agree with that, yes.

BY ATTORNEY BARHAM:

Q. Do you share the concern that some teens who present at clinics are indulging in a fantasy about what a transgender identity will do for them and their distress?

A. I would not put it in that way, no.

Q. As part of your assessment do you have to --- as part of your thorough assessment do you have to assess whether the teen is incorrectly assessing what a transgender identity would do for them and their distress?

A. A part of any formed --- informed consent process is assessing the understanding of the child and

the family's understanding of the risks, benefits and alternatives of that specific intervention. That would include an unrealistic belief about what the potential benefits may be.

Q. All right.

I want to go to page five of this document. Dr. Anderson indicates earlier today I talked to some parents who brought their child to a health professional. The child is seen three times by a therapist and then recommended for hormones. The therapist never talked to the parents. Do you share her concern that three sessions with a mental health providers is far less than required before a competent diagnosis of a durable transgender identity can be made?

ATTORNEY BLOCK: Objection to the form.

THE WITNESS: I would not. The objection as I read it in this article that you've put in front of me with the interview with Dr. Anderson, her concern seems to be more about not having spoken to the parents prior to the recommendation. And I can't take her word for it that this was true. We hear a lot of things from parents who express frustration with care that is ultimately found not to be accurate.

BY ATTORNEY BARHAM:

Q. Would you share the concern that prescribing hormones if one parent is strongly opposed to it is creating a likelihood of family conflict that is going to likely be destabilizing and harmful to the child?

ATTORNEY BLOCK: Objection to the form. Are you referencing something in the article or is this your own question?

ATTORNEY BARHAM: I am referencing page six, where Dr. Anderson says you don't want to rush ahead with a kid, giving them encouragement that they're going to get hormones until we bring their parents along. Battling the parents is a no win proposition.

BY ATTORNEY BARHAM:

Q. So just to be clear about the question do you share the concern that prescribing hormones if one parent is strongly opposed is likely creating the likelihood of family conflict that may be separately destabilizing and harmful to the child?

ATTORNEY BLOCK: Objection to the form and foundation.

THE WITNESS: What I hear Dr. Anderson's concern from this is that battling with parents is a no-win proposition. I think that's different from recommending a treatment that not all parents agree to.

I think it's about the work of psychotherapy, which involves understanding and hearing parents' experiences and objections.

BY ATTORNEY BARHAM:

Q. Do you think that prescribing hormones if one parent is strongly opposed is likely creating family conflict that may be separately destabilizing and harmful to the child?

A. I can't answer that question without a specific family scenario in front of me. I have seen the opposite be the case where the conflict is the creation of the lack of consensus as opposed to the other way around. And I've seen kids in my experience treating kids who had parents who have opted out of any decisional capacity and the kid's medical care but nevertheless do much better when given access to this care.

Q. But it is also possible that prescribing hormones over the objection of one parent can create conflict within the family.

Correct?

ATTORNEY BLOCK: Objection to the form.

THE WITNESS: Understanding the impact of any intervention is a part of that consent process.

BY ATTORNEY BARHAM:

Q. I'm just asking if that's a possible outcome?

A. Yes.

Q. All right.

Is it your opinion that it's unreasonable to exclude from female teams biological males, and by that I mean people with XY chromosomes, who have gained a physiological advantage as a result of undergoing male puberty?

A. This is outside of the scope of what I was providing my testimony on.

Q. Well, in paragraph 52 of your report you say no reasonable mental health professional could think the act in question is anything but harmful to the mental health of transgender youth and that preventing transgender youth from participating in the same activities as their peers undermines their ability to socially transition and prevents transgender youth from accessing important educational and social benefits.

So I'm asking you is it your opinion that it's unreasonable to exclude from female teams biological males who have gained a physiological advantage as a result of undergoing male puberty?

ATTORNEY BLOCK: Objection to form and

scope.

THE WITNESS: Again, I can testify to the mental health aspects of exclusion. I can't testify to the endocrinologic changes of the physiologic changes in sports specifically.

BY ATTORNEY BARHAM:

Q. I'm not asking you to testify to the endocrinology aspects of this. I'm just asking is it your opinion that if we assume that an individual has gained physiological advantage as a result of undergoing male puberty that it is still unfair to --- or unreasonable to exclude them from competing on a women's team?

ATTORNEY BLOCK: Objection to form and scope.

THE WITNESS: That is not an assumption I feel comfortable making.

BY ATTORNEY BARHAM:

Q. Well, if you say that it is no reasonable mental health professional can say that this Act is anything but harmful to the mental health of transgender youth that doesn't depend upon whether the child has undergone male puberty or not.

Is that correct?

A. That is correct.
Q. So even if the child --- even if the individual has undergone male puberty you're saying that no reasonable mental health professional could think that the Act is anything but harmful, barring them from competing on the women's team is anything but harmful.
Is that correct?
A. I would say exclusion and isolation from access to same aged peer activities is likely to be harmful from a mental health perspective.
Q. To what extent can puberty blockers started late, such as age 14, unring the bell by reversing physical changes in male puberty?
ATTORNEY BLOCK: Sorry, I can't hear the questions.
BY ATTORNEY BARHAM:
Q. To what extent do puberty blockers started late, for example age 14, unring the bell by reversing the physical changes of male puberty?
ATTORNEY BLOCK: Objection to form and scope.
THE WITNESS: It is a complicated question that is best left to an endocrinologist to answer.

BY ATTORNEY BARHAM:
Q. Can puberty blockers reverse the physical changes of male puberty to the genitals?
ATTORNEY BLOCK: Objection to form and scope?
THE WITNESS: It's the same answer. I would defer to an endocrinologist on that response.
BY ATTORNEY BARHAM:
Q. Can puberty blockers reverse the physical changes to the hair?
ATTORNEY BLOCK: Same objections.
THE WITNESS: Again, I would defer to an endocrinologist.
BY ATTORNEY BARHAM:
Q. Can they reverse the physical changes to the voice or the muscles?
ATTORNEY BLOCK: Same objections.
THE WITNESS: Same answer.
BY ATTORNEY BARHAM:
Q. Can they reverse the effect --- the physical changes of male puberty to the heart or lung size?
ATTORNEY BLOCK: Same objection.
THE WITNESS: Same answer.
BY ATTORNEY BARNHAM:

Q. Isn't it true that puberty blockers just stop further typical male development?
ATTORNEY BLOCK: Same objections.
THE WITNESS: I would --- I would give two responses. One, I would want an endocrinologist to weigh in on the specifics, but clearly puberty blockers are also prescribed to folks assigned females at birth as well. There's more than just impacts on testosterone as a result of these medications.
BY ATTORNEY BARHAM:
Q. I understand, but you make recommendations for whether people are eligible to receive puberty blocking hormones.
Is that correct?
A. That is correct.
Q. So you have to have some understanding of the effects of these medications.
Is that correct?
A. That is correct.
Q. So isn't it true that puberty blockers administered to natal males should stop further typical male development?
ATTORNEY BLOCK: Objection to form and scope.

THE WITNESS: I'd have the same answer, and they do more than that.
BY ATTORNEY BARNHAM:
Q. What else do they do?
A. Again, I would defer to the endocrinologist for the specific pathophysiology of how GnRH analogs affect a complicated physiology of the body.
Q. But what is your understanding of how they affect because you said they also do other things?
ATTORNEY BLOCK: Objection to form and scope.
THE WITNESS: I think I answered it. In the GnRH analogs are given an anatomic manner compared to the pulsatile way in which GnRH is released during the puberty, which is what causes the suppression of other hormones more than just testosterone and estrogen.
BY ATTORNEY BARNHAM:
Q. If puberty blocking hormones are administered to a natal male, do they cause that individual to undergo typically female pubertal development?
ATTORNEY BLOCK: Objection to form and scope.
THE WITNESS: They do not.
BY ATTORNEY BARHAM:

Q. So they just stop further male development. Correct?

ATTORNEY BLOCK: Same objections.

THE WITNESS: As kind of a Gestalt pithy response, yes, they cause puberty for assigned females at birth and assigned males at birth who are given these medications.

BY ATTORNEY BARNHAM:

Q. When does puberty typically begin in biological males?

ATTORNEY BLOCK: Same objections.

THE WITNESS: Those are very known data that an endocrinologist could tell you.

BY ATTORNEY BARHAM:

Q. I'm sure, though, that as a psychiatrist you have a general understanding of what ages puberty typically begins in biological males?

ATTORNEY BLOCK: Same objections.

THE WITNESS: I do, however, I am assessing individuals who come through my office. And regardless of what the population says about when puberty is typical, it's going to depend upon who that individual child is and when they develop puberty.

BY ATTORNEY BARHAM:

Q. I understand, but my question isn't about an individual. My question is when does it typically begin in biological males.

ATTORNEY BLOCK: Same objections.

THE WITNESS: Again, this is a very knowable fact-based answer in a population level. It's not information I have in front of me.

BY ATTORNEY BARHAM:

Q. So you have no --- is it your testimony that you have no information as to when puberty typically begins in biological females?

ATTORNEY BLOCK: Can I just give a standing objection to questions asking the witness about the effects --- the endocrinology effects of blockers and hormones, so I don't have to make an objection each time?

ATTORNEY BARHAM: Yes.

THE WITNESS: My testimony is I don't want to give an imprecise answer for a question that there is a specific answer to.

BY ATTORNEY BARHAM:

Q. What is your understanding, as you sit here today, as to when puberty typically begins in males?

A. The range for typical puberty in males tends to

be around the 12ish mark. But there is a broad variability. And again, there is an answer that exists for this question that I don't have in front of me.

Q. Are you familiar with Tanner stages of puberty?

A. I am.

Q. What are the different Tanner stages of puberty?

A. Tanner stages one through five are the different Tanner stages.

Q. So what is Tanner stage one in biological males?

A. It depends upon if we're talking about genitalia or chest development, but it's no pubertal changes, so ---.

Q. And what is two?

A. Two is at the initial stages of pubertal changes that you start to see. The specifics of the Tanner staging is something that you need to be trained on. I would not claim myself as an expert in being able to accurately access the Tanner stage of a child.

Q. Do you know when --- at what ages Tanner Stage 2 typically initiates in biological males?

A. Again, it's going to be an individualized experience and that's why we do assessments.

Q. Do you have a range, an age range as to when it typically begins?

A. When we talk about the onset of puberty, we're talking about Tanner stage two typically.

Q. And at what age do those typically arise?

A. For assigned males at birth or assigned females?

Q. For biological males.

ATTORNEY BLOCK: Objection to terminology.

THE WITNESS: So for folks assigned male at birth, again, we're going to see it in that 12-ish range.

BY ATTORNEY BARHAM:

Q. And Tanner Stage 3, what is that?

A. Further development. There's tables and charts you would have to look at. I'm not going to be able to use language to describe it in an accurate way.

Q. And when --- approximately when, what age range does Tanner Stage 3 begin in biological males?

A. That's not an answer that I can give you.

Q. And what is Tanner Stage 4?

A. The same answer is further progression of pubertal changes.

Q. And do you know what age range that typically begins in biological males?

A. Same answer as before. That's not an answer I

have here.

Q. And would the same answers hold true for Tanner Stage 5? Is that a yes?

A. That's a yes. I forgot that nodding ---.

Q. Yes. You've been pretty good today. I've been impressed.

Doesn't the position that allowing biological males to play on a girls team if they blocked puberty before it begins create pressure for parents and children to make puberty blocking decision at a young age?

ATTORNEY BLOCK: Objection to form.

BY ATTORNEY BARHAM:

Q. Sort of put them in a now or never situation?

A. Of those 500 patients that I have seen, that has never come up as a concern.

Q. The athletic issue has never come up as a concern?

A. It has not.

Q. Do you think it would --- as a practitioner in the field do you think it would even be ethical for the State of West Virginia to structure its law in a way that puts now or never pressure on parents and children who are dealing with gender dysphoria to decide at an

early age whether to stop the natural development of puberty?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: As a child psychiatrist in this field we're doing individual-based assessments with the children and families that are in front of us. And what that means in the context of this question is that we are assessing all of their different activities, interests and working with all the systems that we can to ensure a safe and appropriate set of decisions that are going to lead to the best outcomes for this individual child and not a medical emphasis that is outside of the scope that I can answer.

BY ATTORNEY BARHAM:

Q. But you're familiar with the ethical standards of your field.

Is that correct?

A. I am, yes.

Q. Under those ethical standards would it be ethical for the State to structure its law in a way that puts this kind of now or never pressure on parents and children?

ATTORNEY BLOCK: Objection to form. Also the witness is in shadow. I can't really see him for

the camera.

THE WITNESS: Is that better?

ATTORNEY BLOCK: Yes.

THE WITNESS: Can you repeat the question? I'm sorry.

BY ATTORNEY BARHAM:

Q. As someone familiar with the ethical standards of psychiatry, do you think it would be ethical for the State of West Virginia to structure its law in a way that puts now or never pressure on parents and children who are dealing with gender dysphoria to decide at an early age whether to stop the natural development of puberty?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I mean that's a question that has a testable hypothesis. Does X intervention lead to this kind of pressure? That's not a study that I've ever seen nor has it been my clinical experience that it's been the case.

BY ATTORNEY BARHAM:

Q. Would it be ethical to put that kind of pressure on someone under the ethical standards of the field of psychiatry?

ATTORNEY BLOCK: Objection to form and

foundation?

THE WITNESS: It is a very theoretical question that really doesn't enter into it when we are one on one with these kids and their families.

BY ATTORNEY BARHAM:

Q. I'm not asking about one on one interactions with kids and families. I'm asking in general in theory is it ethical to put that kind of pressure on someone?

ATTORNEY BLOCK: Objection to form and foundation.

THE WITNESS: I'm sorry I can't give a better answer, but ensuring that a child is making a decision without coercion is a part of the informed consent process.

BY ATTORNEY BARHAM:

Q. Is it your opinion that it is unreasonable to exclude from female teams biological males who begin undergoing male puberty but are now on puberty blockers?

ATTORNEY BLOCK: Objection to form and scope.

THE WITNESS: Can you repeat the question?

BY ATTORNEY BARHAM:

Q. Is it your opinion that it is unreasonable to

exclude from female teams biological males who begin undergoing male puberty but are now on puberty blockers?

A. Is it unethical is the question?

Q. Unreasonable.

A. Unreasonable. I would defer to kind of our physiology and endocrinology experts and our medical ethics experts in rendering an opinion on that specifically.

Q. Is it your opinion that it is harmful to youth's mental health to be excluded from female teams biological males who begin undergoing male puberty but are now on puberty blockers?

A. What I would say is that exclusion as well as specific legal exclusion from activities of same-aged peers is likely to be harmful for a kid's mental health.

Q. Now, the Act in question does not prevent a biological male who has gender dysphoria from competing on the boys team.

Is that correct?

ATTORNEY BLOCK: Objection to form and scope.

THE WITNESS: I'd need to know specifics. I don't know what you're referring to. I think lots of people have different policies around how this actually

works.

BY ATTORNEY BARHAM:

Q. I'm asking your understanding of the statute upon which you're opining.

A. Can you repeat the question, please?

Q. The Act in question does not prevent a biological male who is experiencing gender dysphoria from competing on the boys team.

Correct?

ATTORNEY BLOCK: Objection to form and scope.

THE WITNESS: So one, I don't know what biological male necessarily means.

BY ATTORNEY BARHAM:

Q. An individual with XY chromosomes, natal male?

A. So assigned male at birth can have a number of reasons why they might not be able to play on the boys team, including intensity of gender dysphoria.

Q. But the law does not prevent them from playing on the boys team.

Correct?

A. From my read of the law it does not prevent them from playing on the boys team. Again, from a mental health perspective, their gender dysphoria may.

Q. So is it harmful to the mental health of a biological male who is experiencing gender dysphoria to be excluded from the women's team even if he is on puberty blockers?

ATTORNEY BLOCK: Objection to form and terminology.

THE WITNESS: Any potential exclusions from a peer-appropriate activity has the potential to have negative consequences on the mental health of that girl. And again, that's going to be something that on an individual basis we are assessing.

BY ATTORNEY BARHAM:

Q. And that would be irrespective of whether the individual is on puberty blockers, begins to undergo male puberty or not.

Correct?

A. An individual assessment is going to be inherently tailored to wherever an individual is.

ATTORNEY BARHAM: Why don't we pause for lunch?

ATTORNEY BLOCK: Let's go off the record.

VIDEOGRAPHER: Going off the record. The current time reads 1:24 p.m.

OFF VIDEOTAPE

(WHEREUPON, A SHORT BREAK WAS TAKEN.)

ON VIDEOTAPE

VIDEOGRAPHER: Back on the record. The current time reads 1:53 p.m.

BY ATTORNEY BROOKS:

Q. What does puberty suppression or puberty blockers do?

ATTORNEY BLOCK: Objection to form and scope.

THE WITNESS: I think I answered that question before. So they suppress the endogenous release of testosterone and estrogen as well as some other hormones.

BY ATTORNEY BARHAM:

Q. How does puberty suppression differ from cross sex hormones?

ATTORNEY BLOCK: Same objection.

THE WITNESS: Totally different medication. One suppress hormones and the other is a direct hormone itself.

BY ATTORNEY BARHAM:

Q. So cross sex hormones are given with the

intention of causing development typical to the other sex.

Correct?

A. It depends upon the context in which hormones are used. And again, I would defer for my endocrinology colleagues on the specifics.

Q. So if cross sex hormones are given to a natal male as part of treatment for gender dysphoria, what is the intention?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: As I understand it, if an assigned male at birth is given cross sex hormones that is estrogen in order to provide the effects of estrogen on the body.

BY ATTORNEY BARHAM:

Q. And the effects of estrogen on the body are what natal females would naturally experience as a result of puberty.

Correct

A. I mean, that is correct, yes.

Q. And so if a natal female is given cross sex hormones, she's being given testosterone to create the effects that natal males would naturally experience through puberty.

Correct?

A. Typically speaking, an assigned female at birth is going to be receiving testosterone and will have the subsequent effects as a result of having testosterone in the bloodstream.

Q. Maybe I was confused, a natal male who is given cross sex hormones?

A. You were right.

Q. I was right, okay. At what Tanner stage do you recommend that a patient begin puberty blocker hormones?

A. Again, that's going to depend upon an individualized assessment with the family, but never before Tanner Stage 2 of puberty.

Q. And in what age does Tanner Stage 2 begin again?

ATTORNEY BLOCK: Asked and answered.

THE WITNESS: I think I answered that question. It really depends upon the person.

BY ATTORNEY BARHAM:

Q. And typically ---.

A. And for an assigned male at birth we're talking 12-ish, but again I would refer to my endocrinology colleagues on the specific dates.

Q. And through what Tanner stage do you recommend that a patient remain on puberty blockers?

A. That's not a question I can speak to. That's a question for the physician or provider who's prescribing that specific medication.

Q. So after you recommend that a patient receive puberty blocking hormones, what is your continuing involvement in the puberty blocking process?

A. My continuing involvement really depends upon the individual child and family for the sake of a mental health assessment. For the initiation of puberty suppression it's an assessment for the initiation of puberty suppression. The involvement thereafter is really dependent upon what the individual needs of that child are.

Q. Do you play any role in continuing to advise whether the patient can continue to receive puberty blocking hormones or come off of them?

A. It really depends upon the context. If the child is seeking to come off of puberty suppression because of a shift in their understanding of their identity, certainly that's a conversation that I would be involved in. If they are coming off of puberty suppression because they have a sufficient amount of testosterone or estrogen in their system that they are no longer requiring that from a medical purpose, that's

not a discussion that I'm privy to.

Q. When you are discussing puberty blockers with patients and their parents do you describe them as placing a pause on puberty?

A. That's not specific language that I use.

Q. Do you describe them as being reversible?

A. Again, that's not a language that I use. I'm much more specific in my discussions.

Q. So on the issue of whether puberty blocking hormones are reversible, what do you tell parents and patients?

A. I would say, by and large, most of the effects of puberty suppression are reversible.

Q. And when you say by and large what effects are you referencing?

A. What I'm referencing is that the literature is still an open book and we are constantly seeking and learning new information. We want to understand what those potential new data tell us about the efficacy, safety, et cetera, of these interventions.

Q. So when you say they are by and large the effects are reversible, which effects are you referencing are the by and large?

A. When I say by and large, it's really a caveat to

allow for the things that we don't yet know.

Q. So which effects are reversible?

A. Virtually all of the effects that we're aware of are reversible.

Q. When you're discussing puberty blockers with patients and their parents do you describe them as safe?

A. Safe isn't a binary concept in my world. There is no such thing as anything that is completely safe or unsafe. So we talk about gradations of risk with any intervention.

Q. So for puberty blockers what are the --- what's the gradation of risk?

A. It is individualized to the specific needs of the child and the family.

Q. In general, what is your understanding of the gradations of risk across the board?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I don't have a better answer for you because that's the whole process of doing an informed consent process, is understanding what are the specific risks and benefits and alternatives for that individual child.

BY ATTORNEY BARHAM:

Q. Are you aware of the literature regarding any

testing of puberty blocking hormones and the gradations of risks presented in those tests?

A. I'm not sure what you mean by tests.

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I'm not sure what you mean by testing.

BY ATTORNEY BARHAM:

Q. Don't medications undergo testing before they can be used?

A. There's a wide variety of processes by which medications are approved or not approved for certain indications.

ATTORNEY BARHAM: Let's go to Tab 5. I believe that's Exhibit-2.

LAW CLERK WILKINSON: Exhibit-2.

BY ATTORNEY BARHAM:

Q. It's the Endocrine Society Guidelines from 2017.

THE WITNESS: Yes.

BY ATTORNEY BARHAM:

Q. On page 3880 the Endocrine Society states we suggest that clinicians begin pubertal hormone suppression therapy --- pubertal hormone suppression after girls and boys first exhibit physical changes of puberty, Tanner stages G-2/B-2. Is that consistent with

your practice?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: This is --- the document, as I read it, is a set of guidelines for the practice of care that should be individually applied to each child and family. My practice takes these recommendations and individually applies them to the specific risks, benefits and alternatives for the child sitting in front of me.

BY ATTORNEY BARHAM:

Q. On the prior page in number 1.4 the Endocrine Society recommends against puberty blocking and gender affirming hormone treatment in prepubertal children. Do you approve the use of puberty blockers before puberty?

A. I do not.

Q. You didn't recommend or prescribe any puberty blockers for BPJ.

Is that correct?

A. I have not.

Q. You did not evaluate BPJ before he started taking puberty blockers.

Is that correct?

A. I have not evaluated her or seen her, these materials.

Q. Is it your opinion that no responsible clinics begin puberty blocking before puberty begins?

ATTORNEY BLOCK: Objection to form and scope.

THE WITNESS: There's no indication to start puberty blocking agents until Tanner Stage 2.

BY ATTORNEY BARHAM:

Q. Isn't it true that there have been no Phase I clinical trials to test the safety of GnRH inhibitors for this age group?

A. That is my understanding, but I would have to specifically review the literature with that question in mind. I'm not familiar --- completely familiar with the phased nomenclature in this context.

Q. Isn't it true that there have been no Phase I clinical trials to test the safety of GnRH inhibitors for this duration?

A. Again I would need to find a definition of what you are referring to by Phase I specifically.

Q. Isn't it true there have been no clinical trials per FDA rules for this use of puberty blockers?

A. I don't know what is meant by per FDA rules.

Q. Food and Drug Administration rules?

A. Yeah. I'm not familiar with what their rules

are. There have been clinical trials of these medications for this purpose.

Q. Which clinical trials are you referencing?

A. There are clinical trials through the Dutch clinic. There is also an ongoing clinical trial here in the U.S., a multi-phase study.

Q. That study is still ongoing.
Correct.

A. That is correct.

Q. So there are no completed clinical trials in the United States under FDA rules.
Correct?

A. I am not ---.

ATTORNEY BLOCK: Objection to the form.

THE WITNESS: I can't say that I'm familiar with all clinical trials that have ever happened, so that's not a statement I can answer.

BY ATTORNEY BARHAM:

Q. You're not aware of any, though?

A. I don't know what is meant by Phase I and what specifically is registered with the FDA for their purposes versus the copious numbers of clinical trials that have happened.

Q. Are you aware of any clinical trials in the

United States that have been completed regarding the safety of using puberty blockers for gender dysphoria?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Yeah, I'm not sure how I can answer that because I'm not aware of all of the trials that have occurred.

ATTORNEY BLOCK: Counsel, can we have a discussion about the scope of this deposition? I'm happy to have it off the record. I don't want it to influence the witness at all, but this is a rebuttal witness addressing specific issues and it seems that, you know, there are a lot of questions that are just really far outside the scope. So I'd love to have a discussion.

ATTORNEY BARHAM: I'm happy to go off the record.

VIDEOGRAPHER: Going off the record. The current time reads 2:07 p.m.

OFF VIDEOTAPE

(WHEREUPON, AN OFF RECORD DISCUSSION WAS HELD.)

ON VIDEOTAPE

VIDEOGRAPHER: Back on the record. The

current time reads 2:17 p.m.

BY ATTORNEY BARHAM:

Q. We were looking at Tab 5, which is Exhibit-2, page 3874. About three-quarters down the first column the Endocrine Society indicates, quote, in the future we need more rigorous evaluations of the effectiveness and safety of endocrine and surgical protocols and specifically highlight the need to include a careful assessment of the effect of prolonged delay of puberty in adolescence on bone health, gonadal function and the brain.
Do you see that?

A. I see that, yes.

Q. Do you agree that more rigorous evaluations of the safety of endocrine and surgical protocols are needed?

A. I would agree that that's an important goal for all treatments, yes.

Q. Do you agree that because, as the Endocrine Society indicated here, that these evaluations are needed in the future, that this --- that they have not been done yet?

A. Well, this is published in 2017. There are ongoing trials that are happening now, and some that

have had at least preliminary data presented at various meetings that have looked at some of these.

Q. So the issue here is the prolong delay of puberty. You would agree that it's quite different from treating individuals with precocious puberty.
Correct?

ATTORNEY BLOCK: Objection to form and scope.

THE WITNESS: As a non-endocrinologist I wouldn't hazard an opinion on that.

BY ATTORNEY BARHAM:

Q. Do you treat individuals for precocious puberty?

A. I do not.

Q. Do you agree with the Endocrine Society that there have not yet been a study of how the prolonged delay of puberty affects bone health?

ATTORNEY BLOCK: Objection to form and scope.

THE WITNESS: I don't know if I can answer that in the most accurate way. I know I've seen preliminary data presented at various meetings about impacts on bone health, but I'm not as familiar with the endocrine literature as I am with the mental health literature.

BY ATTORNEY BARHAM:

Q. Do you agree that there has not yet been a study on the prolonged effect of --- the prolonged delay of puberty affecting gonadal function?

ATTORNEY BLOCK: Objection to form and scope.

THE WITNESS: Same answer as to the last one.

BY ATTORNEY BARNHAM:

Q. And that is the same as fertility? Correct?

A. There has been more study fertility in those populations.

Q. Do you agree there has not yet been a study on how the prolonged delay of puberty affects the brain?

A. There are ongoing studies.

Q. None complete yet?

A. None that have published thus far that I'm aware of again.

Q. And when you say there are ongoing studies of bone health, none have published so far that you're aware of. Correct?

A. I know I have seen data published at various

national and international meetings, so I could not answer that question accurately. I think things have been published on bone health, but I'm not familiar with --- I'm not as familiar with the endocrinologic literature as I am the mental health literature.

Q. Are you aware of any studies that have been completed regarding the prolonged delay of puberty affecting the cognitive, emotional, social and sexual development?

A. Can you repeat the question?

Q. Are you aware of any studies that have been completed regarding the prolonged delay --- of how the prolonged delay of puberty affects the cognitive, emotional, social and sexual development?

A. There have been a number of studies including studies that we have referenced here that have looked at long-term psychosocial outcomes for these kids. So certainly some of those items have been looked at quite extensively. Some have not yet or have studies that are ongoing.

Q. If the Endocrine Society is indicating that all of this is needed research, why are you --- what do you tell parents about the relative safety of puberty blocking hormones?

A. What I would say this was published in 2017, and so we would want to update since then about any literature since then on these potential risks. What I want to do is make sure that the endocrinologist or the adolescent medicine specialist, whoever it is that is prescribing the specific treatment knows how to have those discussions based on the psychiatric needs of the patients that I'm seeing.

Q. Let's turn to 3872 in this document. The Endocrine Society indicates that the task force followed the approach recommended by the grading of recommendations and assessments, development and evaluation group. The international group with expertise in the development and implementation of evidence based guidelines. Do you see that in the second column?

A. Yes.

Q. And in this document they indicate that the use of the phrase we recommend and the number one are strong recommendations --- use the phrase we recommend --- recommendations use the phrase of we suggest in number two. Is that correct?

A. Correct.

Q. So the recommendations regarding the use of puberty blockers are based on low quality evidence. Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: What I can state is how this particular working group within the Endocrine Society characterized it using the assessment tool and using this assessment tool that is how it was graded for the sake of this set of guidelines.

BY ATTORNEY BARHAM:

Q. Were you aware of this when you drafted your report?

A. Yes.

Q. Do you agree or disagree with this assessment of the quality of the evidence?

A. Based upon how they did it, I would agree. In the world of child psychiatry this is very common. There is very little that we have in terms of very mainstream standard of care treatments that has anything other than poor quality of evidence based upon using these standards.

ATTORNEY BARHAM: I'm going to hand you what we will mark as Exhibit 31, and that will be Tab 76?

THE WITNESS: Thanks.
LAW CLERK WILKINSON: You're welcome.

(Whereupon, Exhibit 31, Label of Lupron, was marked for identification.)

BY ATTORNEY BARHAM:
Q. This is the label of Lupron, pharmaceutical label for Lupron. Right at the top of page one, this label indicates that Lupron is approved for puberty blocking or delay for precocious puberty.
Correct?
A. That is correct.
Q. And precocious puberty is a hormonal imbalance.
Correct?
A. I think there's a precise terminology for precocious puberty that involves more than just a hormonal imbalance.
Q. But it's a malfunction of hormonal controls in the brain?
ATTORNEY BLOCK: Objection to the form.
THE WITNESS: My understanding as a non-endocrinologist is that's initiation of puberty much earlier than anticipated or expected based upon the

history of the family.
BY ATTORNEY BARHAM:
Q. So Lupron is inspected and approved by the FDA for safety and efficacy for precocious puberty not for all other possible uses.
Correct?
A. Correct.
Q. And Lupron was tested only for delaying puberty up until the normal age of puberty.
Correct?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: I'm not familiar with the literature that was used for gaining the FDA approval for this indication.
BY ATTORNEY BARHAM:
Q. If you turn to section 14.1, 14.1 you'll see that it says that this --- Lupron was tested for monthly administration on 6 males and 49 females.
Is that correct?
A. That is correct.
Q. And on the next page you'll see it was tested for three months administration on 8 males and 76 females.
Is that correct?

A. I do not see where it says that.
Q. 14.2?
A. Yes.
Q. Do you know why the test was weighted towards girls?
ATTORNEY BLOCK: Objection to form and scope and foundation.
THE WITNESS: It would be a mere supposition on my end.
BY ATTORNEY BARHAM:
Q. Is it because precocious puberty is more common in girls?
A. I would defer to an endocrinologist on this epidemiology of that.
Q. But the goal of using Lupron in this context is to help steer the body into healthy and normal development.
Correct?
ATTORNEY BLOCK: Objection to form, scope.
THE WITNESS: Generally speaking I would agree with that.
BY ATTORNEY BARHAM:
Q. Prescribing Lupron or other GnRH for gender

dysphoria disrupts hormones and developments at an early stage.
Correct?
ATTORNEY BLOCK: Objection to the form and scope.
THE WITNESS: Again, as a mental health professional, this would be outside of my area of expertise to comment on that.
BY ATTORNEY BARHAM:
Q. Would you agree that normal pubertal development includes bone growth, such as height?
ATTORNEY BLOCK: Objection to form and scope.
THE WITNESS: Yes, I would.
BY ATTORNEY BARHAM:
Q. Would you agree that normal pubertal development can include bone strengthening?
ATTORNEY BLOCK: Objection to form and scope.
THE WITNESS: Specifics of that question are really outside of my scope of understanding in the practice that I have.
BY ATTORNEY BARHAM:
Q. But in general, you would agree that bones get

stronger during puberty, especially for men?

ATTORNEY BLOCK: Objection to form and scope.

THE WITNESS: My understanding is that the process of bone health is a quite dynamic, not static nor binary process, so it's more complicated than I feel that I can answer that question to.

BY ATTORNEY BARHAM:

Q. But do bones generally get stronger as puberty progresses?

ATTORNEY BLOCK: Objection to form and scope.

THE WITNESS: Again, I think it's a more complicated answer than a yes or a no but I'm not ---.

BY ATTORNEY BARHAM:

Q. Would you agree that normal pubertal development includes brain development?

A. Yes.

Q. Each of these things have stopped or decreased by the administration of puberty blockers.

Correct?

A. I don't think we can say that it's been stopped or decreased. There's not a term decreasing brain development that has been studied or referred to in the

literature as I'm aware of it.

Q. Slower brain development?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Slower isn't a word that I've used, seen in the literature either.

ATTORNEY TRYON: Travis, can you speak up just a little bit more, please?

ATTORNEY BARHAM: Certainly.

BY ATTORNEY BARHAM:

Q. Would you agree that normal pubertal development also includes psychosocial development of an adult identity as a sexual being contemporaneous with ones peers?

A. I would say I would agree with that as an adolescent developmental process, not necessarily as a pubertal developmental process.

Q. What's the --- what's your distinction between an adolescent pubertal development --- excuse me, an adolescent developmental process and a pubertal developmental process?

A. As an example, folks who have delayed puberty, so 16-year olds who I have seen that have yet to undergo all stages of puberty nevertheless develop a sense of identity independent of the fact that their puberty has

been delayed.

Q. But their development in that regard is not contemporaneous with their peers.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: In my specific hypothetical some of their development is going to be contemporaneous with their peers. Some of it will not be.

ATTORNEY BARHAM: I'm going to show you what we will mark as Exhibit 32. This will be Tab 73.

(Whereupon, Exhibit 32, Puberty Blockers Document, marked for identification.)

THE WITNESS: Can I ask a clarifying question, it is 2:32 east coast time, not central.

ATTORNEY SWAMINATHAN: Yes.

LAW CLERK WILKINSON: Tab 73.

BY ATTORNEY BARHAM:

Q. This document is a hand out --- or it's from the --- I'm going to butcher the name, Doernbecher Children's Hospital at OHSU from their gender clinic and about puberty blockers document. At the bottom of page three, this document indicates that researchers have not

finished studying how safe puberty blockers are in the long-term.

Do you agree with that?

A. Yeah, I would agree with that.

Q. On the next page this document says that because puberty block --- because blocking puberty hormones can weaken your bones, it is best to just take them for just two or three years.

Do you agree or disagree?

A. That is outside of my scope of expertise.

Again, this is a public facing the most like website. I can't be quite certain what the context of this is, but the individualized discussions you're having with patients and families is always going to be more complex than one or two sentences.

Q. Do you expect to offer any opinion in this case that puberty blockers administered according to your guidelines are safe and reversible?

A. I don't --- I guess I don't understand the question. I provided my expert testimony and my testimony is focused on the mental health effects of various interventions.

Q. Okay.

Do you anticipate saying anything about the

reversibility of puberty blockers?
A. Other than what I have already discussed, I don't think so.
Q. Let's go to tab 5, I think that's Exhibit 2. And on page 3874, again, about two-thirds down the first column, the Endocrine Society says we still need to study the effects of puberty blocking hormones on gonadal function.
Correct?
A. Yes.
Q. That refers to hormone secretion.
Correct?
A. Hormone secretion?
Q. Uh-huh (yes).
A. I'm not sure what you mean by that.
Q. Gonadal function refers to the achievement of the production by the gonads of fertile ova or sperm.
Correct?
ATTORNEY BLOCK: Objection to form and scope.
THE WITNESS: I can't speak to the author's intent for how they used that language. It's broader in scope from my perspective than that.
BY ATTORNEY BARHAM:

Q. Does it include the achievement of production of fertile ova or sperm?
A. That is a component, yes.
Q. What other components do you have in mind for that term?
A. For gonadal development includes size, shape, sexual functioning.
Q. On page 31, I want to go to --- have we done Tab 6 yet?
ATTORNEY BARHAM: I want to introduce what will be marked as Exhibit 33, this will be Tab 6. These are Endocrine Society guidelines from 2009.
LAW CLERK WILKINSON: I don't think I have that.
ATTORNEY BARHAM: Maybe we do.
LAW CLERK WILKINSON: Six?
ATTORNEY BARHAM: Uh-huh (yes).
LAW CLERK WILKINSON: Uh-uh (no).
BY ATTORNEY BARHAM:
Q. We will go back to Tab 5 then, Exhibit 2. Would you agree that if the administration for puberty blockers for gender dysphoria has irreversible effects on brain development, that would be a serious safety problem?

ATTORNEY BLOCK: Objection to form.
THE WITNESS: All risks are graded risk an benefits as well as alternatives for each individual child.
BY ATTORNEY BARHAM:
Q. But if it had an irreversible affect on brain development that would still be a serious concern, regardless of the gradations that we would have to consider and address it?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: There are a number of interventions that lead to irreversible changes that are beneficial and are not of concern to safety.
ATTORNEY BARHAM: All right.
Do we have Tab 32?
LAW CLERK WILKINSON: That one I have.
ATTORNEY BARHAM: This will be Exhibit 33, Tab 32 just to make it conducive.

(Whereupon, Exhibit 33, Endocrine Society's Guidelines, was marked for identification.)

BY ATTORNEY BARHAM:

Q. And if you look on --- at the end of the document where it says for more information, it stated this is a document from the National Institute of Mental Health.
Correct?
ATTORNEY BLOCK: Objection to form, foundation.
THE WITNESS: I have no idea of what the context of this website is or what this is from.
BY ATTORNEY BARHAM:
Q. But it gives the National Institute of Mental Health's website.
Is that correct?
A. It does.
Q. And it says for more information you can e-mail the National Institute of Mental Health e-mail address.
Correct?
A. That is correct.
Q. And that's a part of the National Institute.
Right?
A. It is.
Q. And the citations it's drawing from articles in 1999 and 2000.
Correct?

A. That is correct.
Q. On page one in the middle column, the article describes gray matter at the thinking part of the brain. Do you agree with that description?
A. I would describe it as a gross mischaracterization of the complexity of the brain.
Q. What is your understanding of the function of the gray matter?
A. That is one element of it. I think it is a lot of nuance, I guess is the word that I'm looking for. It's not characterized by that much of a pithy phrase, not of a neuropathologist.
Q. The article talks about a second wave of production in gray matter that peaks around age 11 in girls and 12 in boys. And the article refers to that as just prior to puberty. In terms of Tanner stages that would be around Tanner 2 for most boys and girls, would it not?
A. That would be Tanner Stage 1.
Q. That would be Tanner Stage 1. But by 11 or 12 you have already --- by age 12-ish in boys, it's typical for puberty blockers to have been administered. Correct?
A. To use the language of this article, the

differences in Tanner stages is caused by the, quote, surging sex hormones not the other way around. So it's not about age, but it's the exposure to hormones that causes the Tanner stages to develop.
Q. Have you made a study yourself about the timing of brain gray matter development and the puberty hormones in causing that development?
A. I have not.
Q. Do you have any reason to doubt the timing and nature of development as set out in this National Institute of Health publication?
ATTORNEY BLOCK: Objection to form and foundation.
THE WITNESS: I only have the context of this article that you've put in front of me for the first time and in this article they describe the brain changes just happening prior to puberty, which is prior to when we would be initiating any interventions medically.
BY ATTORNEY BARHAM:
Q. And it says though that it is possibly the thickening peaks around 11 or 12, depending on girls and boys and that's possibly related to the influence of surging sex hormones.

Correct?
A. If that's what it says, yes.
Q. Do you know --- have you conducted any studies to determine the effect of administering puberty blockers during the ordinary years of puberty and how that would impact the ordinary development of brain matter in the brain of a child?
A. I have not, but it kind of sounds like that is conflating this as a study, which is definitely not.
Q. No, I'm just asking if you had conducted any such studies?
A. I have not.
Q. Are you aware of any such studies?
A. There are studies that are ongoing now.
Q. That are ongoing.
ATTORNEY BARHAM: Okay.
I'm going to show you what we marked as Exhibit 34, this will be Tab 33.

(Whereupon, Exhibit 34, Article by Blakemore, et al., was marked for identification.)

BY ATTORNEY BARHAM:

Q. This is an article by Blakemore, et al., published in 2010, The Role of Puberty in the Developing Adolescent Brain. On page 929, the article states the ages at which these peaks in gray matter volume were observed correspond to the sexually dimorphic ages gonadarche, I'm mispronouncing that, onset which suggests possible interactions between puberty hormones and gray matter development. Do you agree or disagree with that statement?
A. I'm not seeing where you're referring to this.
Q. On page 929, first column right above the role of puberty in gray matter development?
A. As stated in this study, the changes were observed to correspond to the ages which suggest possible interactions. I have no objection to the idea that there are possible interactions between puberty hormones and gray matter development, but again, outside the field of my expertise.
Q. Okay. It also refers to other MRI studies showing a gradual emergence of sexual dimorphisms across puberty. Do you know what sexual dimorphism of the brain means?
A. I do.
Q. What does it mean?

A. Differences that are measurable between folks assigned female and folks assigned male at birth is typically how that is described.

Q. On the first page of this document it says throughout adolescence there are changes in the structure and function of the brain, sexual dimorphism in many of these changes suggest possible relationships to puberty.

This article is saying that the available evidence suggests sex links puberty hormones to play a role in stimulating brain development; do you agree?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Certainly I agree that exposure to sex hormone is a part of brain development for all people. We know less about the developing brain for transgender youth.

BY ATTORNEY BARHAM:

Q. Do you agree this includes a aspects of brain development that differ between healthy males and healthy females?

ATTORNEY BLOCK: Objection as to form.

THE WITNESS: I don't. I haven't seen any literature that speaks to that specific question.

BY ATTORNEY BARHAM:

Q. Okay.

Let's go back to Exhibit 2, page 3882?

ATTORNEY BLOCK: What page was that, Counsel?

ATTORNEY BARHAM: 3882.

BY ATTORNEY BARHAM:

Q. Under the heading side effects, the article indicates that the primary risk of pubertal suppression in GD, gender incongruent adolescents may include, ellipses, unknown effects on brain development, do you see that?

A. I see that.

Q. And in the first column of 3883 indicates that animal data suggests there may be effects of GnRH analogs on cognitive function.

Do you see that?

A. I see that.

Q. Cognitive function means the ability to think.

Correct?

A. That is one aspect of cognitive functioning.

Q. Do you tell parents and patients that the Endocrine Society has indicated that there are unknown effects on brain development related to the use of puberty blocking hormones?

A. I typically use language that is more similar to how they actually described it in this article which is to say that it may have unknown effects on brain development.

Q. Okay.

ATTORNEY BARHAM: Let's go to Tab 32, which we have already looked at and that is Exhibit.

LAW CLERK WILKINSON: Exhibit 33.

BY ATTORNEY BARHAM:

Q. Exhibit 33?

ATTORNEY GREEN: Travis, this is Roberta Green. I'm sorry to interrupt. I wondered if you wouldn't mind keeping your voice up I'm just having trouble hearing. No doubt it's me but it'd be great. Thank you.

ATTORNEY BARHAM: It may also be where I'm located in the room, but I'm getting it from enough people, so I appreciate the reminder.

VIDEOGRAPHER: Counsel, did you say Exhibit 33.

ATTORNEY BARHAM: Exhibit 33.

BY ATTORNEY BARHAM:

Q. Page two at the top refers to the gray matter --- or the white matter and how research purports a wave

of white matter growth that begins at the front of the brain in early childhood, moves to the side after puberty, striking growth spurts can be seen from age 6 to 13 in areas connecting brain regions specialized for language and understanding special relationships. Ages 11, 12 and 13 are sort of the heart and center of puberty.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: It depends upon the child.

BY ATTORNEY BARHAM:

Q. In general?

ATTORNEY BLOCK: Same objection.

THE WITNESS: I don't want it to be like I'm parsing this out, but it's really important. We can't apply population based data onto an individual and make conclusions about it.

BY ATTORNEY BARHAM:

Q. But we can assess population-based data as to when puberty is generally occurring and generally it's occurring around the ages of 11 to 13?

A. I would agree with the statement that puberty is generally occurring within those age ranges, yes.

Q. And that is also approximately when puberty

blocking hormones are being prescribed.
Is that true?
A. It depends upon the individual.
Q. But generally around age 12 is what you indicated earlier.
Correct?
A. It really depends upon the individual. To clarify, it's based upon Tanner stage as one element, age has one element, psychosocial functioning has another, family choices. It's a calculus of the risks, benefits and alternatives that guide when we decide to intervene if we decide to intervene.
Q. So you would agree that a teenage brain and cognitive development across puberty is a very complicated area and one that's not easily understood.
Correct?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: Yes, adolescent brain development is a complicated phenomenon for sure. I have no objection to that.
BY ATTORNEY BARHAM:
Q. Is that an area of your professional research and investigation?
A. Specifically on neuroscience with regard to

adolescent development, no, it is not.
ATTORNEY BARHAM: Let's go to Tab 8.
THE WITNESS: I need to take another bathroom break.
ATTORNEY BARHAM: Let's just take a break now. Let's go off the record.
VIDEOGRAPHER: Going off the record. The current time reads 2:53 p.m.
OFF VIDEOTAPE

(WHEREUPON, A SHORT BREAK WAS TAKEN.)

ON VIDEOTAPE
VIDEOGRAPHER: Back on the record. The current time reads 3:00 p.m.
BY ATTORNEY BARHAM:
Q. Are you an expert on suicide and suicidality?
A. I guess I don't know exactly how to qualify that response. I know more than most people about suicide and suicidality, yes.
Q. Have you made any systematic study of suicide among the thousands treated at the NYU Gender and Sexuality Service?
A. I have not.

Q. Have you made any systematic studies of suicide among the thousands treated at the Lurie Children's Hospital here in Chicago?
A. I have a study ongoing.
Q. Has that study generated any preliminary results yet?
A. It has not.
Q. Have you made any systemic studies of suicide among the thousands you've treated at the Gender Variant Youth and Family Network?
A. That is not a clinical service.
Q. Are you aware that suicide for any reason is extremely rare among children younger than 15?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: I would disagree with that as a statement. It's among one of the top causes of death for children of ages 10 to 15.
BY ATTORNEY BARHAM:
Q. And what's your basis for saying that?
A. The CDC data.
Q. Did you cite that data in your report?
A. I did not.
Q. You're not offering an opinion that BPJ faced a high suicide risk unless put on puberty blockers.

Correct?
A. I am not.
Q. Has any responsible health authority or organization made a claim that the use of puberty blockers relate to suicide?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: I mean, that's a big list. I don't think any that I'm aware of have made the claim, especially when it comes to causation.
BY ATTORNEY BARHAM:
Q. In paragraph 19 of your report you refer to gender-affirming hormone therapy and you make similar statements in paragraphs 39, 40, 41 and 42. What do you mean by gender affirming hormone therapy?
A. Typically speaking when I'm referring to gender-affirming hormone therapy, these are hormones that are aligned with the gender identity.
Q. So that means the administration of cross sex hormones.
Is that correct?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: Yeah. I mean, I think I would call them gender-affirming hormones. That is how typically they are referred to in the literature.

BY ATTORNEY BARHAM:

Q. So this means that you would administer testosterone to natal females.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I personally would not, but ---.

BY ATTORNEY BARHAM:

Q. Cross sex hormones or gender-affirming hormones refers to the administration of testosterone to natal females.

Correct?

A. Or assigned females at birth, yes, that's correct.

Q. And it means the administration of testosterone suppression of estrogen for natal males.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Assigned male at birth, yes.

BY ATTORNEY BARHAM:

Q. You mean assigned males at birth?

A. Yes. Is that what I not said? Sorry.

Q. What is your role in the administration of cross

sex hormones?

A. It depends on the child and the family, but my role is most often as a mental health professional who is either doing the assessment or providing care for the co-occurring psychiatric disorders that are present in that individual child.

Q. Cross sex hormones prevent rather than enable an adolescent from becoming capable of reproducing sexually.

Correct?

ATTORNEY BLOCK: Objection to the form.

THE WITNESS: That's not something that I can answer. That's out of the scope of my expertise.

BY ATTORNEY BARHAM:

Q. You lack an understanding of the effects of administering cross sex hormones?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I would disagree with that statement.

BY ATTORNEY BARHAM:

Q. So my question is what is the effect of administering cross sex hormones on an adolescent's ability to develop and become capable of reproducing sexually?

A. It's a highly complicated question that depends upon a lot of factors that are above the scope of my testimony here. As an example, there are many adult transgender men who become pregnant despite being on testosterone for many years.

Q. And what studies are you referencing that support that statement?

A. I'm not referencing any studies to this. I'm referencing personal experiences.

Q. Okay.

Cross sex hormones cannot cause an adolescent to develop the genitalia associated with his or her --- his or her desired transgender identity.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: That's correct.

BY ATTORNEY BARHAM:

Q. Cross sex hormones also cannot achieve male height in a natal female.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I would defer to my endocrine colleagues on that answer.

BY ATTORNEY BARHAM:

Q. Can cross sex hormones change the hip and leg configuration in a natal male to match that of a natal female?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I would defer to my endocrine colleagues on that question.

ATTORNEY BARHAM: Let's go to Tab 77. This is probably new.

LAW CLERK WILKINSON: Yes.

ATTORNEY BARHAM: This is an article by Guss, et al. in 2015, entitled Transgender and Gender Non-Conforming Adolescent Care. This will be Exhibit 35.

(Whereupon, Exhibit-35, Article by Guss, et al., was marked for identification.)

BY ATTORNEY BARHAM:

Q. Are you familiar with the authors?

LAW CLERK WILKINSON: I'm sorry. I gave you the wrong one. Here is the right one.

THE WITNESS: I know Dr. Shumer. And we read something by Katz-Wise earlier. I don't know Carly Guss.

BY ATTORNEY BARHAM:

Q. Page four of this document indicates that if a patient is on cross sex hormones it's important to remind them that the side effects may be infertility.

Is that correct?

A. Where are you pointing to?

Q. The top of page four.

A. Yes.

Q. Do you agree with that statement?

A. I agree.

Q. Do you know of any long-term studies that will change to what extent infertility caused by taking cross sex hormones can be reversed later in life?

A. There are ongoing studies now, but I'm not aware of any that have published anything.

Q. Have you studied the literature regarding mental health problems in adults resulting from sterility?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I don't know what you mean by studied. I don't think probably more than any cursory manner.

BY ATTORNEY BARHAM:

Q. The use of cross sex hormones to affirm a transgender identity is an off-label use.

Correct?

ATTORNEY BLOCK: Objection to terminology.

THE WITNESS: If by off label you mean off label for the FDA?

BY ATTORNEY BARHAM:

Q. Yes.

A. Yeah, as far as I know. Again, I'm not prescribing these medications as a psychiatrist.

Q. Earlier you mentioned that some of your patients, some trans --- some women --- natal females who identify as male have been able to become pregnant. Do you recall that testimony?

A. I did not say anything about my patients, I said those were personal experiences.

Q. Personal experiences. I'm sorry. I assumed it was patients, so thank you for that correction. I would like to show you Tab 81. This is going to be an article by Moseson, et al. in 2020, entitled Pregnancy Intentions and Outcomes, tab 81 for those at home and Exhibit 36 for the record.

--

(Whereupon, Exhibit-36, Article by Moseson, et al., was marked for identification.)

BY ATTORNEY BARHAM:

Q. Are you familiar with this study?

A. Certainly not the details of it. This is the first time I'm recalling looking at it.

Q. Are you aware of any other studies regarding the ability of individuals taking cross sex hormones to become pregnant?

A. There are a number of ongoing studies that are looking into those questions, yes.

Q. If you look at Table 3 on page number 36, this table indicates there were 79 pregnancies among the respondents who have ever used testosterone.

Do you see that?

A. Yes.

Q. And there were 342 among those who have never used testosterone.

Do you see that?

A. I see that.

Q. But only 15 of these pregnancies occurred after initiating testosterone. Is that correct? And I'm referencing page 33 when I say that, at the bottom of page 33.

ATTORNEY BLOCK: Where is this on page 33?

ATTORNEY BARHAM: The very last line on page 33 extending over onto page 35.

THE WITNESS: I see on Table 2 the number of pregnancies after initiating testosterone was 15.

BY ATTORNEY BARHAM:

Q. So the other 337 of the pregnancies tell us nothing about the impact of testosterone on female fertility and the possible impact of birth defects.

Correct?

A. Well, the question about fertility certainly doesn't speak to us being able to understand it more based upon the data points. And without reading the article I don't know if the author said anything about birth defects.

Q. On page 35 it indicates that 2 of the 15 --- or 4 of the 15 pregnancies that started while taking testosterone half of them ended in miscarriage.

Correct?

A. Yes.

Q. One ended in abortion and one was not reported.

Correct?

A. I don't see where that is.

Q. It's the same line. Two of these four pregnancies ended in miscarriage, parentheses, one ended in abortion in the outcome and testosterone duration for the other four were not reported?

A. Yes.

Q. Okay.

And there is no data given on the other outcome of the other 11 pregnancies. So this article does not document a single live birth to a natal female at any time after taking testosterone.

Correct?

ATTORNEY BLOCK: Objection to form. And give him a chance to read, please.

THE WITNESS: I would really have to read the article quite closely to agree with that. I'm not seeing the text in this article to support that. In the Pregnancy Intentions and Outcomes, as I'm reading it, it discusses what the potential outcomes are, but it didn't parse those into who had testosterone before or after, so I'm not sure.

BY ATTORNEY BARHAM:

Q. Okay.

Let me shift gears and turn to paragraph 37 of your report. There you indicate --- you state that

there is no evidence supporting Dr. Levine's speculation that allowing prepubertal children to sexually transition puts children on a conveyor belt to becoming transgender adolescents and adults. And you say evidence shows that prepubertal children who are likely to have a stable transgender identity into adolescence are the children who are most likely to articulate a strong and consistent need to socially transition.

Do you see that?

A. I see that.

Q. And in footnote 11 you cite an article by Steensma published in 2013.

Is that correct?

A. That's correct.

ATTORNEY BARHAM: I will show you what we're going to mark as Exhibit 37, Tab 120, and I will also show you Tab 121, which is Exhibit 38.

(Whereupon, Exhibit-37, Article by Steensma, was marked for identification.)

(Whereupon, Exhibit-38, Analysis, was marked for identification.)

BY ATTORNEY BARHAM:

Q. Tab 120, Exhibit 37, is the Steensma article that you cited in footnote 11 of your report.

Is that correct?

A. That is correct.

Q. Let's look at Table 1 on page 584. And it gives --- in the first four columns it gives numbers on persistence and desistance among the study subjects. And about halfway down it delineates how many of the persisting boys and girls and desisting boys and girls had a childhood diagnosis of gender identity disorder.

Correct?

A. Correct.

Q. And it also breaks down how many were subthreshold. I'm presuming that means for gender identity disorder.

Correct?

A. That is correct.

Q. So according to Table 1, 91.3 of the 23 persisting boys had gender identity disorder.

Correct?

A. Correct.

Q. So that means about 21 of the 23 persisting boys had that condition.

Correct.

A. Correct.

Q. And according to Table 1, 95.8 of the 24 persisting girls had the same diagnosis or 23 of the 24.

Correct?

A. That's correct.

Q. And according to the same Table, 39.3 of the 56 desisting boys had that diagnosis.

Correct?

A. That is correct.

Q. So that's 22 of the 56.

Correct?

A. I'll take your word for the math.

Q. Well, you can see it on Exhibit-121 (sic). On Table 1, 58.3 of the 24 desisting girls had gender identity disorder or 14 of the 24.

Correct?

A. Correct.

Q. Do you see any reason to dispute the figures set forth on Exhibit --- on Tab 121, Exhibit 39 --- Exhibit 38?

A. No, I have no reason to ---.

ATTORNEY SWAMINATHAN: I think he is looking at the wrong document.

BY ATTORNEY BARHAM:

Q. I'm talking about this.

A. Got it. So this is a transposition from Table 1?

Q. Correct.

A. I mean, I'm going to have ---.

ATTORNEY BLOCK: Just objection. I'm sorry, can we put on the record what this document is? Is it a reprint of what's in the Steensma or is it new analysis that ---?

ATTORNEY BARHAM: Exhibit 38 is an analysis of the Steensma 2013 article that is Exhibit 37.

ATTORNEY BLOCK: Thank you. And is there an author of the analysis?

ATTORNEY BARHAM: I'm sorry. Say that again.

ATTORNEY BLOCK: Is there an author of this analysis?

ATTORNEY BARHAM: Yes, it was me.

BY ATTORNEY BARHAM:

Q. So according to the figures that have been calculated from table one of the Steensma article, 80 children --- of the 80 children who had gender identity

disorder, 44 persisted and 36 desisted.

Is that correct?

ATTORNEY BLOCK: Objection to give the witness a chance to see it on his own what the figures are.

THE WITNESS: I'm not sure I understand what your question is.

BY ATTORNEY BARHAM:

Q. Of the children with the --- the 80 children who had a diagnosis of gender identity disorder, 44 persisted and 36 desisted.

Is that correct?

A. I would have to do the math myself for me to say yes to that, but it's about right.

Q. So according to Steensma figures, of the children with the strongest transgender identity as children 55 percent persisted and 45 percent desisted.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Again, I would have to run those numbers myself in order to --- unless it's referred to already in the article, but that sounds about right.

BY ATTORNEY BARHAM:

Q. In footnote 12 of your report, paragraph 37, you cite an article by Rae saying for the proposition that socially transitioning before puberty did not increase children's cross gender identification and deferring transgender did not decrease cross gender identification.

Is that correct?

A. That is correct.

ATTORNEY BARHAM: All right.

Let's turn to Tab 108. This will be Exhibit 39, and it will be an article by Rae, et al. published in 2019, Predicting Early Childhood Gender Transitions.

ATTORNEY BLOCK: It's 2:22 central time. So the witness has to take a break at 2:30?

THE WITNESS: I can do 2:45.

(Whereupon, Exhibit 39, Article by Rae, et al., marked for identification.)

BY ATTORNEY BARHAM:

Q. Exhibit 39 is the article that you cited in footnote 12 of your report.

Is that correct?

A. That's correct.

Q. On page 679 the author indicates that replication of this affect is muted preferably from longitudinal study comparing a single group of children before and after transition.

Correct?

A. That's correct.

Q. And the authors also indicate that they tested a sample skewed by race, class, parental that education and political affiliation that may or may not affect the children that are socially transitioning now or in the future.

Correct?

A. That is correct.

Q. And they also indicate that follow-up occurred only two years after testing and some of the children who had not transitioned could transition in the future and some who had transitioned could not revert in the future.

Correct?

A. Correct.

Q. And they indicated that there sample is likely an over estimate of how many gender conforming children in the general population will socially transition.

Correct?

A. Where is that in the article?

Q. Second column of page 679.

A. Yes.

Q. Same column they also indicate that they relied on a convenient sample of individuals recruited through lists and events serving transgender children and gender non-conforming children.

Correct?

A. That is correct.

Q. Let's go back to Tab 5, which is Exhibit 2. Page 3879, the Endocrine Society indicates that if children have completely socially transitioned they have my greater difficulty returning to the original gender on entering puberty.

Is that correct?

A. That's correct. It says it there, but that's based on supposition.

Q. Footnote 40 --- reference number 40 supposition --- reference number 40 is an article by Steensma, et al., published in 2011.

Are you saying that that's a supposition?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: No, I'm saying that the

part of that article that refers to the theoretical risk is based not on any data that was collected by the researchers in that study.

BY ATTORNEY BARHAM:

Q. The Endocrine Society also indicates that the social transition has been found to contribute to the likelihood of persistence.

Is that correct?

A. That is a misstating of Dr. Steensma.

Q. That is what the Endocrine Society has concluded.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: That is what they have written here in the article you presented, yes.

ATTORNEY BARHAM: Let's go to Tab 97 number ---.

LAW CLERK WILKINSON: Exhibit 16.

BY ATTORNEY BARHAM:

Q. Exhibit Number 16, and we are going to be looking at the sixth page of this document. And Dr. D'Angelo, et al. article indicates that since almost all the children treated with puberty blockers proceeded to cross sex hormones concerns have been raised that

puberty blockers may consolidate gender dysphoria in young people putting them on a lifelong path of biomedical invention.

Is that correct?

ATTORNEY BLOCK: Object is to form.

THE WITNESS: Can you show me where that is on this page?

BY ATTORNEY BARHAM:

Q. The first column on the second paragraph. The second column.

ATTORNEY TRYON: Jake, can you scroll down a bit?

THE WITNESS: I would not agree with how you asked that question, I guess. Can you repeat it or clarify?

BY ATTORNEY BARHAM:

Q. I just was reading what it said. They indicate in this section additionally since almost all of the children treated with puberty blockers proceed to cross sex hormones citing de Vries 2014, concerns have been raised at puberty blockers may consolidate gender dysphoria in young people, putting them on a lifelong path of biomedical interventions?

A. It's bit of a logical leap and also just

incorrect. The de Vries study specifically was looking at the children in the Amsterdam clinic, which is not broadly applicable to other gender clinics across the rest of the world.

Q. But you relied upon de Vries 2014 article in your report as well, didn't you?

A. I agree. Yeah.

Q. So there are professionals who have raised these concerns and hold the concerns that social transitioning cannot change the outcome for a child.

Is that correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I think there's two different questions. The first question is, do I agree with this statement that almost all children treated with puberty blockers proceed to cross sex hormones? That is not data that we have nor does this article point to data other than the Dutch clinic that has a very specific protocol.

The question about whether social transition changes a child's trajectory is a different question. It is a question that the Dutch have raised as a possibility, but has not, I have not seen any literature that provides evidence for that.

BY ATTORNEY BARHAM:

Q. But you will recognize that there are some researchers in the field who have raised these concerns and do hold these concerns.

Correct?

A. There are researchers in the field who ask these questions, yes.

ATTORNEY BARHAM: Let's go to Tab 38.

ATTORNEY TRYON: How late are we going in this session; until 2:30 or 2:45?

ATTORNEY BARHAM: The witness has indicated he can go to 2:45.

ATTORNEY TRYON: Okay.

ATTORNEY BARHAM: Exhibit 40 is an article by Carmichael, et al. 2021, Short-term Outcomes of Pubertal Suppression in a Selected Cohort of 12 to 15 year old Young People. If you'll turn to page 12.

(Whereupon, Exhibit 40, Article by Carmichael, et al., was marked for identification.)

BY ATTORNEY BARHAM:

Q. Are you familiar with this paper?

A. I have not read through this paper, yet.

Q. The lead authors are associated with the Tavistock?

A. That is correct.

Q. And that's part of the National Health Services of the UK.

Is that correct?

A. That is correct?

Q. And it's the leading and most respected clinic in the UK.

Correct?

A. That I can't answer.

Q. If you'll look at page 12, the authors indicate that one young person decided to stop GnRHa and did not start cross sex hormones due to continued uncertainty and concerns about the side effects of cross sex hormones, the remaining 43 or 98 percent elected to start cross sex hormones.

Is that correct?

A. Correct.

Q. So the vast majority of these children who received puberty blockers went onto take cross sex hormones.

Correct?

A. That is correct.

Q. Would you agree that the majority of children who receive puberty blockers go on and take cross sex hormones?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: That is not a question that we have an answer to based upon the literature. A majority of patients with gender dysphoria that are prescribe puberty blockers are not involved in clinical care at either the Tavistock clinic or the Amsterdam clinic.

BY ATTORNEY BARHAM:

Q. Is it --- in your practice, do the majority of children who receive puberty blockers for gender dysphoria go on to take cross sex hormones?

A. Based upon the demographic of the patients that I'm seeing, particularly in Chicago, yes, but I'm not seeing the younger kids as much as I did in New York.

Q. So as a practical and ethical matter the decision to put a child on puberty blockers must be considered as equivalent of a decision to put the children on cross sex hormones with all of the considerations and full consent obligations listed in that decision.

Correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: No.

BY ATTORNEY BARHAM:

Q. Why do you say --- why do you disagree?

A. Inherent in the informed consent process is a specific discussion of the risk benefits and alternatives of a specific intervention. Hormones are not puberty blockers, it's a separate discussion.

Q. Even though the vast majority according to the research and according to your testimony go onto take cross sex hormones?

ATTORNEY BLOCK: Objection to form and mischaracterizes testimony.

THE WITNESS: A description of the potential trajectories of development is a part of the discussion in an informed consent process for the engagement with puberty suppression agents. It's not the same as informed consent process discussion around the use of hormones at that time.

BY ATTORNEY BARHAM:

Q. So when you're having an informed consent discussion surrounding the decision to start puberty blockers, do you discuss with parents and patients the

dangers associated with cross sex hormones?

A. This is going to be very individualized discussions that we have with families. It's a very momentous decision to make this kind of treatment choice. The potential trajectories are all discussed and there's risk to everything. I don't think it is useful to use the term dangers in the context of medical care but it's about weighing risks of interventions but also weighing the risks of non-intervening. And it's appropriate to have those discussions about what those potential outcomes may be with each individual kid.

Q. How do you get informed consent from a child?

A. You get assent from a child, but you get informed consent from a parent.

Q. How do you get --- how can a child even begin to understand the implications of starting puberty blockers and then potentially going to cross sex hormones, the effects that that may have on the fertility when the child is 12-ish?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Well, I have a skewed perspective here because of the work that I do, but there are 12-year-olds who are often much more capable of having that kind of informed decision than many

adults that I have encountered, which is to say it's an individualized assessment based upon multiple things, including the cognitive status of the child, their capacity to engage back and forth and have an open discussion and a realistic discussion about the potential benefits, risks and alternatives in specific intervention.

BY ATTORNEY BARHAM:

Q. Is it your position that most 12-year-olds have a better understanding or a better capability of making decisions about their long-term fertility than adults?

A. It is not my position and I will reflect that that was a statement meant in jest, but it does reflect some sense of reality in terms of the maturity level of 12-year-olds, not speaking to the maturity level of most 20-somethings in the world.

ATTORNEY BARHAM: I think this would be a good time to pause for your appointment and give you a few moments before that starts, so we'll go off the record.

VIDEOGRAPHER: Going off the record. The current time reads 3:37 p.m.

OFF VIDEOTAPE

(WHEREUPON, A SHORT BREAK WAS TAKEN.)

ON VIDEOTAPE

VIDEOGRAPHER: Back on the record the current time reads 4:31 p.m.

ATTORNEY BARHAM: All right. Let's go to Tab 16, which will be Exhibit Number 41.

(Whereupon Exhibit 41, Washington Post Article, was marked for identification.)

BY ATTORNEY BARHAM:

Q. This is will be a Washington Post article from January 10, 2022. Are you aware of the 2021/2022 season swimming events surrounding the University of Pennsylvania's swimmer Lia Thomas?

ATTORNEY BLOCK: Objection to scope.

THE WITNESS: I have not been following closely, but I've heard about it.

BY ATTORNEY BARHAM:

Q. Okay.

On page three of Exhibit 41, the article references that Lia Thomas in her first year in the Women's Division after more than a year of testosterone

suppression set the Women's Division record in two events.

Do you see that?

A. I see that, yes.

Q. And Lia Thomas beat the best time of women's Olympian Torri Huske in the 200 freestyle.

Do you see that?

A. I see that.

ATTORNEY BLOCK: I just want to note an objection to foundation, that there's no URL. This appears to be cut and pasted. So I'm just noting that for the record.

ATTORNEY BARHAM: And I would note For the record that there is an URL at the bottom of page --- at the bottom of each page.

ATTORNEY BLOCK: Thanks. It's not visible from what's on the screen.

ATTORNEY BARHAM: Okay.

Just trying to be clear.

BY ATTORNEY BARHAM:

Q. Is it your position that it is fair for Lia Thomas to compete in the Women's Division of swimming?

ATTORNEY BLOCK: Objection to scope.

THE WITNESS: I don't have an opinion on

the fairness.
BY ATTORNEY BARHAM:
Q. Do you believe that it's beneficial to Lia Thomas' mental health to compete in the Women's Division?
A. I couldn't tell you that unless I had evaluated Lia Thomas herself.
Q. But it's your opinion as expressed in paragraph 52 of your report that no reasonable mental health professional could conclude that the Act is anything but harmful to the mental health of transgender youth.
Is that correct?
A. I would say youth as a class, yes, that is correct, but the specific details of that impact are not going to be known and I wouldn't care to surmise on it for a specific individual that is not under my care.
Q. Okay.
But it's your position that allowing a transgender --- or allowing natal males to compete in the Women's Division if they are gender dysphoric is beneficial to their mental health, in general.
Correct?
ATTORNEY BLOCK: Objection to terminology

and form.
THE WITNESS: In my report, excluding transgender youth can be harmful to their mental health.
BY ATTORNEY BARHAM:
Q. And when you say excluding them you mean excluding them from competition consistent with their gender identity.
Is that correct?
A. That is correct.
ATTORNEY BARHAM: All right.
I want to show you Tab 17 now. This will be Exhibit-42.

(Whereupon, Exhibit 42, Out Sports Article, was marked for identification.)

BY ATTORNEY BARHAM:
Q. Have you read about Iszac Henig before today?
A. I have not.
Q. This is an article from Out Sports published on January 9th, 2022, by Karleigh Webb entitled Trans swimmers Lia Thomas and Iszac Henig went head-to-head in the pool, each getting wins. Are you aware that Iszac Henig is a biological female who identifies as male?

A. I have not heard of Iszac Henig until today at least by name.
Q. Do you see on the first page of this article the article reads Henig, a trans man competing on the women's swimming team at Yale?
A. I see that, yes.
Q. So in this event a biological male identifies as female, Lia Thomas, competed against a biological female who identifies as male, Iszac Henig, in the women's competition?
ATTORNEY BLOCK: Objection can you give him a chance to read the article. He's never seen or heard of this before?
THE WITNESS: It seems that is what stipulated in the article.
BY ATTORNEY BARHAM:
Q. Okay.
According to the terminology you prefer, do you consider Henig to be anything other than a man?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: I will typically ask the individuals that I'm working with or engaging with how they choose to define their own sense of labels. Not knowing Iszac I can't speak for him.

BY ATTORNEY BARHAM:
Q. Okay.
But according to the terminology that you've been using Iszac would be an individual assigned female sex at birth and identifying as male.
Correct?
A. Again, I don't see ---
Q. Henig a trans man?
A. --- a description of his words to describe his identity, so I can't say how he identifies himself, but it appears through that that's how --- that is the implication of the article at least.
Q. In the article it uses masculine pronouns to refer to Henig.
Correct?
A. Yes.
Q. Do you think it'd beneficial to Henig's mental health to compete on the women's team?
A. Again, I can't answer that unless I had evaluated Henig myself.
Q. In general, if you have a transgender individual who wants to compete on the team consistent his or her biological sex, do you think it's beneficial to his or her mental health to be allowed to do so?

ATTORNEY BLOCK: Objection to form.
THE WITNESS: Again, this is an individualized discussion that you have with patients. With the patients that I've had I have had patients who would be harmed by having to compete with the cohort of kids who were aligned with their sex assigned at birth.
BY ATTORNEY BARHAM:
Q. I understand your position about kids who are forced to do something, what about kids who want to compete with that same cohort, do you think it's beneficial to allow them to compete as they see fit?
A. As a mental health professional working with kids and families, it really is an individualized discussion. There is not going to be a specific answer that's universal for all kids.
Q. Do you believe that if Henig were prevented from competing with the women's team as desired, that it could be harmful to Henig's mental health ---
ATTORNEY BLOCK: Objection to form.
BY ATTORNEY BARHAM:
Q. --- possibly?
A. I can't speak to the specifics about a person that I've never evaluated.
Q. If it is harmful to someone's mental health to

be prevented from participating in athletics on a team consistent with their gender identity, could it be harmful to their mental health to be prevented from competing on a team consistent with their biological sex if they so wanted to?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: I think there's a whole host of hypotheticals that could potentially be possible.
BY ATTORNEY BARHAM:
Q. And that is one of them?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: That's possible.
ATTORNEY BARHAM: Okay.
BY ATTORNEY BARHAM:
Q. In paragraph 34 of your report you write a recent study found people who reported experiencing those conversion efforts were more likely to report an attempted suicide, especially those who reported receiving such therapy in childhood.
Do you see that?
A. I see that.
Q. And there we are talking about conversion therapy.

Is that correct?
A. We're talking specifically about the study participants on perceptive perceptions of conversion therapy.
Q. But that's what's meant by those conversion efforts.
Correct?
A. Correct.
Q. In footnote six you cite an article by Turban published in 2020.
Is that correct?
A. That is correct.
ATTORNEY BARHAM: All right.
I'm going to show you Tab 113, which will be Exhibit 43.

(Whereupon, Exhibit 43, Article by Turban, et al., was marked for identification.)

BY ATTORNEY BARHAM:
Q. This is an article published by Turban, et al. published in 2020, it's entitled Association Between Recalled Exposure to Gender Identity Conversion Efforts

and Psychological Distress and Suicide Attempts Among Transgender Adults. This is the article that you cited in your report.
Is that correct?
A. That is correct.
Q. And this is the article cited in footnote six as support for the proposition that studies that found that people who reported conversion efforts are more likely to have reported suicide.
Correct?
A. That's correct.
Q. On page two of this article the authors --- and by this article I'm referring to Exhibit 43. The authors note that they rely upon data from the National Center for Transgender Quality and its 2015 transgender survey.
Correct?
A. That is correct.
Q. On page eight of this document, the authors admit that it is cross sectional study designed precludes determination of causation.
Correct?
A. I don't have page numbers. Which one is that?
Q. It's the one with strengths and limitations at

the heading at the bottom.

A. Can you repeat the question?

Q. On page eight, the authors admit that the studies cross-sectional study design precludes determination of causation.

Correct?

A. That is correct.

Q. The authors also admit that those with worse mental health or internalized transphobia may have been more likely to seek out conversion therapy rather than non GICE therapy suggesting conversion efforts itself were not causative of these poor mental health outcomes.

Correct?

A. That is what is written, correct.

Q. Okay.

So this study does not establish a causal link between conversion therapy and suicidality.

Correct?

A. That is correct.

Q. The authors also admit that they lack data regarding the degree to which GICE occurred.

Correct?

A. That is correct.

Q. And they also admit that they lacked information

as to what specific modalities were used.

Correct?

A. That is correct.

Q. Turban et al., in 2020 also admits that participants were not recruited via random sampling and thus the sample may not be nationally representative.

Is that correct?

A. That is correct.

Q. In paragraph 37 you go on to say that conclusions further supported by extensive evidence that rejection of a young person's gender identity by family and peers is the strongest predictor for adverse mental health outcomes.

Is that correct?

A. That is correct.

Q. And you cite in that article --- you cite in footnote seven an article by Ryan, et al. published in 2010.

Is that correct?

A. I'm not seeing that.

Q. In footnote seven?

A. Oh, in footnote seven, yes.

ATTORNEY BARHAM: I'm going to show you what we will mark as Exhibit-44, which is Tab 114, an

article by Ryan, et al. published in 2010 entitled Family Acceptance in Adolescence and the Health of LGBT Young Adults.

(Whereupon, Exhibit-44, Article by Ryan, et al., was marked for identification.)

BY ATTORNEY BARHAM:

Q. This is the article that you cited in footnote seven of your report.

Correct?

A. That is correct.

Q. On page 206, in the second column, the authors note that they relied on a sample of 245 people.

Is that correct?

A. That is correct.

Q. Of that sample, only nine percent identified as transgender.

Correct? That's on page 208.

A. Correct.

Q. That means we're talking about nine people.

Correct? 245 times nine percent is 22.05.

A. I'll take your math.

Q. On page 210 the authors admit that they cannot

claim that this sample is representative of the general population of LGBT individuals.

Is that correct?

A. That is correct.

Q. On page 210 to 211 the authors recognize that this is a retrospective study, which, quote, allows for the potential of recall bias in describing specific family reactions to their LGBT identity.

Correct?

A. That is correct.

Q. And then in footnote seven of your report you also cite an article by Klein and Golub published in 2016.

Correct?

A. That is correct.

Q. All right.

ATTORNEY BARHAM: I'm going to show you what we will mark as Exhibit 45, which is Tab 15.

(Whereupon, Exhibit-45, Article by Klein and Golub, was marked for identification.)

BY ATTORNEY BARHAM:

Q. This is an article by Klein and Golub entitled Family Rejection as a Predictor of Suicide Attempts. This article simply says that family rejection is a predictor of suicide attempts and substance abuse among transgender and gender non-conforming adults.

Correct?

ATTORNEY BLOCK: Objection. Can you point to where you are reading from?

ATTORNEY BARHAM: The title.

THE WITNESS: They identify as a predictor, yes.

BY ATTORNEY BARHAM:

Q. In fact, the word strongest does not even appear in this article.

Is that correct?

ATTORNEY BLOCK: Objection.

THE WITNESS: I would have to read the whole article.

ATTORNEY BLOCK: Let him read it.

THE WITNESS: The authors note on page 195 on a multi-variant model moderate levels of family rejection were associated with almost twice the odds of attempted suicide and high levels of family rejection were associated with almost three and a half

times the odds of attempted suicide. While there is not any use of the word stronger, I don't see any additional risks that were highlighted in this specific study.

BY ATTORNEY BARHAM:

Q. Okay.

On page 197 stemming over on to 198 the authors admit that they relied on data NTDS that use sampling techniques that were not random and included a homogenous study population that was largely white, educated and employed.

Correct?

A. That is correct.

Q. Do you agree with them that this limits the generalizability of the article's findings?

A. I do.

Q. The authors also admit that the cross sectional nature of the data did not allow us to determine any causal relationship between family rejection and the negative health-related outcomes.

Correct?

A. Correct.

Q. The authors also indicate that they did not have any information about the timeframe within which family rejection occurred, including what precipitated the

event, the severity of the rejection or whether this changed over time.

Correct?

A. Correct.

Q. Do you agree with them that these factors might have influenced their results?

A. Sure.

Q. All right.

Let's go to Tab 97, which is Exhibit 16. This article we discussed before, but this reviews the Turban article that you cited in footnote seven of your report.

Is that correct?

A. That is correct.

Q. Or footnote six of your report. Okay.

And in your report you are using the Turban 2020 article to critique the use of what you describe as conversion therapy.

Is that correct?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I'm just pulling this up where I have it. As I stated in my report, the Turban article found that people who reported experiencing those conversion efforts were more likely to have reported attempting suicide.

BY ATTORNEY BARHAM:

Q. So you're using it to critique what you described as conversion therapy.

Is that fair?

A. I think that's fair.

Q. On page two of Dr. D'Angelo's letter to the editor he notes at the top of the first --- towards the top of the first column that Turban's analysis used data from the 2015 USTS survey of transgender identifying individuals, this survey is convenient sampling methodology which generates lower quality data.

Would you agree that convenient sampling generates low quality data?

A. Convenient sampling generates lower quality data. And then some other statistical method of study design. One of the ways that you want to counteract that potential for low quality of data is to have increased number of participants. The difference of 27,000 participants in this particular survey analysis versus say 100 in another, 40 in another does add a little bit more context to the applicability of these findings.

Q. Right below that Dr. D'Angelo, et al. notes that the participants were recruited through transgender

advocacy organizations and subjects were asked to pledge to promote survey among friends and family. This recruiting method yielded a large but highly skewed sample. Would you agree that the sample for this survey was highly skewed?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I think we'd have to understand what specifically you mean by skewed and skewed in what way. It's hard to know.

BY ATTORNEY BARHAM:

Q. The authors go on in Table 1 to demonstrate what they mean by skewing of the data. Upon reviewing their information, would you agree that the sample was skewed?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Again, I'm not sure skewed in comparative --- comparison to what?

BY ATTORNEY BARHAM:

Q. The authors continue on page two by saying that a number of additional data irregularities in the USTS raise further questions about the quality of the data captured by the survey. They talk about how high number of survey participants had not transitioned medically or socially, significant number reported no intention to transition in the future. The information about

treatments does not appear to be accurate as a number of respondents reported the initiation of puberty blockers after the age 18, which is highly improbable. Further, the survey has developed special waiting due to unexpected high proportion of respondents who reported that they were exactly 18 years old. Do you agree that these irregularities raise serious questions about the reliability of the data?

A. I think these are all elements that you want to take into context as you're establishing validity of the data and the conclusions that could be drawn.

Q. The second column of page two, the authors note that the emphasis on the survey's goals to highlight the injustices suffered by transgender people during the recruitment stage in the introduction of the survey instrument itself made it eligible for reporting adverse experiences due to demand bias.

Do you agree that this demand bias likely skewed the responses?

A. I wouldn't agree that it likely, but that implies that we have data that we don't have. It's a possibility that these authors are raising.

Q. Now, the authors also note that the experience of detransitioners and the sisters were not included, as

they were disqualified from completing the survey. They note that this failure is a serious oversight.

Do you agree with them that that's a serious oversight?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I would need to look at the specific survey instructions for the survey in question to understand the validity of that. I don't see how in the context of this that folks who detransitioned were specifically excluded, but ---.

BY ATTORNEY BARHAM:

Q. Did you review ---?

A. Can you point to where that --- where in the original article or the study that those folks are excluded specifically. I may have missed it.

Q. I don't have the original survey on hand at the moment. If it proved that they were excluded, would you agree that that would be a serious oversight?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: It would really depend on how that was done and what the language was used. Without seeing it I can't make a comment otherwise.

BY ATTORNEY BARHAM:

Q. What if there was no language involved, it was

just those who indicated that they were either desisting or detransitioning or not included in the data set?

A. I would need to see the context of it in order to make a judgment on the validity of that structure.

Q. On page four of this document. The authors note that Turban's hypothesis is further weakened by a significant flaw in their data analysis failure to control for individuals pre-GICE exposure mental health exposure status, noting that this is a potential compound and may mask reverse causation.

Do you have any scientific basis for disputing that concern?

A. Let me review this part of the paper, please.

ATTORNEY BLOCK: Just objection. I don't think he read the full the sentence.

THE WITNESS: I have not seen any literature on specific risks or predictors for individuals who would be exposed to gender identity conversion efforts, and so the supposition inherent in this paragraph that the authors are making that an individual's underlying poor mental health led to their experience of gender identity conversion efforts is not supported by my understanding of the literature.

BY ATTORNEY BARHAM:

Q. Do you have any reason to dispute a potential for a confound or the potential for masking reversed causation that the authors identify here?

A. As I described, I haven't seen any literature that speaks to this nor has that been my clinical experience.

Q. On page two of this document the authors note that Turban's conclusions rest on the assumption that they have a valid way of determining whether or not the respondent was exposed to the unethical practice of conversion therapy. Do you agree that this lack of context in detail renders the question incapable of differentiating between ethical non-affirming --- non-affirmative neutral and counters unethical conversion therapy?

A. I do not.

ATTORNEY BLOCK: Sorry, objection to form.

BY ATTORNEY BARHAM:

Q. Back on page four the authors note that the failure to control for the subjects' baseline mental health makes it impossible to determine whether the mental health or suicidality of a subject person stayed the same or potentially even improved after the

non-affirming encounter. Do you have any scientific basis for disputing this observation?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Again, if we wanted to go back to the Turban study itself and look more specifically at their methodology and their description that would be a more accurate way of getting a potential ups and downs side of this study other than this letter to the editor.

BY ATTORNEY BARHAM:

Q. But do you have any basis for -- any scientific basis for disputing that observation?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: This question gets to a very specific type of study designed methodology. That is something that typically is done by a data scientist, which is not where my level of expertise is. There are nuances in it. What I would say is in a population as large of a survey that having a denominator as high as they had helps to reduce the chances of confounders like the authors in this letter to the editor are describing as problematic.

BY ATTORNEY BARHAM:

Q. A little bit later on page five the authors

highlight the cross sectional design of the USTS and indicate that presenting a highly confounded association of causation is a serious error.

Do you agree that presenting a confounded association as causation is a serious error?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I have not claimed nor do I understand my reading of the Turban, et al. article to claim causation when an association has been found, and in fact, they specifically called out that it was not causative or at least the analysis could not prove it was causative with a cross-sectional design.

BY ATTORNEY BARHAM:

Q. So when you wrote paragraph 34 of your report and said that a study found that people who reported experiencing these conversion efforts were more likely to have reported attempting suicide, especially those who reported receiving such therapy in childhood, were you suggesting that the conversion efforts caused the suicide attempts?

A. I believe in my testimony I am saying that there is a relationship between those who are exposed to conversion efforts and those who have described reporting attempting suicide.

Q. And how would you describe that relationship?

A. As an association.

Q. Is association a synonym for correlation?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: It depends on the context, but generally in plain English association and correlation are relative synonyms for one another.

BY ATTORNEY BARHAM:

Q. In this specific context of your report, when you say that you are reporting an association, were you using association in correlation to synonyms?

A. As far as I know I was, yeah.

Q. Have you had patients impacted by not being allowed to play sports consistent with their gender identity?

A. On occasion, yes.

Q. Approximately how many such patients?

A. On the order of less than two or three.

Q. What sports were those patients participating in?

A. I do not recall the specific. These were --- the two or three that I had were all in the order of between five, six and seven-year-olds.

Q. What was your follow-up with each patient?

A. With those particular kids?
Q. Yes.
A. Without having their charts in front of me, it's hard to expound. My typical process would be understanding why it's happening, what they need and how to coordinate with whatever program to help make sure that the kid gets the support that is going to be most beneficial to them.
Q. Are you offering an opinion that the State of West Virginia does not have a strong interest in ensuring safe competition for women?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: My testimony is about the mental health impacts. I don't have an opinion on the state interests of West Virginia in this regard.
BY ATTORNEY BARHAM:
Q. Are you offering an opinion that the State of West Virginia does not have a strong interest in ensuring fair competition?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: Same answer.
BY ATTORNEY BARHAM:
Q. Would you agree that ensuring fairness and safety is an important state interest.

ATTORNEY BLOCK: Objection to form and scope.
THE WITNESS: Same answer.
ATTORNEY BARHAM: All right. I believe those are all my questions for today. I will turn the floor over to Mr. Tryon.
ATTORNEY TYRON: Okay.
Here I am.

EXAMINATION

BY ATTORNEY TRYON:
Q. My name's David Tryon. I am with the West Virginia Attorney General's Office and represent the State of West Virginia. So we've got about an hour left. Do you want to just keep on going and finish up or would you like to take a break for five minutes before we finish up?
A. I think let's keep going. If I have to take a break, I'll let you know. I appreciate it.
Q. Okay.
You bet. Happy to help you out that way again. I just want to follow up, first of all, on a couple of questions about the Turban study, if I may, that we were

just discussing. And Exhibit 16 I believe was the document that addressed that Turban study.
A. I see Exhibit 16 as the letter to the editor from D'Angelo, et al.
Q. And that's the one that we were just looking at addressing the Turban study.
Right?
A. Correct.
Q. So let me just ask you, you did cite the Turban study in your report.
Right?
A. Yes.
Q. Yeah, and that was to support your opinion.
Right?
A. That is to support my opinion, yes.
Q. Now, before you used it did you do something to cite check it to see if there were any articles that either challenged it or critiqued it or criticized it?
A. I would say that a routine review of the literature is a part of my day-to-day practice. This particular article did not come up in that review.
Q. Okay.
Is there a way to specifically search for it to see if --- to look at it and then do a search and see

what other articles are quoted or cited?
A. My guess is there probably is, I'm not aware of it.
Q. But I think you said you were not aware of the letter which is Exhibit 16 prior to issuing your expert report.
Is that right?
A. That is correct.
Q. Would it have been helpful to have seen that ahead of time?
A. I think it would have been helpful for me to feel more prepared in this deposition. I don't think it would have changed any of my report.
Q. If you had that, would you have investigated those criticisms to see if they were failed criticisms?
A. The authors of the Turban study had raised most of those criticisms themselves in the context of their report.
Q. And did you independently look at it and determine if they were --- if that caused you some concerns?
A. Concerns wouldn't be the right word. It's about weighing the evidence and making sure that we understand context and applicability. There's nothing in this

letter to the editor that changes those demands from my reading of the Turban article.

Q. So you are saying that this letter in the Turban article --- I'm sorry, you're saying this letter to the editor does not raise any new issues at all than what the Turban study itself raised.

Is that right?

A. I would have to read through this in a more detailed manner to say for certain that no single issue has been addressed. None of which we discussed today are elements that hadn't been addressed, either by myself reading the Turban article or by the Turban, et al. in the article itself.

Q. But you do not raise any of those concerns in your report, do you?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: No. No, not specifically.

BY ATTORNEY TRYON:

Q. Okay. Fair enough.

If you can follow your report now, which I'm forgetting which exhibit that is, Exhibit 1. Thank you.

So first of all, you said you were retained by Counsel for the Plaintiffs as an expert. Can you tell me when you were retained, please?

A. I would have to pull up my invoice to give you the specific date, and I'm guessing Mr. Block might have that information at the ready.

Q. Unfortunately, I can't depose him. I would love to, but I don't think he would agree to that. So as best you can recall --- first of all, was it this year or last year?

A. It was this year to the best of my recollection.

Q. Okay.

Was it after the other expert reports came out or before?

A. I believe I was hired or retained. I don't know what the correct terminology is so forgive me, after the development of the additional expert reports. It was the rebuttal to those reports that led to my being retained to my recollection.

Q. I'm sorry?

A. From my recollection. And I'm terrible with dates, so I apologize for that.

Q. In paragraph four, you say --- you explain what you viewed and you mention the reports of Dr. Safer. Does that refer to Dr. Safer's original report that was filed with the Court and his rebuttal report --- strike that.

Does that --- so he filed something with the Court originally. Did you review that one?

A. It was the original report that I had reviewed.

Q. Okay.

So let me just be clear. So he filed an original report back in --- last year and then issued a new report in February of this year and then issued a rebuttal report. So a total of three. Did you see all three of those?

A. I would have to see them ---.

ATTORNEY BLOCK: Object to form.

THE WITNESS: I would have to see them in front of me to know if it was something that I had read. I don't know the terminology well enough to know if I was reading the original report or rebuttal report or the third type.

BY ATTORNEY TRYON:

Q. So one of them was expert report which was issued I believe in February of this year. I believe you saw that one.

A. Again, I would have to see the report in front of me to know if it was the one I saw.

Q. Okay.

There was another one which was labeled as

rebuttal. Do you remember if you saw that one?

A. I would have to go back through my notes. I don't have it in front of me, so I apologize for not recalling.

Q. Well, let me ask you this question. Do you remember how many reports you saw from Dr. Safer?

A. All I can say is I remember seeing at least two.

Q. Very good. And Dr. Adkins, how many of her reports did you see?

A. I can't be certain, but I think I also saw two of hers.

Q. And I'll represent to you that each of them issued a rebuttal report. And did you read their rebuttal reports prior to preparing your rebuttal report?

A. I don't have the documentation in front of me in terms of when I was spending time on what piece of this process. That's a part of my notes that are not here today.

Q. Do you know why you were asked to issue a rebuttal report if Dr. Safer and Dr. Adkins were both issuing rebuttal reports?

ATTORNEY BLOCK: Objection. Just don't discuss any of the contents of your communications with

the attorneys.
ATTORNEY TRYON: Correct.
THE WITNESS: My understanding was to rebut the reports of Dr. Levine and Dr. Cantor.
BY ATTORNEY TRYON:
Q. Is your rebuttal different than the rebuttals of Dr. Adkins and Dr. Safer?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: Yes.
BY ATTORNEY TRYON:
Q. Pardon me?
A. Yes.
Q. Does your rebuttal report have any opinions which are different from Dr. Safer and Dr. Adkins' reports?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: I think it's hard without the specific reports in front of me. I know they were long documents and I was specifically rebutting the reports of Dr. Levine and Cantor.
BY ATTORNEY TRYON:
Q. Do you have any specific reports that are not rebutting Dr. Levine and Dr. Cantor?
A. The process of developing this rebuttal report

was for that specific intent.
Q. So you don't believe you have any original opinions to report; would that be a fair statement?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: I'm not --- I guess I'm not sure what you mean by original opinions.
BY ATTORNEY TRYON:
Q. So let's move on. Do you recall the Costa study?
A. Yes, we had reviewed one Costa study earlier. Can you remind me of the exhibit number?
Q. I believe it's Exhibit 27?
A. All right. Okay.
Q. I believe that during that discussion you referred to the standards in there as being rough or imprecise measure and --- let me get this right, and not objective criteria.
Do you remember that?
A. I had described the CGAS, the Children's Global Assessment Scale, as an imprecise measure of children's functioning.
Q. And you said not having any objective criteria; can you help with that?
A. Yes, it's a scale from zero to a hundred that is

very gestalt that the clinician uses to rate a child. It's not an instrument that I find clinically useful.
Q. Is it not clinically useful because it doesn't have objective criteria?
A. I wouldn't say it's fair to say that there are no objective criteria, but there are at times contradictory objective criteria within the CGAS. And again I would he have to see the CGAS in front of me to point out those specifics, but there are other functions, or other ways of measuring outcomes than the CGAS.
Q. What is an objective criteria? What does that term mean in other words?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: I guess what would say is we would want a psychometrically valid approach for answering a question, ideally that is of clinical relevance.
BY ATTORNEY TRYON:
Q. Can you just repeat your answer for me? I didn't quite understand it.
A. Probably not the same language. A psychometrically valid tool that in an ideal world provides some kind of clinical relevance.

Q. Okay.
You said psychometrically valid tool.
Did I get that right?
A. Psychometrically validated tool, yes.
Q. Validated?
A. Yes.
Q. What is that?
A. Essentially you want to understand that the measure you're using is measuring what it says to measure and is reliable across multiple domains. The CGAS has been widely used in research, it's just not my favorite tool because I don't find it to have that second domain of having that clinical utility.
Q. Let me ask you to take a look at paragraph 19 of your opinion?
A. I'm looking at it now.
Q. You say at one point it says contrary to the portrayal. Do you see that sentence?
A. I see that, yes.
Q. Contrary to the portrayal in Dr. Levine and Dr. Cantor's reports, gender-affirming treatment also requires a careful and thorough assessment of a patient's mental health, including co-occurring conditions, history of trauma, and substance abuse among

many other factors. My question for you is with respect to your language, a careful and thorough assessment, and I'd like to then know are there psychometrically validated tools used to do that?

A. There are on occasion, and particularly when we're looking at research outcomes for transgender youth there are a number of psychometrically validated screenings or outcome measures that are used.

Q. What are those?

A. These include most importantly the Utrecht Gender Dysphoria Scale, the Body Image Scale, historically what's in the Dutch data, the Toronto data, and the Costa data and The Tavistock Clinic, all of them were participatory in kind of the informal research group that agreed to collect the same measures, so these included the Achenbach, CBCL, and they use self report.

Q. I'm sorry. What was the first one you said before Body Image Scale?

A. Utrecht Gender Dysphoria Scale.

Q. Utrecht Gender Dysphoria Scale?

A. Correct.

Q. What is that?

A. It's a measure of the degree and intensity of gender dysphoria.

Q. How is it --- what does it look like? Does it have a series of scale one to ten on different issues or what is it?

A. It's a series of questions that I'd have to have in front of me to give a better job of describing, but it provides a rating of --- I can't remember what the range is, from zero to somewhere in the low dozens, that correlates with the intensity of gender dysphoria.

Q. Is that something that you use in your practice to diagnose gender dysphoria?

A. It is an element that I have used.

Q. Do you use that with every patient?

A. It is not something that I use with every patient. The contents of the Utrecht Gender Dysphoria Scale are generally pieces that I'm getting or gathering from every clinical encounter without necessarily utilizing the specific tool.

Q. This statement, a careful and thorough assessment, does that have a --- is there a source for that particular standard?

A. There are a number of sources for this particular standard. The general practice of children's mental health from my guild in child adolescence psychiatry, there are years of training and

certification in order for you to have demonstrated a careful and thorough assessment. In order to get Board Certified I had to do a careful and thorough assessment in front of a board of examiners, so this is inherent to the practice of mental health.

Q. Is there --- but there is no requirement that these various standardized tools that you mentioned to me, these psychometrically valid tools have to be used, is there?

A. There isn't, and there is not a clinical verification that they be used in every instance. For the sake of these kind of studies, it's important to have these validated tools so we're all speaking the same language and that outcomes can be tracked over time, but not necessarily in every clinical event is it going to be warranted.

Q. If you don't use them in every clinical event, then how can how can you adequately track something across patients if you wanted to do a study?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: As an example there are a number of psychometrically validated tools that cannot be administered at every clinical encounter, otherwise they would be rendered invalid. So there's a lot of

nuance in these specific tools and I think that level of nuance is really a clinical judgment based upon professional and prevailing standards.

BY ATTORNEY TRYON:

Q. Okay.

So there's no objective measure of someone other than --- well, let me back up. So different psychiatrists would come up with different conclusions.

Is that right?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I don't think that's related to what I was speaking about. I think different psychiatrists would utilize different instruments to provide an assessment, and that's going to change from person to person. I can't speak to diagnostic reliability for a psychiatrist that I haven't met or trained.

BY ATTORNEY TRYON:

Q. Let me ask you how long you would normally spend with a child before --- or adolescent before prescribing puberty blockers?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: There is not going to be a single answer to that question. It really is dependent

on the requirements of the assessment, as well as the individual factors of that child and that family.
BY ATTORNEY TRYON:
Q. Could ten minutes be long enough?
A. Not in my opinion.
Q. What about 30 minutes?
A. Likely not.
Q. How about an hour?
A. It would be very atypical in my practice to spend that little time prior to making a recommendation for puberty suppression. I do a much more thorough assessment than an hour.
Q. So how long would a thorough assessment normally take?
ATTORNEY BLOCK: Objection to form.
BY ATTORNEY TRYON:
Q. You said more than an hour I think?
A. Correct. I would say more than an hour. I think maybe there's a ceiling, but not a roof. What I mean by that that is there are certain criteria required in order to make a recommendation for a treatment for gender dysphoria to be offered. Those include a diagnosis of gender dysphoria, a recognition of any co-occurring mental health issues and whether or not

they are adequately well controlled enough to be able to proceed with care. And a clear understanding of the risks, benefits and alternatives of that treatment. There's no specific timeframe on that as an assessment.
Q. How many visits would you expect to be adequate for a careful and thorough assessment?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: And I apologize, it's --- I'm not trying to be evasive. It really is going to depend upon each individual child.
BY ATTORNEY TRYON:
Q. What about is one enough? Have you ever done it --- given a recommendation for puberty blocker after only one visit for an hour?
ATTORNEY BLOCK: Compound question.
THE WITNESS: I have never given a recommendation for puberty suppression after a one hour visit personally.
BY ATTORNEY TRYON:
Q. What's the minimum time that you think is adequate?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: As I said, I don't think it's based on time. It's based about the content.

There are circumstances in which patients have been followed for several years by therapists, that can provide a tremendous amount of collateral information including information provided by parents, family members, community providers, et cetera, that can allow more abbreviated assessment for some people.
BY ATTORNEY TRYON:
Q. Is someone as consistently spending only an hour with one patient, with each patient for recommending puberty blockers, that would look kind of like a rubber stamp recommendation wouldn't it?
ATTORNEY BLOCK: Objection.
BY ATTORNEY TRYON:
Q. Assuming that it's happening?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: I would have to see the specifics in order to make any kind of comment.
BY ATTORNEY TRYON:
Q. Isn't it fair for Dr. Levine or Cantor to express concern that in actual practice that may be happening?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: I have not seen anywhere in Dr. Cantor or Dr. Levine's report or within the

literature that this is a pervasive thing that is happening.
BY ATTORNEY TRYON:
Q. Well, it's not tracked at all so we wouldn't know, would we, one way or the other?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: It is a question that could be asked. I don't think it's for me to make suppositions, nor do I think it is for Dr. Cantor and Dr. Levine to make suppositions about the critical care of transgender youth in this context.
BY ATTORNEY TRYON:
Q. Is there any --- is there any place where you report any central location where you or your clinic report how much time and effort and what your thorough examination is so that it can be tracked?
A. The site where I'm at now is part of a four-site NIH trial that has published on the specific assessment processes that the kids who are involved in the study engage in.
Q. How many kids are in that trial?
A. I'm not a specific participant in the organization of that trial, so I don't have that information in front of me.

Q. Does your clinic report to that trial?
A. My gender clinic, the gender clinic within the hospital that I work in, there are many patients who are enrolled in that trial, yes.
Q. But it's certainly not mandated, right?
A. No.
Q. When these careful and thorough assessments are done, what type of documentation should be used for that?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: That's a very contextual question. We have prevailing standards in terms of what should and shouldn't be documented through various professional organizations, but that's going to change from state to state, country to country.
BY ATTORNEY TRYON:
Q. And what about in the State of West Virginia?
A. I have no knowledge of documentation requirements in the State of West Virginia.
Q. How about in the United States in general?
A. As far as I'm aware, there are no universal recommendations in terms of specifics of how things are documented.
Q. Are there any organizations like the WPATH or

any other organizations that do give recommendations on what documentation to use in America?
A. WPATH has certainly provided some educational events in terms of best practices in documenting, but these aren't specific guidelines or recommendations. I think it is notable to say that the Dutch clinic in particular has been quite vigorous in their production of research and is quite well respected in the world in terms of how things are structured, and they actually don't even have a letter that their clinicians write and/or see initiation of puberty suppression for gender-affirming hormones.
ATTORNEY TRYON: Jake, if you could bring up the exhibit entitled Adolescent Medicine, Confidential Patient Questionnaire, which has been redacted?
VIDEOGRAPHER: Do you want that marked?
ATTORNEY TYRON: Yes, please, wherever we are at in the next number.
VIDEOGRAPHER: I believe we're at 44.
LAW CLERK WILKINSON: 46.
ATTORNEY SWAMINATHAN: 46.

(Whereupon, Exhibit-46, Form, was marked

for identification.)

ATTORNEY TRYON: If you could bring that up, Jake.
VIDEOGRAPHER: Yes. Give me one second. I'm just marking that right now. We might have to mark this one physically. The program won't mark it because it's a redacted document.
ATTORNEY TRYON: Okay. Then we'll do that to bring that up. And then, if you could, Jake, just scroll down in this. I just have a couple questions about this form.
THE WITNESS: Okay.
ATTORNEY TRYON: Go onto the next page down.
BY ATTORNEY TRYON:
Q. Have you ever seen a form like this?
ATTORNEY BLOCK: Objection to form. No pun intended.
THE WITNESS: Could you be a little more specific? I mean, I've seen --- this is kind of very typical for a lot of intake-type documents in mental health clinics or in medical clinics.
BY ATTORNEY TRYON:

Q. So you would characterize this as a typical intake form?
ATTORNEY BLOCK: Objection.
THE WITNESS: I wouldn't characterize it in that way. I have seen typical intake forms that resemble this in some ways.
BY ATTORNEY TRYON:
Q. Would this be something that you would consider adequate to document a careful and thorough assessment?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: Again, without knowing the context of the individual's practice, it's impossible for me to say.
BY ATTORNEY TRYON:
Q. Is this a form that you would use for careful and thorough assessment of a patient's mental health?
ATTORNEY BLOCK: Objection to form.
THE WITNESS: I don't use this form. I can't say whether or not I was in the context this provider was practicing that I wouldn't use this form as part of my assessment.
BY ATTORNEY TRYON:
Q. Fair enough. Do you use it as a part of your careful thought thorough assessment of the patient's

mental health, are there any other forms that you expect to see in the caregiver's file about that patient's mental health?

A. Not specifically.

Q. This would be adequate?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Again, I can't speak to the adequacy of it without understanding the context of the rest of the treatment.

BY ATTORNEY TRYON:

Q. Is there any certification that you think is necessary or appropriate for someone to diagnose gender dysphoria?

A. There is no universal certification process. What we have are guidelines and recommendations for ensuring that folks for the mental health prospective, again, medical professionals are able to diagnose gender dysphoria, but from the mental health prospective, it's recommended that we are licensed clinical professionals that have some, if not an expert level of understanding of gender identity issues and having continuing education in the field. These are ongoing recommendations. I wouldn't say it was the expertise, but knowledge about standard of care that's congruent

with how other disorders are also treated.

Q. Let me ask you about paragraph 16 of your report.

Do you see the last sentence there?

A. Yes.

Q. It says HB-3293 does not affect elementary students --- elementary school students who are transgender boys?

A. Yes.

Q. So you previously testified that puberty is --- starts on the average about age 12 for males.

Right?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Again, I would defer to our --- that's an answerable question based upon national data that I don't have in front of me, but 12-ish is, yes.

BY ATTORNEY TRYON:

Q. And the range would be --- from what I read, the range is generally between 8 and 14 years old.

Right?

A. Again, I would defer to my endocrine colleagues, but yes, that's --- that's pretty typical.

Q. And you're aware that boys go into Middle School

as early as 11 years old or sometimes even earlier.

Right?

A. I can't say that I'm familiar with how each state organizes their primary and secondary education systems. I'm familiar with how it was in New York and Illinois, and that was occasionally the case.

Q. So if an 11-year-old who has not gone through puberty is in Middle School, then this would definitely apply to some pre-pubescent children.

Right?

ATTORNEY BLOCK: Objection to form.

BY ATTORNEY TRYON:

Q. I'm sorry, I didn't make that clear. So if there are prepubescent boys that are in middle school, then HB-3293 would affect them.

Right?

A. I would have to put HB-3293 in front of me to --- to know specifically. I'd have to refamiliarize myself with it, the specifics of it.

Q. I'm sorry to interrupt you.

A. Yeah, I wouldn't want to comment on something I don't have in front of me right now.

Q. Okay.

So just so you know I had to relocate from my

office to my home, and there's a poodle in here that you may hear. So forgive if you hear the interruption.

ATTORNEY BLOCK: Objection to the poodle.

ATTORNEY TRYON: Let me take one second. I will be right back.

THE WITNESS: Maybe now is a good time for bathroom break.

ATTORNEY BLOCK: Let's go off the record.

VIDEOGRAPHER: Going off the record the time reads 5:46 p.m.

OFF VIDEO

(WHEREUPON, A SHORT BREAK WAS TAKEN.)

ON VIDEO

ATTORNEY TYRON: Okay let's go back on the record.

VIDEOGRAPHER: Back on the record the current time reads 5:50 p.m.

BY ATTORNEY TRYON:

Q. Let me direct you to paragraph 26 of your report?

A. Yep.

Q. So there's the --- let's see, starting with the word prepubertal children who he insists are children with non-conforming gender expression who realize at the onset of puberty that their gender identity is consistent with their sex assigned at birth. Their understanding of their gender identity changes at the onset of puberty, but their gender identity does not. So that's really a circular argument unless there's some objective external way of proving what that child's gender identity actually is, wouldn't you agree?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I think that the research that we have on inherent gender identity is relatively recent and needs a little bit more robust follow-up. What we have are studies of cognition as well as some very limited brain imaging studies that point to some element of gender identity that has an objective criteria to it. These are not studies that are significant enough or have enough participants for us to draw any kind of significant conclusions, but it does speak when paired with clinical experiences of kids who have desisted that the way that they describe their identity is that it is not a fix or a change in their sense of self but more about the expression of their

behaviors and their understanding of how they fit into the world that has changed.

Q. So as you say it's too early to really know for sure which of these things it is, right?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: What I would say is it's a preponderance of clinical experience and the studies that we do have point to this being much more likely.

BY ATTORNEY TRYON:

Q. Much more likely, is that your testimony?

A. Based on my clinical experiences, yes.

Q. But there's no way that anyone outside of --- there's no objective measurement to make that determination, right?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: The way that I would describe it is that gender dysphoria as a diagnosis includes both identity-based criteria that are objective and are measured through the course of the scales that we talked about earlier, as well as measures of role and behavior and congruence with your body. These are things that are tracked over time in the studies that we have, and when a child desists from that diagnosis of gender dysphoria it is clear at that point that it was

primarily the gender role based behaviors that were leading to this diagnosis as opposed to a change in identity.

BY ATTORNEY TRYON:

Q. You were freezing up on me, so let me just see if I can understand this by looking at the transcription. If a child explains the reasons why he or she has a different gender identity, that his or her natal sex, the natal sex designation then later says the opposite, there is really no way of telling whether or not it's just the person's gender identity or the understanding of the identity has changed based on that child's or person's statements.

Right?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I would say to complicate matters even further, a number of the studies that are used to describe this desistance phenomenon were first carried out under the DSM-IV. On the DSM-IV the diagnosis was gender disorder in childhood. And in that nomenclature, an identity that is incongruent with sex assigned at birth was not one of the required elements. And so there are children who are described in the common parlance as transgender because they met criteria

for what was then gender identity disorder, who nevertheless discussed any identity incongruent with their sex at birth. So that makes it hard to draw firm conclusions about data captured under the DSM-IV.

BY ATTORNEY TRYON:

Q. And you are familiar with that diagnostic and statistical manual of mental disorders.

Right?

A. I am.

Q. And you cited it in your reports.

Right?

A. Correct.

Q. That is a manual to assist in the diagnosis of mental disorders.

Right?

A. That is correct.

Q. Is there a value of to classifying a condition as a mental disorders?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I don't know if I can offer an expert opinion on that. I have a biased --- talk about a selection bias as a psychiatrist and a mental health professional. I think it's important for us to destigmatize mental illness as much as possible, so

whatever is going to allow folks access to care, I'm relatively neutral on placing a value on whether or not something is a diagnosis or not.

BY ATTORNEY TRYON:

Q. A manual does not recommend any treatments, only tools for diagnosis.

Is that right?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: The main goal of DSM for classifying diagnoses and ensuring stability or reliability of those diagnoses across practice locations.

BY ATTORNEY TRYON:

Q. That does not recommend or even provide any treatments.

Right?

A. The text of the DSM often recommends or describes treatments.

Q. Does it describe treatments for gender dysphoria?

A. The text was recently revised for gender dysphoria, and so I really want to see the text in front of me for me to talk about it.

Q. So in the DSM-V you don't know if it has any

recommendations for treatments in it for gender dysphoria?

A. I don't know in the revised text how much was changed without familiarizing myself with it. And I'm happy to look at it. It's a quick read, but primarily the DSM-V as it comes to gender dysphoria is a description of the phenomenology not a recommendation for treatments.

Q. And when was it revised?

A. It was just released about a week ago, maybe two.

Q. Let me ask you to take a look at your report, paragraph 51. You say to the contrary, as noted previously, stigma and discrimination have been shown to have a profoundly harmful impact on the mental health of transgender people and other minority groups. Now, when you say stigma and discrimination, you're not referring specifically to not allowing, as using your term, a transgender girl to participate on a girls sports team to be that type of stigma or discrimination, are you?

ATTORNEY BLOCK: Objection to the form.

THE WITNESS: The reference that I referred to in my report I would want to look at, because they had an operational term for stigma and

discrimination. However, there has been literature, I can't remember the names of the authors or the date of the study, that look at specific laws that are enacted to discriminate against LGBT people and impact on both mental health and medical health, and so those kind of discrimination laws certainly do have real felt impact for transgender folks.

BY ATTORNEY TRYON:

Q. So are you saying that this sentence is referring to a law such as HB-3293 or not?

A. I think, as I stated, for the sake of this expert report, the Yhuto reference from 2015 is what I'm using to craft that statement.

Q. I'm sorry, the what from 2015?

A. Footnote number 21.

Q. What are those profound impacts of mental health that you are referring to?

A. Well, as I mentioned earlier in my report are correlation between many exposures that transgender individuals have and increased rates of suicide, self harm, substance use, exposure to trauma that have certainly profound negative impacts for the folks who are experiencing them.

Q. And of those harms that you have just mentioned

are you aware of any of them caused by --- to a child or person who was not --- who was a transgender female not allowed to participate on a girls or woman's athletic team?

A. As I had testified to earlier, I think I said I've had two or three patients who are excluded from sports teams, one of which was a child who was assigned male at birth, who at age six was not allowed to participate in the sport. I can't remember what support it was. This was a child who was heckled and kicked out of the group of friends that were participating in that sport which led to negative mental health consequences for that individual child.

Q. What specific --- I presume that's thoughts of suicidality.

Right?

A. Thankfully at that age they were not.

Q. How did that child adapt to the situation?

A. Well, we worked with the child, the family and the sports team, to understand what this child may need and ended up --- I think it was T ball, I think ended up joining the T ball team.

Q. So how much --- how much of a delay was there between wanting to join the T ball team and being

allowed to join the T ball team?

A. This was years ago, so I don't recall the specifics.

Q. Would it be your testimony that any delay at all between the time of identifying for a natal male identifying as a female and participating on a female team would be profoundly harmful?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I have not seen any studies that have asked that question or could speak to the duration of time between exclusion from an activity and the mental health impacts.

BY ATTORNEY TRYON:

Q. Is it your position that as soon as the child or person who is a natal male determines or identifies as a female, that that person should be immediately allowed to play on female teams?

ATTORNEY BLOCK: Objection to form and scope.

THE WITNESS: I'm not able to answer that question. I think that's out of the scope of my expertise.

BY ATTORNEY TRYON:

Q. Let me ask it differently because I didn't ask

it quite as artfully as I could have. You indicated profoundly harmful or have a profoundly harmful impact. So if a child or adolescent or adult, adult meaning anyone through collegiate age, were to be a natal male and identify as a female and is not allowed to immediately participate on female teams, would that be profoundly harmful, would it have a profoundly harmful impact on their mental health?

A. That would require an individualized assessment of that child or young adult in order to understand the potential impacts specific to that individual.

Q. What if they were required to wait a full year, would that be profoundly --- have a profoundly harmful impact on the mental health of that person?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Same answer.

BY BY ATTORNEY TRYON:

Q. Well as a general rule, do you have any opinion as a general rule?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: General rule of what? I'm not understanding the question.

BY ATTORNEY TRYON:

Q. Let me try again. So is there --- do you have a

general --- I mean you made a generalized statement here in the last sentence of paragraph 51. So my question is, as it pertains to this generalized statement, is there any delay that would not cause a profoundly harmful impact on the mental health of transgender people if they are denied the opportunity to immediately participate in the sports team of their gender identity?

ATTORNEY BLOCK: Objection to form and characterization.

THE WITNESS: It's a long sentence with a lot of clauses. I'm trying to --- I'm trying to parse them all out to make sure that I'm answering this accurately. As I testified to in my report, there's evidence of discrimination, stigma and bias leading to individual harms. The specific manifestation of those harms are highly individualized and require individual assessment of each child and family in order to know. Which is why you can't speak to the specific impacts for each individual child, but what we know are population-based data.

Q. Is it your view that if after a psychiatrist or psychologist or appropriate healthcare individual determines that there would be a profoundly harmful impact that healthcare professional should be the one to

determine whether or not the child should be allowed to participate on a girl's team?

A. I don't have a specific opinion about how sports administration vary from state to state. I know it's very different from state to state. What I would say is from a mental health perspective my goal is to help our kids access spaces that are going to be health promoting and build resilience. I think it's important for health professionals to be involved in the decisions that are made, but I can't speak to the legislative process within the scope of my expertise.

Q. Is the mental health of the cisgender females who might be at a disadvantage of the participation of a transgender female on the team, is their mental health important?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I would say first that the mental health of cisgender children who have participated in sports is certainly attestable hypothesis to explore and it's not research that I have seen, nor that I'm aware that it exists. Beyond that, you know, my expertise does not extend to this population as you have asked this question.

BY ATTORNEY TRYON:

Q. So then let me ask that specifically, have you treated any cisgender females that have been upset about transgender females participating on the girls team?

A. I have treated cisgender girls who have had transgender teammates. I have not treated anybody who has expressed any concern or harm from that.

Q. Do you acknowledge that there are those cisgender girls who are suffering from psychological harm from that?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I would not acknowledge that. That is not data that I have seen nor has been my personal experience with patients that I have seen or other colleagues who have described this.

BY ATTORNEY TRYON:

Q. Are you aware that some of Lia Thomas' cisgender teammates are very upset about Lia Thomas participating on the female swimming team?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I haven't read much about Lia Thomas or her teammates prior to today, so I'm not aware of any specifics to that.

BY ATTORNEY TRYON:

Q. Have you read anything about that incident ---

excuse me, that situation?

A. Well, I've read something today.

Q. Prior to today?

A. Which did not mention about teammates being upset. I've heard about it, but I have not read it.

Q. So you're aware of it?

A. I'm vaguely aware of it, yes. I've not done any primary research into it.

ATTORNEY BLOCK: Could we get a time check?

VIDEOGRAPHER: It looks like I got about three minutes left.

ATTORNEY TRYON: I speak really fast.

BY ATTORNEY TRYON:

Q. Well, is there benefits in --- for example, you said that HB --- you've read HB-3293 and you're aware that it does require --- well, first of all, are you aware that HB-3293 does not use the word transgender at all or trans woman or trans girl at all?

A. I would want to look at it specifically to double check that that's correct, but I would take your word for it.

Q. And so in HB-3293, it does require that all biological males must --- let me rephrase that, that

biological males may not compete on girls teams.

Do you understand that?

A. I don't, because biological male as a term is certainly up for debate.

Q. Which word would you like to use?

A. I don't know if there's going to be an answer for that in the context of this particular bill. I think ---.

Q. How about natal male, does that work?

A. Sure. We can use that. I would typically use assigned male at birth, but yes.

Q. Okay.

So natal males under this Bill are not allowed to participate on girls sports teams.

Do you understand that?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Yeah. And I apologize I really don't mean to be parsing, if the text of the Bill is biological males, what that just means is that that is a complex term that doesn't have a universal acceptance. But I understand that the goal of the Bill is for folks assigned male at birth, not to participate in women's sports teams, yes.

BY ATTORNEY TRYON:

Q. If a --- to use your term, a person assigned male at birth is told that that person may not participate on girls sports, and as in so many other things in life, you are told that's the rule and you have to live with it, is there value in learning coping skills to deal with rules that you don't agree with and abide by them?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: I guess the way I would approach it is that if we look at the data, clinical experiences and from the testimonies of transgender individuals that they face enough on a daily basis stigma discrimination exclusion, that they all would benefit from a healthy development of coping skills. Nowhere in the field of psychiatry is it recommended that we expose people to traumatic events for them to develop coping skills to manage through.

BY ATTORNEY TRYON:

Q. Well, not to intentionally do so, but there's laws and rules that you made that said you have to live with those rules then it's your position that the rules need to be changed to comply with the wishes of that person?

ATTORNEY BLOCK: Objection to form.

THE WITNESS: Again my expert testimony is rebutting the testimony of Dr. Levine and Cantor. I can't speak to the specific legislative processes in terms of the best way for states to approach a complex issue such as this.

ATTORNEY TRYON: I have no further questions. Thank you for your time I appreciate it.

THE WITNESS: Thank you. What is your poodle's name? Can I ask that off the record?

ATTORNEY BLOCK: We don't have any Redirect questions. Dr. Janssen will review the transcript.

ATTORNEY GREEN: This is Roberta Green on behalf of WVSSAC. No questions.

ATTORNEY MORGAN: This is Kelly Morgan on behalf of the West Virginia Board of Education and Superintendant Burch. I don't have any questions. Thank you.

ATTORNEY DENIKER: Dr. Janssen, thank you for your time today, this is Susan Deniker. I have no questions.

THE WITNESS: Thank you, guys.

VIDEOGRAPHER: Going off the record. The current time reads 6:18 p.m.

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VIDEOTAPED DEPOSITION CONCLUDED AT 6:18 P.M.

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IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA
CHARLESTON DIVISION

B.P.J. BY HER NEXT FRIEND AND MOTHER, HEATHER JACKSON,

PLAINTIFF,

VS.

CIVIL ACTION NO. 2:21-cv-00316

WEST VIRGINIA STATE BOARD OF EDUCATION, HARRISON COUNTY BOARD OF EDUCATION, WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION, W. CLAYTON BURCH IN HIS OFFICIAL CAPACITY AS STATE SUPERINTENDENT, DORA STUTLER IN HER OFFICIAL CAPACITY AS HARRISON COUNTY SUPERINTENDENT, AND THE STATE OF WEST VIRGINIA,,

DEFENDANTS,

AND

LAINEY ARMISTEAD,

DEFENDANT-INTERVENOR.

VIDEOTAPED REMOTE ZOOM 30(b)(6) DEPOSITION
WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION
BERNARD DOLAN
FRIDAY, FEBRUARY 11, 2022

JOB NO. 5079532
REPORTED BY: DAYNA HESTER, C.S.R. 9970

VIDEOTAPED REMOTE ZOOM 30(B)(6) DEPOSITION OF WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION BERNARD DOLAN, TAKEN ON BEHALF OF PLAINTIFF B.P.J., BY HER NEXT FRIEND AND MOTHER, HEATHER JACKSON, AT 12:18 P.M., EASTERN STANDARD TIME, FRIDAY, FEBRUARY 11, 2022, WITH THE WITNESS (PHYSICALLY PRESENT WITH COUNSEL), COURT REPORTER, AND VIDEOGRAPHER APPEARING REMOTELY VIA ZOOM VIDEOCONFERENCE, BEFORE DAYNA HESTER, C.S.R. NO. 9970.

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LINDSAY DUPHILY, VERITEXT CONCIERGE
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E X H I B I T S (CONTINUED)

EXHIBIT NO.	PAGE	DESCRIPTION
EXHIBIT 9	140	FILE TITLED "EXHIBIT 0009 - TAB 01.PDF"
EXHIBIT 10	142	FILE TITLED "EXHIBIT 0010 - TAB 06.PDF"
EXHIBIT 11	146	FILE TITLED "EXHIBIT 0011 - TAB 03.PDF"
EXHIBIT 12	148	FILE TITLED "EXHIBIT 0012 - TAB 04.PDF"
EXHIBIT 13	151	FILE TITLED "EXHIBIT 0013 - TAB 17.PDF"
EXHIBIT 14	152	FILE TITLED "EXHIBIT 0014 - TAB 08.PDF"

I N D E X

DEPONENT	EXAMINATION	PAGE
BERNARD DOLAN		
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QUESTIONS INSTRUCTED BY COUNSEL NOT TO ANSWER
(NONE.)

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EXHIBIT 1	18	FILE TITLED "EXHIBIT 0001 - TAB 14.PDF"
EXHIBIT 2	33	FILE TITLED "EXHIBIT 0002 - TAB 19.PDF"
EXHIBIT 3	47	FILE TITLED "EXHIBIT 0003 - TAB 09.PDF"
EXHIBIT 4	91	FILE TITLED "EXHIBIT 0004 - TAB 11.PDF"
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EXHIBIT 8	128	FILE TITLED "EXHIBIT 0008 - TAB 07.PDF"

-- EXHIBITS CONTINUED ON NEXT PAGE --

ZOOM VIDEOCONFERENCE DEPOSITION
FRIDAY, FEBRUARY 11, 2022
12:18 P.M. EASTERN STANDARD TIME

THE VIDEOGRAPHER: Good afternoon. We are going on the record at 12:18 p.m. 12:18
EST on February 11th, 2022. 12:18
Please note that the microphones may pick 12:18
up background noise, private conversations, and 12:18
interference if unmuted. 12:18
When muted remember to unmute to speak on 12:18
the record. 12:18
Audio and video recording will continue to 12:18
take place unless all parties agree to go off the 12:18
record. 12:18
This is Media Unit 1 of the video-recorded 12:18
deposition of 30(b)(6) witness Bernie Dolan taken by 12:19
counsel for plaintiff in the matter of B.P.J., by 12:19
her next friend and mother, Heather Jackson, versus 12:19
West Virginia State Board of Education, et al., 12:19
filed in the United States District Court for the 12:19
Southern District of West Virginia, Charleston 12:19
Division. Case Number 2:21-cv-00316. 12:19
This deposition is being conducted via 12:19
Veritext Virtual Zoom technology and all parties are 12:19

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attending remotely. 12:19
My name is Shawna Hynes from the firm 12:19
Veritext Legal Solutions, and I am the videographer. 12:19
The court reporter is Dayna Hester from 12:19
the firm Veritext Legal Solutions. 12:20
I am not related to any party in this 12:20
action, nor am I financially interested in the 12:20
outcome. 12:20
Counsel present and everyone attending 12:20
remotely will state their appearances and 12:20
affiliations for the record. 12:20
If there are any objections to proceeding, 12:20
please state them at the time of your appearance 12:20
beginning with the noticing attorney. 12:20
MS. KANG: Hi. 12:20
My name is Katelyn Kang. I'm an attorney 12:20
at the law firm of Cooley LLP, and I'm here on 12:20
behalf of the plaintiff. 12:20
And I'll let my co-counsel introduce 12:20
themselves. 12:20
MS. HARTNETT: Hi. 12:20
This is Kathleen Hartnett from Cooley LLP 12:20
for plaintiff. 12:20
MR. BARR: Good afternoon. 12:20
This is Andrew Barr from Cooley LLP on 12:20

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behalf of plaintiff. 12:20
MS. VEROFF: Hello. 12:20
This is Julie Veroff from Cooley LP on 12:20
behalf of plaintiff. 12:20
MS. STARK: Hi. 12:20
This is Loree Stark with the American 12:20
Civil Liberties Union of West Virginia on behalf of 12:21
plaintiff. 12:21
MR. WARD: Hi. 12:21
Nicholas Ward, ACLU West Virginia, on 12:21
behalf of plaintiff. 12:21
MS. HELSTROM: Hi. 12:21
This is Zoë Helstrom from Cooley LLP on 12:21
behalf of plaintiff. 12:21
MS. PELET DEL TORO: Hi. 12:21
This is Valeria Pelet del Toro from Cooley 12:21
LLP on behalf of plaintiff. 12:21
MS. GREEN: Hi. 12:21
Am I too soon? 12:21
MR. BLOCK: Hi. 12:21
This is Josh Block from ACLU on behalf of 12:21
plaintiff. 12:21
MS. SWAMINATHAN: And hi. 12:21
This is Sruti Swaminathan from Lambda 12:21
Legal on behalf of plaintiff. 12:21

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MS. GREEN: This is Roberta Green, Shuman 12:21
McCuskey & Slicer. I'm here on behalf of WVSSAC. 12:21
And here with me today is our deponent 12:22
30(b)(6) witness Bernie Dolan. 12:22
MS. BANDY: Hello. 12:22
This is Kimberly Bandy also on behalf of 12:22
West Virginia SSAC. 12:22
MS. MORGAN: This is Kelly Morgan on 12:22
behalf of the West Virginia State Board of Education 12:22
and Superintendent Burch. 12:22
I have with me as well general counsel 12:22
Heather Hutchens and Deputy Superintendent Michelle 12:22
Blatt as our representative. 12:22
MR. CAPEHEART: This is Curtis Capeheart 12:22
the West Virginia Attorney General's office on 12:22
behalf of the defendant State of West Virginia. 12:22
Also with me in my office is another 12:22
individual from the office, Jesseca Church. 12:22
MR. CROPP: My name is Jeffrey Cropp. I'm 12:22
with Steptoe & Johnson. We represent defendants 12:22
Harrison County Board of Education and 12:22
Superintendent Dora Stutler. 12:22
MS. HAMMOND: Hi. 12:23
This is Kristen Hammond. I'm also on 12:23
behalf of the West Virginia State Board of Education 12:23

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and Superintendent Burch. 12:23
MR. SCRUGGS: All right. I think that 12:23
leaves us as intervenor. 12:23
Jonathan Scruggs on behalf of the 12:23
Intervenor with Alliance Defending Freedom. 12:23
And also attending today on behalf of the 12:23
intervenor is my -- let me get my list here -- Catie 12:23
Kelly, Christiana Holcomb, Hal Frampton, and 12:23
Timothy Ducar. 12:23
And that is it. 12:23
THE VIDEOGRAPHER: Thank you. 12:23
If that's everybody, will the court 12:23
reporter please swear in the witness. 12:23
THE REPORTER: Okay. And because it is a 12:23
federal case, I do have a read-on. One second. 12:23
My name is Dayna Hester. This statement 13:08
is to acknowledge my obligations pursuant to Federal 13:08
Rules of Civil Procedure. 13:08
Rule 30(b), Subsection 5(a). My business 13:08
address is 707 Wilshire Boulevard, Los Angeles, 13:08
California. The videographer has stated the 13:08
additional required information.
Rule 30(b), Subsection 5(c). Upon
completion of the deposition, if there is a
stipulation about the custody of the transcript or

other pertinent matters, I will recite such stipulation(s). Additionally, the videographer will read-off when the deposition concludes.

So with this being said, I will now swear in the witness.

Mr. Dolan, please, raise your right hand.

THE WITNESS: [Witness did as requested].

THE REPORTER: Do you affirm the testimony you are about to give in the cause now pending will be the truth, the whole truth, and nothing but the truth? 12:24

THE WITNESS: I do. 12:24

THE REPORTER: Thank you. 12:24

BERNARD DOLAN

having been first duly sworn, was examined and testified as follows:

EXAMINATION 12:25

BY MS. KANG: 12:25

Q. Hi. Good afternoon, Mr. Dolan. How are you? 12:25

A. Good. How are you? 12:25

Q. Doing well. 12:25

Thank you so much for spending your Friday afternoon with us. 12:25

Before we get started, would you please state and spell your name for the record. 12:25

A. Bernard, B-E-R-N-A-R-D; Dolan, D-O-L-A-N. 12:25

Q. Mr. Dolan, before we get started, we have some housekeeping items. So the oath you just took is the same oath you would take if you were testifying in a courtroom. So what that means is you must testify truthfully and not leave out any important facts. 12:25

Is there any reason you cannot testify truthfully today? 12:25

A. No. 12:25

Q. Please give verbal answers to any of my questions. Nodding or shaking your head cannot, unfortunately, be captured by the court reporter. So the answer you just gave was perfect. 12:25

If you don't understand the question, please let me know, and I'm happy to try to rephrase it or make it clear for you. If you answer, I will assume you understood. Is that fair? 12:25

A. Yes. 12:25

Q. And just to be clear, when I ask questions I am not seeking communications that you had with your attorney. 12:26

Because the court reporter is taking down what we say on the record, I'll do my best to avoid talking over you and to avoid talking at the same time as you. 12:26

And then, finally, I'm going to try to do a break every hour or so -- but if at any point you need a break, we'll finish up whatever question we are on, and we can take a break whenever you feel comfortable. 12:26

Does that sound fair? 12:26

A. Yes, ma'am. 12:26

Q. Have you ever had your deposition taken before? 12:26

A. Yes. 12:26

Q. When was it? 12:26

A. Two years ago, I believe. 12:26

Q. What was it about? 12:26

A. A herpes case in wrestling. 12:26

Q. So were you testifying on behalf of the WVSSAC? 12:26

A. Yes, ma'am. 12:26

Q. And going forward if I say the "Commission" instead of the "WVSSAC," would that be all right with you? 12:26

A. That is fine. 12:26

Q. So you mentioned it's a herpes case. Can you tell me whether you testified on behalf of the W- -- of the Commission or was it in your personal capacity? 12:27

A. I believe it was on behalf of the Commission, but I'm -- I wouldn't -- I'm not sure. 12:27

Q. Have you ever -- have you ever had your deposition taken other than this time? 12:27

A. Not that I recall. 12:27

Q. Have you ever testified at trial? 12:27

A. Yes. 12:27

Q. When was this? 12:27

A. Couple years -- I would say probably three or four years ago. 12:27

Q. What was it about? 12:27

A. A golf ruling in a championship. 12:27

Q. And so were you also testifying on behalf of the Commission? 12:27

A. Yes, ma'am. 12:27

Q. Did you bring anything with you today? 12:27

A. Just a bottle of water. 12:27

Q. Good. 12:27

And do you understand that you are here to respond to a 30(b)(6) deposition notice? 12:27

A. Yes. 12:28

Q. Do you know what a 30(b)(6) deposition -- 12:28
deposition notice is? 12:28
A. Yes. 12:28
Q. Have you had a chance to review the 12:28
deposition notice? 12:28
A. Yes. 12:28
Q. So in that deposition notice, there were a 12:28
number of topics. 12:28
Are you familiar with each of the topics 12:28
described in that notice? 12:28
A. Yes. 12:28
Q. So if you go into your Marked Exhibits 12:28
folder, I'm going to introduce to you a document 12:28
that's been marked as Exhibit 1. 12:28
(Deposition Exhibit 1 was marked for 12:28
identification and is attached hereto.) 12:28
BY MS. KANG: 12:28
Q. Let me know when you have had a chance to 12:28
pull that up. 12:28
A. Okay. Exhibit 1, the deposition notice. 12:28
Q. That's correct. 12:28
And I'm going to ask you to scroll down to 12:28
Page 6 of Exhibit A. I believe it's Page 7 of the 12:28
actual pdf, if that's helpful, or Page 6. 12:29
A. Yes. Okay. 12:29

Q. Great. 12:29
So I'm going to go through each of the 12:29
topics and just ask you a few questions about them. 12:29
So for Topic 1, what did you do to prepare 12:29
for Topic 1? 12:29
A. Looked at our organization. 12:29
Q. Did you review any documents? 12:29
A. Our rules and regulations. 12:29
Q. And by looked at your organization, did 12:29
you mean -- 12:29
A. Review -- 12:29
Q. -- look at your -- sorry. Go ahead. 12:29
A. Just -- there's a part of our rules and 12:29
regulations that has a history of the organization. 12:29
Q. Got it. 12:29
Is there any reason you can't give full 12:29
and complete testimony on Topic 1? 12:29
A. No. 12:29
Q. When preparing for Topic 1, did you 12:30
consult with anyone other than your attorney? 12:30
A. No. 12:30
Q. Moving on to Topic 2, same question. What 12:30
did you do to prepare for Topic 2? 12:30
A. Probably just discuss with my attorney. 12:30
Q. And did you review any documents? 12:30

A. Not necessary for that one. 12:30
Q. And just to clarify, you didn't talk to 12:30
anyone other than your attorney? 12:30
A. No. 12:30
Q. For Topic 3, what did you do to prepare 12:30
for Topic 3? 12:30
A. Looked at our handbook, rules and 12:30
regulations handbook. 12:30
Q. Did you review any other document? 12:30
A. No. 12:30
Q. Did you consult with anyone other than 12:30
your attorney? 12:30
A. No. 12:30
Q. And is there any reason you cannot give 12:30
full and complete answers on behalf of the 12:30
Commission for that topic? 12:30
A. No. 12:30
Q. For Topic 4, what did you do to prepare 12:31
for it? 12:31
A. Rules and regulations handbook. 12:31
Q. Did you review anything else? 12:31
A. No. 12:31
Q. Did you consult with anyone other than 12:31
your attorney? 12:31
A. No. 12:31

Q. And is there any reason you cannot give 12:31
full and complete answers on behalf of the 12:31
Commission for Topic 4? 12:31
A. No. 12:31
Q. For Topic 5, what did you do to prepare 12:31
for that? 12:31
A. Looked at our rules and regulations and 12:31
probably researched my email. 12:31
Q. Can you clarify for me what you mean by 12:31
researched your email? 12:31
A. Just search the email to make sure I 12:31
didn't have any communication with the plaintiffs. 12:31
Q. Did you consult with anyone other than 12:31
your attorney for Topic 5? 12:32
A. No. 12:32
Q. And is there any reason you cannot give 12:32
full and complete answers on behalf of the 12:32
Commission? 12:32
A. No. 12:32
Q. Sorry. I know these questions are 12:32
repetitive, but I do appreciate it. 12:32
For Topic 6, what did you do to prepare 12:32
for Topic 6? 12:32
A. Researched -- or looked through my emails 12:32
as well as text messages. 12:32

Q. Did you review any documents? 12:32
A. Not really. Just -- I'm sorry. 12:32
Our transgender policy or our Board 12:32
policy. That was all. 12:32
Q. Did you review any of the emails or text 12:32
messages that you searched for? 12:32
A. I probably would have read them for -- to 12:32
determine whether there was any substance to them, 12:32
yes. 12:33
Q. Did you consult with anyone other than 12:33
your attorney for Topic 6? 12:33
A. No. 12:33
Q. And is there any reason you cannot give 12:33
full and complete answers on behalf of the 12:33
Commission for Topic 6? 12:33
A. No. 12:33
Q. For Topic 7, what did you do to prepare 12:33
for it? 12:33
A. Looked at our rules and regulations 12:33
handbook. 12:33
Q. Did you review any documents other than 12:33
the rules and regulations handbook? 12:33
A. No. 12:33
Q. Did you consult with anyone other than 12:33
your attorney about Topic 7? 12:33

Q. Did you consult anyone other than your 12:34
attorney? 12:34
A. No. 12:34
Q. Is there any reason you cannot give full 12:34
and complete answers on behalf of the Commission? 12:34
A. No. 12:34
Q. All right. We're almost there. 12:34
For Topic 10, what did you do to prepare 12:34
for it? 12:34
A. Reviewed the rules and regulations 12:34
handbook. 12:35
Q. Did you review anything else? 12:35
A. No. 12:35
Q. Did you -- did you consult anyone other 12:35
than your attorney? 12:35
A. No. 12:35
Q. Is there any reason you cannot give full 12:35
and complete answers on behalf of the Commission? 12:35
A. No. 12:35
Q. For Topic 11, what did you do to prepare 12:35
for it? 12:35
A. Reviewed the rules and regulations 12:35
handbook as well as the Board policy on transgender. 12:35
Q. Did you review anything else? 12:35
A. No. 12:35

A. No. 12:33
Q. And is there any reason you cannot give 12:33
full and complete answers on behalf of the 12:33
Commission? 12:33
A. No. 12:33
Q. For Topic 8, what did you do to prepare 12:33
for Topic 8? 12:33
A. Reviewed text messages and emails 12:33
concerning House Bill 3293. 12:34
Q. Did you review anything else? 12:34
A. No. 12:34
Q. Did you consult with anyone other than 12:34
your attorney? 12:34
A. No. 12:34
Q. And is there any reason you cannot give 12:34
full and complete answers on behalf of the 12:34
Commission? 12:34
A. No. 12:34
Q. For Topic 9, what did you do to prepare 12:34
for Topic 9? 12:34
A. Reviewed the rules and regulations 12:34
handbook. 12:34
Q. Did you review anything other than the 12:34
rules and regulations handbook? 12:34
A. No. 12:34

Q. Did you consult with anyone other than 12:35
your attorney? 12:35
A. No. 12:35
Q. Is there any reason you cannot give full 12:35
and complete answers on behalf of the Commission? 12:35
A. No. 12:35
Q. For Topic 12, what did you do to prepare 12:35
for it? 12:35
A. Reviewed the rules and regulations 12:36
handbook. 12:36
Q. Did you review anything else? 12:36
A. No. 12:36
Q. Did you consult with anyone other than 12:36
your attorney? 12:36
A. No. 12:36
Q. Is there any reason you can't give full 12:36
and complete answers on behalf of the Commission? 12:36
A. No. 12:36
Q. For Topic 13, what did you do to prepare 12:36
for it? 12:36
A. Read the rule -- read the House Bill 3293. 12:36
Q. Did you review anything else? 12:36
A. Just our rules and regulations. 12:36
Q. Did you consult with anyone other than 12:36
your attorney? 12:36

A. No. 12:36
Q. And is there any reason you cannot give 12:36
full and complete answers on behalf of the 12:36
Commission? 12:36
A. I -- I did consult -- I probably -- I had 12:37
a communication with Melissa White from House 12:37
Education. She had sent me documents -- or a 12:37
document. So I would say I communicated with 12:37
Melissa White about House Bill 3293. 12:37
Q. Was this in preparation for this 12:37
deposition? 12:37
A. No. I'm sorry. 12:37
Q. No need to apologize. 12:37
All right. Last -- last topic. What did 12:37
you do to prepare for Topic 14? 12:37
A. Primarily reviewed the rules and 12:37
regulations handbook and the transgender Board 12:37
policy and look at emails and text messages. 12:37
Q. Anything else? 12:38
A. No. 12:38
Q. Did you consult with anyone other than 12:38
your attorney? 12:38
A. No. 12:38
Q. Is there any reason you cannot give full 12:38
and complete answers on behalf of the Commission? 12:38

A. No. 12:38
Q. So for some of these topics, you mentioned 12:38
reviewing emails and documents. Do you know if 12:38
those emails and documents have been produced to 12:38
Plaintiff? 12:38
A. They all have, yes. 12:38
Q. All right. Thank you. 12:38
MS. KANG: You can take down Exhibit 1. 12:38
BY MS. KANG: 12:38
Q. Do you understand that you're testifying 12:38
about these topics in the deposition notice on 12:38
behalf of the Commission? 12:38
A. Yes. 12:38
Q. So just to be clear, when I ask for your 12:38
position on something, I -- I'm asking for the 12:38
position of -- of the Commission unless I say 12:38
otherwise. 12:38
You understand? 12:38
A. Yes, ma'am. 12:38
Q. In general, what did you do to prepare for 12:38
today's deposition? 12:38
A. Again, reviewed the rule -- the rules and 12:39
regulations. 12:39
Q. Did you meet with anyone other than your 12:39
attorney? 12:39

A. No. 12:39
Q. Did you discuss today's deposition with 12:39
anyone other than your attorney? 12:39
A. Just that I had it scheduled so people 12:39
would know in the office not to send me calls. 12:39
Q. So other employees at -- at the 12:39
Commission; is that right? 12:39
A. Yes, ma'am. 12:39
Q. Do you know who B.P.J. is? 12:39
A. By name only, yes. 12:39
Q. Do you know anything else about her? 12:39
MS. GREEN: I'll just object to the form, 12:39
to the extent he knows things from me, from counsel. 12:39
THE WITNESS: I have -- only know what -- 12:39
the documents that have been sent to me. I don't 12:39
know anything firsthand about her. 12:40
BY MS. KANG: 12:40
Q. Do you agree that B.P.J. is a girl who is 12:40
transgender? 12:40
MS. GREEN: I'll object to the form. And 12:40
I'll just object outside the scope. 12:40
THE WITNESS: It's been presented to me 12:40
that way. 12:40
BY MS. KANG: 12:40
Q. Are you aware that B.P.J. ran 12:40

cross-country on the girls' team at Bridgeport 12:40
Middle School? 12:40
A. Yes. 12:40
Q. How did you become aware of that? 12:40
A. Through the court case. 12:40
Q. Have you ever spoken to B.P.J.? 12:40
A. I have not. 12:40
Q. Have you ever spoken to B.P.J.'s parents? 12:40
A. No. 12:40
MS. GREEN: And I'll just object to the 12:40
extent this is outside the scope. 12:40
BY MS. KANG: 12:40
Q. Have you ever spoken to B.P.J.'s sibling? 12:40
A. No. 12:40
Q. Now, I want to just talk a little bit 12:40
about your personal background to sort of better 12:41
understand your selection as -- as the witness for 12:41
the 30(b)(6) deposition. 12:41
What is your position at the Commission? 12:41
A. I am the executive director. 12:41
Q. What are your responsibilities as 12:41
executive director? 12:41
A. Generally oversee the organization, assign 12:41
duties and evaluate staff, make decisions when 12:41
there's disagreement amongst schools. 12:41

Q. What sort of duties do you assign? 12:41
A. Director of all the tournaments. So 12:41
each -- each assistant executive director is 12:41
assigned multiple sports that they will oversee 12:41
and -- and put on the tournaments. 12:41
I assign secretarial duties to the 12:41
secretarial staff. 12:41
Q. How many assistant executive directors do 12:42
you have? 12:42
A. Three. 12:42
Q. So I believe you said you make decisions 12:42
when schools have disputes. Is that accurate? 12:42
A. Yes, ma'am. 12:42
Q. Can you tell me a little bit -- a little 12:42
bit more about that. 12:42
MS. GREEN: I'll just object. Outside the 12:42
scope. 12:42
THE WITNESS: If there is a difference 12:42
on -- opinion on eligibility of a student in one 12:42
school, one school may say they are eligible, one 12:42
school may say they are ineligible. So we gather 12:42
the facts, and we'll make a determination. 12:42
BY MS. KANG: 12:42
Q. And by "we," do you mean you as the 12:42
executive director or the Commission? 12:42

A. The Commission. 12:42
Q. And who is -- 12:42
A. And I -- I'm sorry. Me as the executive 12:42
director for the Commission. 12:42
Q. Understood. 12:42
How long have you been the executive 12:42
director? 12:43
A. Seven years. 12:43
Q. Have you held any other positions at the 12:43
Commission? 12:43
A. No. 12:43
Q. Do you -- 12:43
A. Pardon me. Wait a minute. 12:43
I was on the Board of Directors at one 12:43
point. 12:43
Q. And when was that? 12:43
A. That -- I believe it was 2012 to 2014. 12:43
Q. What was your role when you were on the 12:43
Board of Directors? 12:43
MS. GREEN: Object to the form. 12:43
THE WITNESS: Approve -- approve the 12:43
workings of the organization to proof financial 12:43
reports, those things. 12:43
Also to hear appeals of students or 12:43
coaches who have been -- who violated the rule and 12:43

they come up before the Board to either appeal their 12:44
discipline or appeal their ineligibility. 12:44
BY MS. KANG: 12:44
Q. Do you report to anyone currently as the 12:44
executive director? 12:44
A. I have ten Board members, yes. 12:44
Q. Is that the same Board of Directors that 12:44
you were just talking about? 12:44
A. Yes, ma'am. 12:44
Q. Does anyone report to you? 12:44
A. My eight other staff members report to me, 12:44
yes. 12:44
Q. What are their titles? 12:44
A. Three of -- 12:44
MS. GREEN: Object. Outside the scope. 12:44
And can I just have a continuing objection 12:44
for the outside scope, or you want be to keep 12:44
hopping in? 12:44
MS. KANG: Yes. I'll grant you a 12:44
continuing objection for outside the scope, Roberta. 12:44
MS. GREEN: Thank you. Thank you. 12:44
THE WITNESS: There are three assistant 12:44
executive directors, one events communication 12:44
coordinator, one bookkeeper, and three secretaries. 12:44
///

BY MS. KANG: 12:45
Q. Have you ever been employed by -- employed 12:45
by the Attorney General's Office of the State of 12:45
West Virginia? 12:45
A. No. 12:45
Q. Have you ever been employed by the 12:45
West Virginia House of Delegates? 12:45
A. No. 12:45
Q. Have you ever been employed by the 12:45
West Virginia Senate? 12:45
A. No. 12:45
Q. Have you ever been employed by the 12:45
Harrison County Board of Education? 12:45
A. No. 12:45
Q. Have you ever been employed by the 12:45
West Virginia State Board of Education? 12:45
A. No. 12:45
Q. So I am going to introduce to you a 12:45
document that is going to be marked as Exhibit 2. 12:45
And I'll let you know when it should 12:45
appear in your Marked Exhibit folder. 12:45
(Deposition Exhibit 2 was marked for 12:45
identification and is attached hereto.) 12:45
BY MS. KANG: 12:45
Q. So if you go to your Marked Exhibit 12:45

folder, you should now see a document that's been marked as Exhibit 2.

Let me know when you see it.

A. Okay.

Q. So on Page 2 of Exhibit 2, you'll see a section entitled "Bernie Dolan," and this is -- I'll represent to you that this is a screenshot that I took from the Commission website on February 10th, 2022. And in the bottom left corner you'll see the URL stamp where I pulled it from the website.

And I'd just like to ask you a few questions about your biography in -- on this page.

Do you agree with what's written in the paragraph on Page 2 of Exhibit 2 under "Bernie Dolan"?

MS. MORGAN: Counsel, this is Kelly Morgan.

I do not see an Exhibit 2 in the Egnyte.

MS. KANG: So if you're -- if anyone is having trouble accessing the Marked Exhibits, I recommend clicking on the folder again to refresh it.

Let me know if you continue to have problems.

THE WITNESS: I do -- I agree with what is

written there.

BY MS. KANG:

Q. Where did you work before your current role at the Commission?

A. Ohio County Schools.

Q. How long did you work there?

A. 30 years.

Q. Whoa.

Did you interact with any transgender individuals in that role?

A. I did not.

Q. When did you attend West Virginia University?

A. I graduated in '85; so probably '81 to '85.

Q. And when did you attend Salem International University?

A. I would say '99 to 2000 or 2000 to 2001.

Q. What is the Super Six?

A. State football championship.

Q. What was your role there?

A. I had a variety of roles starting out from assistant media director over the years to being the director -- once I was the athletic director of Wheeling Park High School.

Q. What was your role as the athletic director?

A. I was the athletic director at Wheeling Park High School.

What was the question?

Q. Sure.

Could you tell me what some of your responsibilities were in that role?

A. I would oversee the coaches, do their evaluations, purchase equipment for each team, as well as coordinate transportation, and also make sure all eligibility information was submitted to the Commission -- Commission as well as accurate.

Q. What is the state golf tournament?

A. State championship for golf.

Q. And what was your role there?

A. The director.

Q. What is OVAC?

A. It's the Ohio Valley Athletic Conference. It was the conference that Wheeling Park was a member of, and still is, but it's the athletic conference for the high schools.

Q. What was your role there?

A. I served on executive Board a couple of the years while I was the athletic director at

Wheeling Park.

Q. Finally, what is WVADA?

A. West Virginia Athletic Directors Association.

Q. What was your role there?

A. I served on the executive Board -- or the Board of Directors for a couple of years while I was the athletic director at Wheeling Park High School.

Q. And do you yourself play sports?

A. A little bit still.

Q. What sports do you play?

A. Tennis a little bit. Basketball a little bit. Pickleball.

Q. Do you currently coach any sports?

A. I do not.

Q. Did you used to coach?

A. I did.

Q. What did you coach?

A. 18 years I coached boys' and girls' track at Wheeling Park High School;

12 as the head coach for both boys and girls;

Assistant coach of football;

And assistant coach of girls' basketball.

Q. Thank you.

MS. KANG: You can take down Exhibit 2 now.
BY MS. KANG:
Q. So now I want to move into talking a little bit more about the Commission and its structure.
When was the Commission founded?
A. In 1916.
Q. Why was it founded?
A. To primarily handle disputes between schools at that point, and they did provide championship opportunities for schools.
Q. What sort of disputes between schools?
A. As I said earlier, it could be eligibility; it could have been breaking of contracts; could be officials, you know -- who -- what officials get assigned to games.
So there is quite a bit of conflict possible.
Q. How does the Commission define secondary sports?
A. Secondary sports, we are -- we oversee the sports that we currently have, which is -- a number of them.
But the -- what happens is, as the schools

offer these sports as clubs, once there is enough schools that offer the sports, then they would petition us to recognize an additional sport. So we have, I believe, 19 championships at this point.
Q. What grades count as a secondary grade?
A. 6th through 12.
Q. Do you know if Bridgeport Middle School qualifies as a secondary school?
A. They are a member of our association. So yes.
Q. Can you tell me what is a member of your -- what does a member of your association mean?
A. First of all, initially there was a initia- -- an initiation fee. And there were dues. But we have not charged dues for 20 years.
To be a member, you just have to provide -- you have to agree to follow all the rules and regulations as well as provide an opportunity for a boy sport and a girl sport in each of the seasons.
Q. So each member school has to offer a boys' team or a girls' team for each support?
A. Yes.
Q. Is that right?
A. Yes. Yes.

Q. And you said you stopped collecting dues for 20 years; is that correct?
A. Yes.
Q. Why did the Commission stop collecting dues?
A. At that point, it was more trouble than it was worth it. There wasn't that much money coming in from dues. It was before my time, though.
Q. Understood.
How many employees does the Commission have currently?
A. Nine.
Q. Is there someone who is considered in charge of the Commission?
A. I would assume -- I am the executive director. So I would be in charge. But I still answer to my Board of Directors.
Q. So does the Commission have a relationship with the State Board of Education in West Virginia?
A. We do have a relationship, number one. As our rules are promulgated from our members, they will submit rules to be voted on by the membership at our Board of Control.
If at the Board of Control they pass by a majority, then those rules get submitted to the

State Board of Education who would then put them out for public comment.
And they would have final vote on whether or not the rule becomes law. And if it does, they will submit that to the Secretary of State's office.
Q. So just to clarify, who submits the rules to the Board of Control again?
A. Principals. We are a principals organization. So each principal has one vote in our membership.
Q. And are you the principal of your member school?
A. Yes, ma'am.
Q. Do you personally, as the executive director, work with the State Board of Education of West Virginia?
A. Not directly.
MS. GREEN: I'm sorry. Could -- I'm sorry.
Ms. Kang, would you repeat the question?
MS. KANG: Sure.
BY MS. KANG:
Q. Do you personally, as the executive director, have a role or relationship with the State Board of Education of West Virginia?

A. I don't have a -- I mean, I have a working relationship because we deal with same schools. But as far as on a daily basis of any interaction, no -- other than they approve the rules. 12:55 12:55 12:55 12:56

Q. Does the Commission have a relationship with the County Board of Education? 12:56

A. Not really. We are a principals organization. We do communicate with county boards. But our membership are the high schools. 12:56 12:56 12:56

Q. What sort of communication -- 12:56

A. And -- 12:56

Q. Oh, sorry. 12:56

What sort of communications would you have with the County Board? 12:56 12:56

A. Oftentimes we would -- if there is rules or memos that we go out and send out, sometimes we will send them to the County Boards of Education that -- to keep them up to date on what is going on with the Commission. 12:56 12:56 12:56 12:56

Q. By "rules," do you mean the Commission's rules? 12:56 12:56

A. It could be -- yes, the Commission rules. Yep. Yes. 12:56 12:57

Q. Does the Commission determine who can play on a secondary school sports team? 12:57 12:57

with a final answer. 12:58

Q. What sort of information would you look at? 12:58 12:58

A. Whether they -- when they enrolled at the school, who they -- are they still living with their parents, same household, did they -- did they make a bona fide move, and whether they have a 2.0 or not. Things like that. 12:58 12:58 12:58 12:58 12:58 12:58 12:58

Q. Anything else? 12:58

A. Could be age. There's a number of rules for eligibility, but those are the biggest ones. 12:58 12:58 12:58

Q. So if a student is deemed ineligible by the Commission, is that student -- student prohibited from playing? 12:59 12:59 12:59

A. The student would be prohibited from playing in a varsity or JV game. There's only a limited exception as to when they would be able to even practice with the team. But for the most part, if you're ineligible, you're ineligible for all activities for that team. 12:59 12:59 12:59 12:59 12:59 12:59 12:59 12:59

Q. And I believe you mentioned that you have 286 member schools. Do you know if that includes all the schools -- secondary schools in West Virginia? 12:59 12:59 12:59 12:59

A. It does not. 12:59

MS. GREEN: Object to the form. 12:57

THE WITNESS: When you say "Commission," it's not the nine members here at the office. 12:57 12:57

The Commission, technically, is made up by the 286 members. So they have voted in the rules, and they are required by law -- by the -- being a member to follow those rules. So only when there is a dispute do we intervene. 12:57 12:57 12:57 12:57 12:57 12:57

BY MS. KANG: 12:57

Q. So I'd ask who makes the initial determination of a student's eligibility? 12:57 12:57

A. That would be the school. 12:57

Q. I believe you mentioned earlier the -- a dispute process. So the student -- or a student's eligibility is disputed. 12:57 12:57 12:57

Can you walk me through what would happen there? 12:57 12:57

A. It could be a school sending -- if Student A left School Number 1, went to School Number 2, and didn't follow the normal transfer procedures, School A might file a complaint to say, "Hey, can you look at so-and-so because they never sat out with School B, or Number 2." 12:57 12:58 12:58 12:58 12:58 12:58 12:58 12:58

So we would intervene and get the information, work with the two schools, and come up 12:58 12:58

Q. Do you know how many schools are not a member school in West Virginia? 12:59 12:59

A. I do not. 12:59

Q. If the Commission finds a person is ineligible, is there an appeal process? 12:59 12:59

A. Yes, there is. 12:59

Q. Can you walk me through what that appeal process looks like? 13:00 13:00

A. They would -- I would send them a letter telling them initially that they were determined ineligible. If they would like a hearing in front of our Board of Directors, then along with the level -- along with a letter of ineligibility, I would send the appeal papers that they would fill out and return to me. 13:00 13:00 13:00 13:00 13:00 13:00 13:00 13:00 13:00

And then within 30 days, I would bring them before our Board of Directors for them to make a decision to grant a waiver or not. And the Board can grant a waiver for rule fails to accomplish what it was intended for or there's a hardship on the student. 13:00 13:00 13:00 13:00 13:00 13:00 13:00 13:00 13:00

Q. What sort of hardship would count? 13:00

A. It -- it's up to the Board of Directors. So there is -- there's no marker that you have to hit. So there's lots of different things that may 13:00 13:00 13:00 13:01

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have come up.
Q. Have you taken part in the appeal process before?
A. When I was a member of the Board of Directors, yes.
Q. So is it the Board of Directors that makes the determination on the appeal?
A. Yes.
Q. Are you familiar with WVEIS, the West Virginia Education Information System?
A. Yes.
Q. Does the Commission have any control over the information that goes into WVEIS?
A. No. We have no access to that note.
Q. In West Virginia, to your knowledge, has a college team ever competed against a middle school team?
A. Has a college team ever competed against a middle school?
Q. That's correct.
A. It would be against our rule if they did. But no, not to my knowledge.
MS. KANG: So I'm going to introduce a document to you that's going to be marked as Exhibit 3, and I'll let you know when folks can

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access it in their Marked Exhibit folder.
(Deposition Exhibit 3 was marked for identification and is attached hereto.)
MS. KANG: So Exhibit 3 should now be in everyone's Marked Exhibit folder. If you don't see it, try clicking on the folder again to refresh it.
BY MS. KANG:
Q. Mr. Dolan, let me know when you're able to access Exhibit 3.
A. Okay.
Q. Do you recognize this document?
A. It is our rules and regulations handbook. Yes.
Q. Do you know who prepared this document?
A. Over time it's -- you know -- you know, it's the charge of one of my secretaries to -- once rules are changed, to submit the changes. But we take care of that in -- in the office here.
Q. So is this a Commission that's responsible for the information in the rules and regulations handbook?
A. Yes.
Q. So you'll notice that on the first page of Exhibit 3 it says that this was revised and printed August 2021.

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Is this the most recent version of the rules and regulations?
A. Yes. There may be editorial changes between then, but that's the most recent copy we have, yes.
Q. So is it fair to say --
A. For --
Q. I'm sorry. Go ahead.
A. For the current year.
Q. So is it fair to say that this document is -- is currently in effect?
A. Yes.
Q. And just to be clear, is this the rules and regulations handbook that you reviewed when preparing for this deposition?
A. Yes.
Q. Is the Commission required to follow these rules and regulations?
A. The Commission as well as all the member schools, yes.
Q. So I believe you might have mentioned it earlier, but just to be clear, can you walk me through the rule-making process of the rules and regulations in this handbook?
A. Okay. Any principal can submit a rule

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proposal. It has to be in by January 15th.
This rule proposal would then be looked at by our constitution and bylaws committee. They would make sure that it's legal and written appropriate.
In the next week here, we'll be sending out those proposals, all of our rule proposal changes out to our membership.
We will meet in the -- the first week of in April. And we will go over all of the rule proposals, and we'll vote on them individually.
If they pass by a majority, they'll move on to the State Board of Education, who puts them out for comment. And then they will vote on them whether or not they will move forward as part of our rule book.
Q. What do you mean by you make sure that the proposed rule is legal?
A. Sometimes the way it's written may not be appropriate. You know, there just may be misspellings, misinterpretation. So any changes we make would go back to the person who made it. We would re-read it and say, "Is this what your intent was" to make sure it's written properly.
Q. And just to be clear, who exactly votes on

the proposed rule in the Commission? 13:06
A. At our Board of Control, all 286 members 13:06
are eligible to vote. So if they come to our annual 13:06
meeting, we will discuss each item. And then the 13:07
next day we vote on every item that we have. 13:07
Q. So it -- it would be the Board of Control 13:07
and any member school who participate in that 13:07
meeting that would vote on that rule? 13:07
A. That is correct. 13:07
Q. Who amends these rules if they need 13:07
amendments? 13:07
A. Beforehand, it would be the constitution 13:07
and bylaws. There is a committee that we have 13:07
that -- made up of five principals. 13:07
Q. Who is responsible for enforcing these 13:07
rules? 13:07
A. All of the member schools plus the SSAC 13:07
office itself. 13:07
Q. What happens if a member school doesn't 13:07
follow these rules? 13:07
A. Either the coach, the administration, or 13:07
the school itself could face any sort of penalty 13:07
from a letter of warning to suspension or fine. 13:08
Q. By "suspension," do you mean suspension 13:08
from being a member school? 13:08

A. I don't know if we have ever suspended 13:08
anybody from being a member school, but it would be 13:08
suspicion of games, maybe not able to participate in 13:08
championships. 13:08
But, to my knowledge, we have never 13:08
suspended anybody from being a member. 13:08
Q. Is it possible for the Commission to 13:08
cancel a school's membership? 13:08
A. I'm not sure. 13:08
Q. To your knowledge, has anyone ever 13:08
submitted a rule proposal about the participation of 13:08
transgender students? 13:08
A. No. 13:08
Q. So I'm going to be just walking you 13:09
through a couple of excerpts in this exhibit. And 13:09
it is quite long. So I'm only going to be pointing 13:09
to certain sections. 13:09
So with that said, as I am going through, 13:09
if you want me to slow down or pause, or you want to 13:09
read over something, just -- just let me know. 13:09
So I'm going to ask you to turn to Page 99 13:09
of the pdf. In the bottom right-hand corner, it 13:09
will be stamped WVSSAC000216. And let me know 13:09
whenever you happen to get there. 13:09
A. What page again? 13:10

Q. So it's Page 99 of the pdf. But I believe 13:10
it's Page 85 of the actual document. 13:10
A. Okay. 13:10
Q. And just for future reference, when I -- 13:10
when I say Page 99 or Page 2, I'm referring the page 13:10
of the pdf not the page numbers that may be written 13:10
in the exhibit. 13:10
MS. GREEN: His assistant is slow. He has 13:10
got a really slow assistant over here who is paging 13:10
through a page at a time. We should be back in 13:10
about two weeks. 13:10
THE WITNESS: Is it the organizational 13:10
chart? 13:10
BY MS. KANG: 13:10
Q. That's correct. 13:10
A. Okay. Yes. I am there. 13:10
Q. Do you recognize this organizational 13:10
chart? 13:10
A. I do. 13:11
Q. Do you believe that accurately reflects 13:11
the organizational structure of the Commission? 13:11
A. Except for the State Board of Education, 13:11
they only have oversight of our -- they have final 13:11
say of our rules. So that may be why they are 13:11
placed at the top. 13:11

The Board of Directors -- I'm not sure it 13:11
accurately reflects our organization. But yeah. 13:11
Q. Would -- 13:11
A. The Board of Directors does not answer to 13:11
the Board of Control, I guess. 13:11
Q. So, I guess, where would you place the 13:11
Board of Directors in the organizational chart to 13:11
make it more accurate? 13:11
A. Well, I would probably and will probably 13:11
move State Board of Education, National Federation 13:11
out of the chart, and Board of Directors would be at 13:11
the top. Board of Control would be where the 13:11
National Federation is. 13:12
Q. So is it fair to say that the Board of 13:12
Directors is probably the one at the head of the 13:12
organization? 13:12
A. That is correct. 13:12
Q. I'm just going to ask you few questions 13:12
about a couple of these -- of these entries on the 13:12
organizational chart. 13:12
Can you tell me a little more about the 13:12
State Board of Education's relationship with the 13:12
Board of Control specifically. 13:12
A. With the Board of Control, the State Board 13:12
of Education has final -- they will review and put 13:12

the rules out for comments by the general public, and they'll have the final say on the votes. 13:12

That's probably the only relationship the State Board of Education has with the Board of Control. 13:12 13:13

Q. I know you touched a bit on this earlier, but could you tell me a bit more about what the Board of Control's role is in the Commission. 13:13

A. The Board of Control's charge is to vote for rule changes, either vote them up or down. 13:13

Q. What do you mean by "vote them up or down"? 13:13

A. When the -- they are put up for a vote, whether it's to create a new rule or not, it's their vote -- it's a majority of the Board of Control that is there that day for the vote. 13:13

It either passes or it fails. If it passes, it goes on to the State Board of Education. 13:13

Q. Does the State Board ever promulgate rules that the Commission has to follow? 13:13

A. The State Board has a 2.0 policy that is in our rule book, but it never passed our Board of Control. It was -- it's a State Board of Education policy. 13:13 13:14

Q. Does the Commission have to follow that 13:14

2.0 rule? 13:14

A. Yes. And all of our members. 13:14

Q. Are you aware of any other rules from the State Board of Education? 13:14

A. Not really. 13:14

Q. What is the Board of Control's relationship with the directors, if any? 13:14

A. Five of the Board of Directors are principals; so five of those principals would be members of the Board of Control. That's about the -- the best relationship -- the only relationship they have. 13:14

Q. What is the Board of Control's relationship with the executive director? 13:14

A. None, really. I mean, the Board -- the Board -- the five members of the Board of Directors that are principals represented an administrative district. And so the Board -- the Board of Directors answers to schools in their district. So that's the only indirect connection between myself and the Board of Control. 13:15

Q. And there are ten Board of Directors members; is that right? 13:15

A. Yes, ma'am. 13:15

Q. Does any member of the Board of Directors 13:15

ever promulgate or propose rules? 13:15

A. If they are one of the five principals they can, yes. 13:15

Q. Can you tell me a little bit more about what your assistant executive directors do in relation to the rules in this handbook? 13:15 13:16

A. Basically they -- they can help interpret the rules between our member schools, if there is issues. 13:16

But they primarily are responsible for the championships in their particular sports. But they can answer questions and interpretations on disputes of the rule book between schools. 13:16

Q. By overseeing the championship, does that include issuing rules for the championship? 13:16

A. No. All of our playing rules are created by the National Federation. There are some times that they have -- by state adoption that you can modify rules, but we follow the NFHS playing rules 100 percent. 13:16 13:17

Q. So the -- 13:17

A. Close a 100 percent. As close to a 100 percent as possible. 13:17

Q. So does -- so the Commission does not have any of its own rules in relation to championship? 13:17

A. No. There are rules in there that govern how many people are at the game; you know, how many teams are at the game; where the game is going to be held. All those things. The time. The place. Those are all determined by our Board of Directors. 13:17

And then they are given the charge to myself or my -- my assistants to run those championships on those days. 13:17

Q. What does the Sports Medicine Committee do? 13:17

A. They advise us in all of our rules and regulations that go in for each sport for safety. For instance, concussion, heat illness, sudden cardiac arrest, whether we are making modifications to practice schedules based on their -- their expertise. 13:17 13:18

And so they will make recommendations to us for modifying sports to make it more safe. 13:18

Q. So who makes up the Sports Medicine Committee? 13:18

A. There's a variety of doctors and athletic trainers. I believe there is -- I mean, there is a number of them. At least 12. I'm not sure of the exact number because they come off and on. But yeah. So they -- that's who makes it up is a 13:18

variety of medical personnel. 13:18
Q. And do they report to you? 13:19
A. They would make recommendations to me to give to the Board of Directors if we happen to have changes about -- sport-specific things, practice, things like that. Things that are not in the rule book, but they are modifications or rules that they would apply. 13:19
Heat illness is a big example. They are providing recommendations on how long a practice is, what you are allowed to do at a practice, and things like that. 13:19
Q. Do you happen to know if anyone from the West Virginia Legislature spoke with anyone from the Sports Medicine Committee before H.B. 3293 was passed? 13:19
A. Not that I know of. 13:19
MS. KANG: So I think now might be a good time for a five- to ten-minute break, just let you stretch your legs a little bit. 13:20
THE WITNESS: Okay. 13:20
MS. KANG: Roberta, are you all right with that? 13:20
MS. GREEN: Yes. I think it's a good time. 13:20

MS. KANG: All right. So why don't we -- why don't we take a break until about 1:30. 13:20
THE WITNESS: Okay. 13:20
THE VIDEOGRAPHER: This marks the end of Media Number 1. Going off the record. The time is 1:20. 13:20
(Brief recess.) 13:34
THE VIDEOGRAPHER: This marks the beginning of Media Number 2 in the deposition of 30(b)(6) Witness Bernie Dolan. 13:34
Back on the record. The time is 1:35. 13:35
BY MS. KANG: 13:35
Q. Mr. Dolan, before I move on to my next topic, I just want to ask you two more quick questions about the Sports Medicine Committee. 13:35
To your knowledge, has the Sports Medicine Committee or anyone from that committee ever made a recommendation regarding transgender participation in athletics? 13:35
A. I don't believe it's ever been on the agenda, no. 13:35
Q. Do you know if the Sports Medicine Committee has ever made a recommendation on girls playing on boys' teams? 13:35
A. Not in my tenure here, no. I don't know 13:35

about previous. 13:35
Q. All right. So I'm going to have a similar set of questions next. So just diving a little bit more into the Commission's role at -- role in sports. 13:35
Can you tell me -- I know you mentioned some earlier -- what factors are currently used to determine a student's eligibility? 13:36
A. Number one is do they live with their -- are they enrolled in the school; 13:36
Number two, do they live with their parents; 13:36
Number three, do they reside in the district where their school is; 13:36
What's -- what's their age as of August 1st of the -- that current year; 13:36
Are they playing on any other teams outside the school team. 13:36
Those are the majority -- and do they have a 2.0. 13:36
Those are the majority of the eligibility reasons that somebody might not be eligible for a period of time. 13:36
Q. If I could just put a pin in that. 13:36
So a student could be ineligible for a

certain period of time and then gain eligibility? 13:36
A. Yes. 13:37
Q. And the factors that are used to determine a student's eligibility -- are those the rules and regulations in the handbook plus the rules promulgated by the State Board of Education? 13:37
A. It is the -- the rules that are in our rule book, as well as the 2.0, which is the West Virginia Department of ED's rule, State Board of Education. 13:37
It's in our rule book, but it's not technically our rule, but it's for all of our member -- all of our public schools, and our private schools follow it too. 13:37
Q. Do the -- do the county boards of education in West Virginia have any rules that determine a student's eligibility? 13:37
MS. GREEN: And I'll just object to the form. 13:37
THE WITNESS: They are not supposed to have any rules additional than ours. They have given over the rights of overseeing sports to the SSAC. 13:38
BY MS. KANG: 13:38
Q. When a student's eligibility is in

dispute, who makes the final determination as to that student's eligibility?

A. I would make the initial -- well, the school makes the initial call. I would then either verify or overturn their decision based upon the facts.

And then if they're not happy with the answer that I get, they want to appeal that, they take that to the Board of Directors. And if they are -- if my ruling is sustained at the Board of Directors, they have a Board of Review that they could go to to get one final opportunity for a waiver.

Q. And the Board of Review is that different from the Board of Control?

A. It is. The Board of Review is the final Board that has seven members and may or may not be connected to the schools. It's more general. But they are appointed by the State Board of Education.

Q. Is the Board of Review a part of the Commission?

A. They are appointed by the Board of -- or the State Board of Education. So I think you've seen them say WVSSAC Board of Review, but we have no input as to whether or not -- who the members are.

Q. Are any Commission members currently part of the Board of Review?

A. There may be one member who is a Board office personnel who also serves on the Commission -- or on the Board of Review as the athletic director's association, but she is not a member -- she's not an employee of one of the schools. She works at the county office.

Q. Which county office?

A. I believe Lewis County office.

Q. Okay. So I want us to go back to Exhibit 3. And this will be Page 16 of the pdf. And in the bottom right-hand corner it will be Bates stamped VSV- -- WVSSAC000133. And let me know whenever you get a chance to review it.

MS. GREEN: And, Ms. Kang, what was the pdf page?

MS. KANG: Sure. It's Page 16.

MS. GREEN: 15 or 16?

BY MS. KANG:

Q. 16. 1,6.

A. Okay. I'm at 14 now.

MS. GREEN: Sorry.

THE WITNESS: Okay.

MS. GREEN: And what does it read at the

bottom?

BY MS. KANG:

Q. WVSSAC000133.

A. Yep. Okay. Yes.

Q. At the top of Exhibit 3, Page 16, you'll note it says, "Title 127 Legislative Rule."

Do you know what a legislative rule is?

A. I assume -- no. All of our rules are 127. So I think that's the area that we are in. But I would probably be guessing if I did, you know.

MS. GREEN: Yeah.

THE WITNESS: Yeah.

BY MS. KANG:

Q. Do you know who promulgated this specific rule?

MS. GREEN: I'll just object to the form.

THE WITNESS: Well, our rules have been in place since 1916. So over time, all of our rules have had some modification every year.

So as far as when that particular rule, the most current part, I couldn't tell you.

It's probably -- well, it says it was effective in September 9 of 2019. So that means there was a rule change at the Board of Control in 2019.

BY MS. KANG:

Q. Okay. I just want to draw your attention to the section on the same page it says "127-1-2 Name."

And in this paragraph -- I'll read out a section. But take your time reading it as well.

It says [as read]:

"Extracurricular activities of the students in the public secondary schools are controlled pursuant to W. Va. Code 18225, and authority for the delegation of such control to the Commission is granted by statute."

A. Yes.

Q. Now, did I -- did I read this correctly?

A. You did.

Q. Is this statement accurate?

A. I believe it's accurate. But it's not inclusive if that's the -- because it's -- we have private schools as members also.

But the legislature apparently, by statute, only dealt with the public schools.

Q. Do you know how many private schools are part of your membership?

A. Somewhere around 20. I don't know the

exact number. 13:44
Q. Are you familiar at all with West Virginia 13:44
Code 18225? 13:44
A. Yes. 13:44
Q. What is your understanding of it? 13:44
MS. GREEN: I'll just object to the extent 13:44
it would call for a legal conclusion. 13:44
THE WITNESS: It was when they authorized 13:45
the WVSSAC. 13:45
BY MS. KANG: 13:45
Q. What do you mean "authorized WVSSAC"? 13:45
A. We had been an organization since 1916. 13:45
And in the late '60s, they -- for some reason they 13:45
put us in the code, I guess. 13:45
Q. What does "extracurricular activities" in 13:45
this section mean? 13:45
A. It would be sports and band. 13:45
Q. Does it include club sports? 13:45
A. No. Not -- not in terms of the WVSSAC, 13:45
no. 13:45
Q. When does a club sport become a sport that 13:46
is controlled by the WVSSAC? 13:46
A. When there is more than 30 -- more than 20 13:46
we can recognize it. 13:46
At 32 teams, when there are 32 individual 13:46

teams, our Board can authorize a championship for 13:46
one class. 13:46
If there is 50 percent of our 13:46
membership -- of the high school membership, they 13:46
could authorize two classes; 75 percent they could 13:46
authorize three. 13:46
Q. So I'm going to draw your attention now 13:46
staying on the same page on Exhibit 3 to the section 13:46
that says, "127-1-3 Goals." 13:46
And I'm also going to refer you to the 13:46
section that says "3.1." And I'll read it out loud. 13:46
And feel free to take your time reading it as well. 13:46
[As read]: 13:46
"This Commission, through the 13:46
employment of instrumentalities 13:46
hereinafter established, shall 13:47
supervise and control interscholastic 13:47
athletics and band activities among 13:47
member schools." 13:47
A. Okay. 13:47
Q. Did I read this correctly? 13:47
A. You did. 13:47
Q. Is this statement accurate? 13:47
MS. GREEN: Object to form. 13:47
THE WITNESS: Yes. 13:47

BY MS. KANG: 13:47
Q. What does "supervise and control 13:47
interscholastic athletics" mean? 13:47
MS. GREEN: Object to the form. 13:47
THE WITNESS: Provide the rules and make 13:47
sure that everybody is following the rules. 13:47
BY MS. KANG: 13:47
Q. And how do you make sure that everyone is 13:47
following the rules? 13:47
A. Well, usually it -- you know, it's brought 13:47
to our attention either through members of the 13:47
public, schools in particular. Sometimes we see 13:47
violations in the newspaper, and we follow up on 13:47
them. 13:48
Q. By "follow up," you mean you reach out to 13:48
the individual member school? 13:48
A. Yes. And ask them for a written response 13:48
as to what the allegation might be. 13:48
Q. And do you have a rough estimate of how 13:48
many violations happen a year? 13:48
A. How many violations? Or how many times 13:48
are we called about a violation? 13:48
Q. Let's say, how many times you are called 13:48
for a violation. 13:48
A. If I had to guess, it would probably be 13:48

two or three a month. Not counting the appeals -- 13:48
the student appeals. 13:48
Q. How does a school stop being a member of 13:48
the WVSSAC? 13:48
A. To be honest with you, I'm not sure how a 13:49
public school does. 13:49
The private school simply writes us a 13:49
letter and says, "We no longer want to be a member 13:49
of your organization." There's no penalty for 13:49
withdrawal. 13:49
Q. Is there a reason why it's a different 13:49
rule for a private school versus a public school? 13:49
A. I guess a public could withdraw. 13:49
Q. To your knowledge, has any public school 13:49
ever withdrawn? 13:49
A. No. Just -- they have consolidated; and, 13:49
therefore, they become a new school, or they've 13:49
closed and have been absorbed into a new school. 13:49
But, to my knowledge, no public school has ever not 13:49
been a member. 13:49
Q. Are all public schools in West Virginia 13:49
currently members? 13:49
A. All public secondary schools 6 through 12, 13:49
yes. 13:49
Q. If a school is not a member of the 13:49

Commission, could it still offer interscholastic sports? 13:49
A. Yes. 13:49
Q. Can a school that is not a member compete with member schools? 13:50
A. As long as they are a school, yes. 13:50
Q. So now I would like to draw your attention to Page 17 of Exhibit 3, it should be just the next page down. 13:50
And I'll ask you to look at the paragraph that starts "127-1-4. Membership." 13:50
A. Okay. 13:50
Q. And that paragraph says [as read]: 13:50
"The WVSSAC shall be composed of the principals or designee, of those public or private secondary schools which have certified in writing to the State Superintendent of Schools of West Virginia [paren] (State Superintendent) that they have elected to delegate the control, supervision, and regulation of their interscholastic athletic and band activities." 13:50
Did I read that correctly? 13:50
A. Yes. 13:50

Q. Is this statement accurate? 13:51
MS. GREEN: Object to the form. 13:51
THE WITNESS: Yes. 13:51
BY MS. KANG: 13:51
Q. What does it mean to "delegate the control, supervision, and regulation of their interscholastic athletic and band activities"? 13:51
MS. GREEN: Object to the form. 13:51
THE WITNESS: It means that the WVSSAC and its member schools will write rules and everybody will follow them. 13:51
And so they can't have rules of their own that are separate from the rules that we have all agreed to. 13:51
BY MS. KANG: 13:51
Q. So just to be a clear, a member school cannot issue its own rules -- is that -- for interscholastic athletics; is that right? 13:51
A. Not if it's in conflict with our rule. 13:51
Q. Can it issue rules that are not in conflict with the SSAC rules? 13:51
A. Sure. 13:51
Q. Did Bridgeport Middle School delegate its control, supervision, and regulation of interscholastic athletic activities to the 13:52

Commission? 13:52
A. I'm sure they did at one time, yes. 13:52
Q. So we're going to stay on the same page, but I'm going to draw your attention to the section that starts with 4.2.b. Says [as read]: 13:52
"The principal or designee is and shall be responsible for conducting interscholastic athletic and band activities of the school in accordance with the constitution, bylaws, rules and regulations of the Commission which have been adopted by the Board of Control of the Commission for the governing of such activities." 13:52
A. Okay. 13:52
Q. Did I read this correctly? 13:52
A. Yes. 13:52
Q. Do you believe this statement is accurate? 13:52
MS. GREEN: Object to the form. 13:52
THE WITNESS: Yes. 13:52
BY MS. KANG: 13:52
Q. What happens if a principal or a designee breaks one of the Commission's rules? 13:53
A. There's a -- depends upon what the rule is 13:53

and how often, it could be a letter of discipline, it could be a verbal warning, or it could go all the way up to suspension or fine. 13:53
Q. So am I right that, when a member school makes a determination of what students are eligible to play secondary sports, it has to follow the rules and regulations of the Commission? 13:53
A. Yes. 13:53
Q. So now I'm going to ask you to scroll down two more pages to Page 19. It should be stamped WVSSAC000136 of Exhibit 3. Let me know whenever you're there. 13:53
A. Okay. We're there. 13:53
Q. I'm sorry. Let me actually take you to Page 20. That's Bates stamped -137 of Exhibit 3. 13:54
A. Okay. 13:54
Q. So in the section that says "127-1-8. Board of Directors," it says [as read]: 13:54
"The Board of Directors shall have authority to administer the regulations of the WVSSAC." 13:54
Did I read that correctly? 13:54
A. You did. 13:54
Q. Do you believe the statement is accurate? 13:54
A. Yes. 13:54

Q. What does administer the regulations of the WVSSAC mean? 13:54
MS. GREEN: Object to the form. 13:54
THE WITNESS: Make sure everybody is following the rules as written and interpreted. 13:54
(Simultaneously speaking.) 13:54
BY MS. KANG: 13:54
Q. By "interpreted," who -- 13:54
A. The -- 13:55
Q. -- makes -- oh, sorry. 13:55
A. Just -- 13:55
Q. Did you -- 13:55
A. As the rules are written. 13:55
Q. Does it mean anything else? 13:55
A. No. 13:55
Q. I'm going to ask you to scroll one more page down to the page that's Bates stamped WVSSAC -138. It should be Page 21 of the pdf of Exhibit 3. 13:55
A. Okay. 13:55
Q. So I'll draw your attention to Section 8.5, which says [as read]: 13:55
"The Board of Directors shall have power to decide all cases of eligibility of students and

participants in interscholastic athletic and band activities. The Board may also exercise discretionary powers it may deem necessary for the furtherance of education and interscholastic athletic and band activities in the secondary schools of West Virginia." 13:55
Did I read that correctly? 13:56
A. You did. 13:56
Q. Do you believe this statement is accurate? 13:56
MS. GREEN: Object to the form. 13:56
THE WITNESS: Yes. 13:56
BY MS. KANG: 13:56
Q. What does it mean "Shall have the power to decide all cases of eligibility of students and participants in interscholastic athletic and band activities"? 13:56
MS. GREEN: Object to form. 13:56
THE WITNESS: If I have -- if the school or I have determined somebody to be ineligible, they can grant a waiver to make them eligible. 13:56
BY MS. KANG: 13:56
Q. Can anyone other than the Commission grant a waiver? 13:56

A. Well, the Commission cannot. The Board of Directors can. And then the Board of Review can. But the -- the office itself cannot grant waivers. 13:56
I'll take that back. 13:56
I can grant a waiver if it's been ruled before in a similar fashion by the Board, but I don't have -- I don't execute that. 13:56
Q. So is it fair to say that if the Board of Review issues a determination of a student's eligibility and the current student before you has a similar set of facts, you can rely on that previous determination? 13:57
MS. GREEN: Object to the form. 13:57
THE WITNESS: The rule says that, but they're never -- I've yet to find two cases that are exactly similar. So... 13:57
BY MS. KANG: 13:57
Q. But you have the ability to -- to do so? 13:57
A. It says that we have the ability to do so, yes. 13:57
Q. So now I'd like to -- we're staying on the same page -- draw your attention to Paragraph 8.7 and 8.8. 13:57
So I'll read Paragraph 8.7 first. It says [as read]: 13:57

"At the request of the Board of Directors, a Deputy Board Member may investigate matters of eligibility and other violations of the rules and regulations of the WVSSAC. The Deputy Board Member shall submit to the Board of Directors a written report of findings and recommendations for disposition of the case(s)." 13:58
Did I read that correctly? 13:58
A. You did. 13:58
Q. Do you believe this statement is accurate? 13:58
MS. GREEN: Object to form. 13:58
THE WITNESS: Yes. 13:58
BY MS. KANG: 13:58
Q. When would the Board of Directors request an investigation into matters of eligibility? 13:58
A. If something was brought to them by a member school or the public at large. 13:58
Q. Are there any Deputy Board Members currently? 13:58
A. There are ten. 13:58
Q. Who do they report to? 13:58
A. They have very few -- very few responsibilities. We have not asked them to 13:59

investigate. We -- you know, we feel like it has put some them in difficult positions. So most of the investigations come out of our office.

Q. Can you tell me a little bit more about putting them in difficult positions; what you mean by that.

A. If they have to go into somebody else's school and make a determination on eligibility or where somebody lives, it could be a rival school and people might not want them there.

So, you know, we have taken it over because it's unbiased if we're looking at it.

Q. So are the Deputy Board Members designees or members of the member school?

A. They are principals of a member school, yes.

Q. So now on Paragraph 8.8 it says [as read]:

"The Board of Directors shall have the power to investigate through the Deputy Board Member, or in such other manner as may be found advisable, matters of eligibility and other violations of rules when the Board deems it advisable to do so on the basis of information furnished,

even though a formal protest is not filed."

Did I read that correctly?

A. You did.

Q. Is this statement accurate?

MS. GREEN: Object to the form.

THE WITNESS: It is.

BY MS. KANG:

Q. So when would the Board -- when would the Board deem it advisable to investigate matters of eligibility even without formal protest?

A. Sometimes they --

MS. GREEN: Object to the form.

I'm sorry.

THE WITNESS: Oh. I'm sorry.

Sometimes they get anonymous letters that would supply some information; and, you know, they would -- now they would ask us because I also can investigate. And so we would do it and then -- instead of our Board -- Deputy Board just because we don't want to put them in a position where they would be ruling on a -- sometimes a competitor.

BY MS. KANG:

Q. And what is the difference between a formal protest versus an informal protest?

A. A formal protest would be somebody's -- has written it and put their name to it.

Informal would be an anonymous letter or a phone call.

Q. So I'm going to ask you to scroll one page down in Exhibit 3 to the page that is Bates Stamped -139. It should be Page 22 of the pdf.

A. Okay.

Q. So I am looking at Section 127-1-9 titled "Funds."

A. Okay.

Q. How -- how is the Commission funded?

A. All of our revenue comes from championship events, ticket sales at championship events;

Regional basketball ticket sales;

Playoffs for football;

Registering of officials;

Coaches Education;

And corporate partnership.

Q. Are there any other sources of revenue?

A. None of any significance.

Q. By "none of any significance," what do you mean?

A. There would be maybe some fines in there for people -- coaches not paying -- or not

evaluating their officials or not putting scores in. Things like that.

Q. How much money are those fines usually?

A. $25 or $50 or $10, depending upon what it is for.

Q. Now, you mentioned the Coaches Education. Could you tell me a bit more about what that is.

A. The legislature requires that our coaches who are non-teachers must have a Coaches Education. And this is a State Board of Education. But they have charged us with providing the education, but State Board of Education would do the certification.

Q. Do the coaches pay the Commission for this education?

A. They do.

Q. Is the Commission a for-profit organization?

A. We are not.

Q. Do you receive any funds from the federal government?

A. We received from -- some pandemic funds.

But that was all through the small business authority.

Q. Anything else?

A. We have received GEAR funding from --

through the Department of Education for monies to go back to the school through AEDs, wet globe bulbs [verbatim], reimbursement for travel, things like that.

Because everybody was in short -- low attendance, and so we were trying to find a way to help them with their money.

Q. By "gear funding," do you mean sports gear or...

A. For them they also had limited attendance and limited games. So --

Did I miss the question?

Okay. What was your question again?

Q. Oh. I just asked that by "gear funding," did you mean sports gear?

A. No. No. It is -- I think it's -- GEAR is the program.

Q. Understood.

And was this all during the pandemic?

A. Yes, ma'am.

Q. Do you receive any funds from your member schools?

A. The only funds we receive at this time would be fines that they would have to pay for not attending, not putting in scores.

Sometimes our events might be held at their schools; so they would collect the gate and then write us a check.

But that's pretty much all we get from the schools.

Q. And how much are the fines?

A. For not putting in an evaluation, it's $10;

For not doing your eligibility, it's $25;

And if you don't put in a score, it's $50.

Q. Is any of the Commission's revenue shared with the member schools?

A. Yes.

Q. How is it shared?

A. We -- we give reimbursement back to the schools. Each sport has a different formula, but we help with travel and meal money at most of the events.

At football they also get a commission of the gate. 20 percent the first week, 15 percent the second, 10 the third, and 5 at the championship.

Q. If you had to estimate, what percentage of Commission funds go to the member schools?

A. When you say go to the schools, you mean actually cash sent back to them? Or do you mean

services to the school?

Q. Let's start with cash sent back to them.

MS. GREEN: Object to the form.

THE WITNESS: I would say $300,000 out of a probably $1.5 million budget.

BY MS. KANG:

Q. So what about services?

A. The services -- oh. I'm sorry.

Services would be higher because -- I would think it's probably closer to $700,000 depending upon what you call as "giving back".

You know, if it's -- some people would say that the expenses to put on tournaments is a way to give back.

Direct expenses would be, you know, the things that we are purchasing for them right now, which would be the AED and the wet globe bulb and the cooling submersion tubs.

Q. So what -- what is encompassed in the term "services"?

A. Services. Each -- each season we travel around the state to meet with all principals for a regional principal meeting.

We also travel around the state to meet with each sport during each -- at the beginning of

each season to make sure -- we go over all the rules and regulations that are current.

Those are some of -- as well as expenses that we incur hosting the tournaments for them.

And the coaches -- you know, we have -- we have expenses in materials for Coaches Education.

Q. I believe you mentioned you stopped collecting dues from your members.

Do you currently have any plans to resume collecting dues?

A. No. We have a proposal from one of our principals for this year to strike out the -- all of the dues' language and inserting language in there that says, "Could resume at any time when necessary."

Q. So, now, sticking with Exhibit 3, I'm actually going to ask you to go back up to Page 6 of the pdf and the Bates stamp is WVSSAC000123. And let me know whenever you get there.

A. Okay.

Q. So I'm going to direct you to the paragraph that begins with "Discrimination Prohibited."

Take your time reading it, and let me know whenever you are finished reading that paragraph.

A. [Witness reviews document]. 14:10
Okay. 14:10
Q. Do you know who wrote this portion of the 14:10
handbook? 14:10
A. I do not. 14:10
Q. Do you know how long this portion has been 14:10
in the handbook? 14:10
A. I do not. 14:10
Q. Do you remember ever reviewing this 14:10
section of the handbook? 14:10
A. Yes. 14:10
Q. When did you review it? 14:11
A. I -- 14:11
Q. Oh. Go ahead. 14:11
A. I would say a couple of years ago. We've 14:11
tried to have a book study and go through all of 14:11
these. 14:11
Q. When you reviewed it a couple of years 14:11
ago, did you believe the Commission was required to 14:11
comply with Title IX? 14:11
A. Yes. 14:11
Q. Is the Commission currently required to 14:11
comply with Title IX? 14:11
MS. GREEN: I'll just object to the form. 14:11
THE WITNESS: I would believe that the 14:11

schools are required to follow Title IX. But I 14:11
believe we believe it also. 14:11
BY MS. KANG: 14:11
Q. Now, I want to turn your attention to the 14:11
section below that titled "Beliefs and Objectives." 14:11
Take a moment to read the first paragraph 14:11
and let me know whenever you are done. 14:11
A. [Witness reviews document]. 14:11
Okay. 14:12
Q. What are "proper ideals of sportsmanship," 14:12
as written in this paragraph? 14:12
MS. GREEN: Object to the form. 14:12
THE WITNESS: Are you on Paragraph 1 or 3? 14:12
BY MS. KANG: 14:12
Q. Paragraph 1 [verbatim] of the Beliefs and 14:12
Objectives section. 14:12
A. What was your question again? 14:12
Q. Sure. 14:12
What are -- what are the proper ideals of 14:12
sportsmanship? 14:12
I'm sorry. I -- 14:12
A. The -- 14:12
Q. I am referring to Paragraph 3. You had it 14:12
right the first time. 14:12
A. Okay. 14:12

Sportsmanship is that everybody's on a 14:12
fair playing field. And the -- you should be 14:12
gracious in losing and winning. 14:13
Q. What do you mean by "fair playing field"? 14:13
MS. GREEN: Object to the form. 14:13
THE WITNESS: Same age. Same gender. 14:13
BY MS. KANG: 14:13
Q. Anything else? 14:13
A. No. 14:13
When I say "same age," it would be same 14:13
programatic level. So middle -- middle school kids 14:13
cannot play against high school but freshmen can 14:13
play against seniors. 14:13
Q. What are physical -- the physical and 14:13
social benefits that are referenced in this 14:13
paragraph? 14:13
A. Just good -- for one, just good health. 14:13
Participation. Also, you know, we believe that 14:13
it's -- the competitive part is good, and the 14:14
training part is beneficial to the student athlete. 14:14
Q. Why do you believe it's beneficial? 14:14
A. Studies we have read. And as a 14:14
participant a long time ago. 14:14
Q. What does "partisanship and prejudice" 14:14
mean in this paragraph? 14:14

A. Partisanship and prejudice would mean that 14:14
it's equal. You know, one side -- especially 14:14
with -- you know, as far as equipment or what -- if 14:14
you come to a game, you can't have lush seats for 14:15
you and the other team have foldable chairs and 14:15
things like that. So that's part- -- partisan. 14:15
You know, all the equipment at a game has 14:15
to be the same equipment everybody is using. Same 14:15
ball. Same rims. Everything is the same. 14:15
Q. What do you mean by "prejudice" in this 14:15
paragraph? 14:15
A. Prejudice would mean, you know -- you 14:15
know, is there some advantage to one team over 14:15
another. 14:15
Q. What sort of advantage are you referring 14:15
to? 14:15
A. Could be something as simple as a tarp 14:15
over your bench as opposed to the other team not 14:15
having it; 14:15
Could be as simple as a heater. You might 14:16
have a heater on a sideline at a cold game and they 14:16
don't. 14:16
So things that would make the game unfair 14:16
that are outside of the game. 14:16
Q. Is there anything else that you believe 14:16

would make the game unfair? 14:16
MS. GREEN: Object to the form. 14:16
THE WITNESS: There are probably other things, but right off the top of my head not sure. 14:16
Could be something as simple as how far you got to walk to your locker room in between games. 14:16
BY MS. KANG: 14:16
Q. Do you believe that allowing transgender students to participate on sports teams consistent with their gender identity is consistent with the goals identified in this paragraph? 14:16
MS. GREEN: Object to the form. 14:16
THE WITNESS: I believe our -- our Board policy was that, if it was not safe or unfair advantage, then it would be okay for them to participate. 14:16
BY MS. KANG: 14:17
Q. Does Bridgeport Middle School cross-country count as an interscholastic athletic? 14:17
A. It does. 14:17
MS. KANG: So I'm actually about to move into the next session. I think we are up on an hour. 14:17
Roberta, do you have preference as to 14:17

BY MS. KANG: 14:19
Q. And, Mr. Dolan, let me know whenever you have it up. 14:19
A. Okay. 14:19
MS. GREEN: Counsel, was there a certain page in the exhibit? 14:19
MS. KANG: Yeah. 14:19
BY MS. KANG: 14:19
Q. If you go to Page 6 to start, that would be great. And the Bates stamp is -365. 14:19
MS. GREEN: I'm sorry. 14:19
THE WITNESS: That's fine. 14:19
Is this the "2016-'17 Participation Report"? 14:19
BY MS. KANG: 14:19
Q. Do you believe it is? 14:19
A. Okay. 14:20
[Witness reviews document]. 14:20
Okay. 14:20
Q. So I'm going to represent to you that this is a document that was produced by your counsel in response to one of plaintiff's discovery requests. 14:20
If you want to read the text of the request, it's Request Number 15 in this same document. 14:20

whether you want me to get started or you want to take a break now? 14:17
THE WITNESS: I'm good. 14:17
MS. GREEN: All right. Let's do -- 14:17
THE WITNESS: I can't go to the bathroom. 14:17
MS. GREEN: I know. Really no need for a bathroom break over here. 14:17
MS. KANG: All right. Well, if it's okay with you, we'll go on a little bit longer. 14:18
Let me know if you do need a break. 14:18
So we can take down Exhibit 3. 14:18
BY MS. KANG: 14:18
Q. And I want to talk a little bit about some of the statistics that the Commission turns over to various organizations. 14:18
So I'm going to introduce an exhibit that will be marked as Exhibit 4. 14:18
MS. KANG: And I'll let you know when it's in everyone's folders. 14:18
(Deposition Exhibit 4 was marked for identification and is attached hereto.) 14:19
MS. KANG: Exhibit 4 should now be in everyone's Marked Exhibit folder. 14:19
Let me know if anyone has trouble accessing it. 14:19

Do you recognize this document that is before you right now? 14:20
A. I do. 14:20
Q. What is it? 14:20
A. This is a participation -- the National Federation of High School keeps track of how many participants are in each sport, trying to find trends among the sports, which ones are growing, which ones are falling; and if they are falling, how come. 14:20
Q. What is the National Federation of State High School Associations? 14:21
A. It is the association of 51 members, the 50 states plus Washington, D.C., and they primarily provide the sport-specific rules for almost all of our events. 14:21
Q. How long have you provided these statistics to the Federation? 14:21
A. To be honest with you, they've been tracking them, but I couldn't tell you how long we have. 14:21
Q. Do you think it's -- 14:21
A. I would assume. 14:21
Q. Go ahead. 14:21
A. I would assume -- it's a -- it's an 14:21

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ongoing thing; so I would think it's probably been done for a number of years. 14:21
Q. More than ten? 14:21
A. Yes. 14:21
Q. More than 20? 14:21
A. Probably. 14:21
Q. Why do you provide these statistics to the NFHS? 14:21
A. They -- they gather them for the whole country to try to monitor which sports are growing in popularity and which ones might not be. And the ones that aren't, they're trying to look and see why. 14:22
Q. I'm just going to ask you a few questions to help me understand how to read this chart. 14:22
Did you prepare this document? 14:22
A. I personally did not prepare it. But this is a document prepared by our office, yes. 14:22
Q. Do you know who prepared this document? 14:22
A. Alice Goodwin in our office. 14:22
Q. What's her position? 14:22
A. Secretary. 14:22
Q. Is she your secretary? 14:22
A. No. 14:22
Q. Do you know which secretary she is? 14:22

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A. Well, we don't all have specific secretaries. She works primarily with Greg Reed, but we all ask different people to do different things, depending upon what the level of activity going on in the office for that particular staff member is. 14:22 14:23 14:23 14:23 14:23
Q. What is Greg Reed's role? 14:23
A. Assistant executive director. 14:23
Q. Do you contribute any information to this document? 14:23
A. This document is -- I personally do not. It's pulled from our website. And it probably -- it is self-populating, I believe. So she doesn't actually type it in there. They pull it from our eligibility sheets. 14:23 14:23 14:23 14:23 14:23
Q. And who is "they"? 14:23
A. Our -- our web designer created this form, and it self-populates from that form, from their eligibility. 14:23 14:24 14:24
Q. So in the second column of this chart, it says "Senior." 14:24
What does that mean? 14:24
A. "Senior" means "high school." 14:24
Q. So senior -- 14:24
A. 9 through 12. 14:24

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Q. So it's any grade from 9 to 12? 14:24
A. It's a combination of 9 through 12, yes. 14:24
Q. If we go over to the third column, the one that says "Male," what does that mean? 14:24
A. That -- it's the same -- when we do our eligibility sheets by sport, for instance, football, football doesn't differentiate between boys and girls. It's -- they're asking for the number of participants. 14:24 14:24 14:24 14:25
When you get to girls' track, it can only be done by girls; so, therefore, that -- that's why there's not -- there's a zero in girls' track for males and boys' track has a number but girls' does not. 14:25 14:25 14:25 14:25
So football is the number of participants. So in the blue column under "Male," it would be the number of male -- or number of people in football. Could be male or female because our eligibility doesn't differentiate between the two. 14:25 14:25 14:25 14:25 14:25
Q. So just to be clear, even if a girl plays on the football team, she will not show up in the column that says "Female" for football? 14:25 14:25 14:25
A. That's correct. Because they're asking for the number of participants in football, and it's primarily football -- it's primarily a male sport. 14:25 14:25 14:26

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So it falls under the male category. That's the best we could do for them. 14:26 14:26
Similarly, cheer is primarily a cheer event, but there are boys. But there's no number in there. So we just -- it's just the total number in that -- for that particular sport. 14:26 14:26 14:26 14:26
Q. Okay. Scroll all the way over to the gray-colored columns. They're labeled as "Mid/Junior." 14:26 14:26 14:26
What does "Mid/Junior" mean? 14:26
A. It was either middle school or junior high and -- you know. I don't believe we have any more junior high. So probably could be fixed to say just middle school. 14:26 14:26 14:26 14:26
Q. What grades would those be? 14:26
A. 6th through 8. 14:26
Q. So now I'm going to ask you to -- to scroll down to Page 11. It will be Bates stamped -370. 14:26 14:27 14:27
Let me know whenever you get there. 14:27
A. Okay. 14:27
Q. So the last year that you produced this document is 2020 to 2021. 14:27 14:27
Do you know when the 2021 to 2022 statistics will be published? 14:27 14:27

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A. We submitted them over the summer. 14:27
Obviously, our spring sports aren't -- aren't in 14:27
place yet. So we wouldn't have numbers for them. 14:27
Q. For the 2021 to 2022 period, do you know 14:27
if B.P.J. will be listed in the "Female" column or 14:27
the "Male" column? 14:27
MS. GREEN: Object to form. 14:28
THE WITNESS: Which team is she on? 14:28
BY MS. KANG: 14:28
Q. She is on the cross-country team for 14:28
girls. 14:28
A. And then that's where she will be listed. 14:28
Because it's just pulling the number off of the 14:28
eligibility of that particular team. 14:28
Q. And the numbers that are submitted, are 14:28
they coming from the member schools themselves? 14:28
A. They -- the member schools have to submit 14:28
their eligibility on our site. And from there, 14:28
it takes the total of each school and puts them in 14:28
their category. 14:28
Q. So I'm going to ask you to scroll down one 14:28
more page to the doc- -- to the document that is 14:28
Bates Stamped -371. 14:28
A. Okay. 14:28
Q. So this is also a document that was 14:28

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produced by your counsel in response to one of 14:29
plaintiff's discovery requests. 14:29
If you want the read the text of that 14:29
request, you can look at Request 14 on Page -4 of 14:29
this exhibit. 14:29
Do you recognize this document? 14:29
A. This is a form from the National 14:29
Federation that puts our participation numbers into 14:29
their chart. 14:29
So the numbers that came off of that chart 14:29
for '18/'19 would match these numbers. 14:29
All those sports that are activities that 14:29
are -- have zeros by them, those are activities or 14:29
sports that we do not offer. But they are offered 14:29
through the National Federation. 14:29
Q. So you do not -- you as a Commission do 14:29
not make this form? 14:29
A. No. They send this back to us. This is 14:29
basically a verification of the form we sent to 14:30
them. 14:30
Q. So is it fair to say that the National 14:30
Federation takes information that you give them and 14:30
puts it into this form? 14:30
A. Yes, ma'am. 14:30
Q. So I noticed that the year only goes to 14:30

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2018 to 2019. Is there a reason why we don't have 14:30
the 2019 to 2020 statistics? 14:30
A. I don't know if that's the most recent 14:30
one. Because obviously with COVID and them not 14:30
working from the office for a long period of time, I 14:30
don't know if they have not submitted the most 14:30
recent years. 14:30
Q. So in the column that says "Boys School," 14:30
what does this column indicate? 14:30
A. Are we still on Page 7? 14:30
Q. Yes. We are -- we are on Page 12. 14:31
A. 12. Okay. 14:31
Q. The Bates stamp is -371. 14:31
A. And which one am I looking for? 14:31
Q. Yeah. So if you go over, it's the fourth 14:31
column. It says "Boys School." 14:31
A. Boys -- okay. 14:31
Q. Yeah. 14:31
A. These are -- these are the schools that 14:31
are offering basketball. If you are looking at 14:31
basketball, there is 124 schools who are offering 14:31
boys' basketball. And there are 124 schools that 14:31
are offering girls' basketball. 14:31
You'll notice that "Baseball" has 122. 14:31
There are no girls -- there are no girls' baseball 14:31

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teams. That's why it is a "0." 14:31
Q. Got it. 14:31
And then the boys participation, does that 14:31
reflect that 3,052 boys participated of the 14:31
124 schools that offer boys' basketball? 14:32
A. Yes. 14:32
And I would believe this is just high 14:32
school. It's not middle school also. 14:32
Q. Do you know if co-ed teams are reflected 14:32
on the chart? 14:32
A. Again, co-ed teams would be -- they would 14:32
be reflected as the -- the majority sport. So, for 14:32
instance, baseball, it could be co-ed if a girl 14:32
wanted to play baseball. But she would be listed on 14:32
the -- the school was offering boys' baseball -- or 14:32
they are offering baseball, the girl would simply be 14:32
listed on the eligibility and be counted as a 14:32
baseball participant, not as a female. 14:33
So in this -- this study that they are 14:33
doing is simply the number of participants in that 14:33
sport, not a breakdown of boys and girls if it's 14:33
co-ed. 14:33
Q. Who determines whether to make a team 14:33
co-ed? 14:33
A. Well, if you have enough boys and have 14:33

enough girls to have a team, then if we are offering boys and girls, then you have to have a separate team.

For instance, cross-country, you can have one girl and she could make up a team or she could be the team. But if you only have one soccer girl, she couldn't be the team. So she would have to play with the boys. And that would be co-ed at the time.

Q. Is it fair to say that what makes a sport co-ed depends on the sport?

MS. GREEN: Object to the form.

THE WITNESS: It depends on the sport -- I would say depends upon the participants.

If there are enough of each gender to participate, we would have separate -- separate championships.

BY MS. KANG:

Q. So is it fair to say that once a certain number of participants is reached for boys and girls, they have to be separate?

A. At some point based on the number, we would make a recommendation to the Board of Directors that we now have enough to break them and have a stand-alone.

Q. Can you give me an example of when you

made that recommendation?

A. We haven't made it yet. But I will tell you that we're -- you know, we have offered more opportunities for girls in golf. And our number of girls playing golf has gone up significantly.

We'll watch the numbers. And, as time goes on, if we -- if the numbers continue to grow, then they will have the opportunity to have a stand-alone program for girls' golf. Right now, they play on the boys' team or the co-ed team.

MS. KANG: So we can take down this exhibit, and I'm going to introduce a different document as the next exhibit, which I believe is Exhibit 5.

(Deposition Exhibit 5 was marked for identification and is attached hereto.)

MS. KANG: Exhibit 5 is now in everyone's Marked Exhibit folder. Please let me know if you have trouble accessing it.

BY MS. KANG:

Q. Mr. Dolan, let me know once you have it up.

And once you have it up, if you could go to Page 5 of the pdf, that would be great.

A. Okay.

Q. So I would like to draw your attention to Interrogatory Number 13 on Exhibit 5.

What does "participation mixed as indicated to respond to demand" mean?

A. "Identify all WVSSAC sponsored sports in which students may participate on a team designated as co-ed or mixed."

Is that the question? And why cheer is considered mixed?

Q. Yeah. That -- why don't we start there.

Why is cheer considered mixed?

A. It has both boys and girls. So it could be co-ed or mixed.

Q. What is the difference between calling cheer mixed and saying that "participation mixed as indicated to respond to demand"?

A. Basically because cheer almost always has boy members. Wrestling is starting to get a number of them. Baseball very seldom has -- it's very seldom a mixed sport. And football is very seldom. But golf is transitioning into its own sport.

Q. By "seldom," do you mean girls seldom participate on those teams?

A. That is correct.

Q. Just to be clear, football is a boys'

team, but if a girl wants to play football, she would be permitted to play on that team?

A. That's correct.

Q. If a boy wanted to play on a girls' team, would they be permitted to?

A. No.

Q. Why not?

A. Because girls have been -- they've been denied opportunity in the past, and by allowing boys to participate on girls' teams that are strictly girls, for instance, girls' soccer, girls' basketball, volleyball and softball, that girls would then lose opportunity.

Q. Do you have any rules preventing a boy from playing on a girls' team?

A. Yes.

Q. What rule would that be?

A. I have to find it in my rule book.

Q. Why don't we go back to the rule book, and I'll ask you a few questions on that.

So we'll go back to Exhibit 3.

(Simultaneously speaking.)

THE WITNESS: I'm trying to --

BY MS. KANG:

Q. And it should be --

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A. Try -- 14:40
Q. It should be Exhibit 3. It should be 14:40
Page 17, and the Bates stamp should end in -148. 14:40
A. Page 17 talks about our membership. 14:40
Q. Yes. I'm looking at Paragraph 3.8 of 14:40
Exhibit 3 on -148. 14:40
A. Okay. 14:40
Q. Take a moment to read Paragraph 3.8 and 14:41
let me know when you've had a chance to finish 14:41
reading it. 14:41
A. What page are you on again? Because I 14:41
don't have 3.8. 14:41
Q. No problem. It's page 17. The Bates 14:41
stamp should end in -148. 14:41
A. 17 of the pdf document or 17 of our -- 14:41
that's numbered on our rule book? 14:41
Q. This might be page -- this might be 17 14:41
that's numbered in your rule book. My apologies. 14:41
It's Page 31 of the pdf. 14:41
A. Okay. We're getting there. 14:41
MS. GREEN: We should have music to play 14:41
through the... 14:41
THE WITNESS: Okay. Scroll down. 14:41
Okay. Yep. Yes. Yes. 3.8. 14:42
///

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BY MS. KANG: 14:42
Q. Is that the rule that you were thinking of 14:42
that prevented a transgender boy from playing on a 14:42
girls' team? 14:42
A. Yes. 14:42
MS. GREEN: Object to the form, if I 14:42
can -- 14:42
THE WITNESS: Okay. Back up? 14:42
MS. GREEN: Yes. 14:42
BY MS. KANG: 14:42
Q. Why was this rule enacted? 14:42
A. I would assume to -- it complies with 14:42
Title IX, but it's -- you know, we're trying to not 14:42
allow boys to participate in girls' events to either 14:42
hurt them or dominate them. 14:42
Q. When was this rule, Section 3.8, enacted? 14:42
A. I would have to find that out. I'd have 14:42
to go back through all of our rules and find when it 14:42
was -- when it was enacted. 14:42
Q. Do you believe that it was enacted within 14:43
the past five years? 14:43
A. No. 14:43
Q. Past ten? 14:43
A. No. 14:43
Q. Past 20? 14:43

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A. I -- I'm not sure. I don't know if it's 14:43
gone that far. But I would say a significant 14:43
number, yes. I don't know if it's made it to 20. 14:43
Q. Fair enough. 14:43
So the team is separated by boys' and 14:43
girls' teams. Can a student ask to participate on a 14:43
co-ed team? 14:43
A. If there is a boys' team and a girls' 14:43
team -- are we talking about, like, boys' and girls' 14:43
basketball and can the girls' basketball player play 14:44
on the boys' team? Is that what you're asking? 14:44
Q. Yes. 14:44
A. They cannot. If there is a team for them, 14:44
they must play on the team of their gender. 14:44
Q. Let's go back to Exhibit 5. 14:44
And then I think once we are done with 14:44
that exhibit, we can take a break. 14:44
So let's go back to Page 5 of the pdf. I 14:44
just have a few follow-up questions. Back to 14:44
Interrogatory Number 13. 14:44
A. Okay. 14:44
Q. What grades does junior varsity cover? 14:44
A. It doesn't have a grade. It could be 9 to 14:44
12. You could be a senior and still on the junior 14:44
varsity. If some -- some schools because of numbers 14:44

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will have just the varsity. Some will have varsity 14:45
and j- -- junior varsity. And some will have 14:45
varsity, junior varsity, and a freshman team. 14:45
So just different designation of those 14:45
teams. 14:45
Q. What does junior varsity mean? 14:45
A. Junior varsity -- 14:45
MS. GREEN: I was just going to object to 14:45
the form. 14:45
THE WITNESS: Okay. 14:45
When you have too many kids and you 14:45
have -- you want an opportunity for them, you have a 14:45
junior varsity as long as you can get a schedule for 14:45
them. 14:45
BY MS. KANG: 14:45
Q. What does "varsity" mean? 14:45
A. You are the team that participates for the 14:45
state championships. 14:45
Q. What does "freshman" mean? 14:45
A. Some large schools want to give more 14:45
opportunity to their student athletes. So they have 14:45
too many kids for a junior varsity, JV; so they have 14:46
a separate freshman program. 14:46
Q. Just to be clear, if a student wants to 14:46
play a sport that is not in this list -- so it's not 14:46

cheer, wrestling, baseball, football, or golf -- they have to join either the boys' or girls' team?
A. I think that's everybody that is not included, yes.
Q. One last question before we take a break. I would like to draw your attention to Page 9 of Exhibit 5, and this is the response to Interrogatory Number 14.
A. Okay.
Q. So just to be clear, to make sure I am reading this chart correctly, in the first row that starts with "Andrew Jackson Middle School," it indicates that one girl participated in wrestling.
Is that an accurate -- is that an accurate interpretation?
A. It is.
Q. How do you collect these statistics?
A. This was a survey of the schools because, when they do their eligibility, it doesn't distinguish between boys and girls.
So in order to find out who is playing what sports, how many -- how many girls are participating in -- in the sports that allow boys and girls, the co-ed or mixed, we -- we have to survey them to find out.

Q. When was this survey done?
A. In the last two weeks, I would imagine. I forget. I mean, it was in the last three -- two to three weeks.
Q. Why did you survey the schools?
A. Just to find out how many girls were participating in our -- since we don't have accurate data of how many girls are playing different sports, this was our opportunity to go ahead and -- and poll our membership.
Not every school replied. And we don't have a way to verify it. It was just for us to have an idea. We looked --
Q. Are there any -- oh. Go ahead, please.
A. We would look at this data, for instance, golf and wrestling, to determine how close we are to having its own sport.
Q. Is this data the current data? Or is this data, like, a participation across all years --
A. And again --
Q. -- of all time?
A. I believe -- you know, it wasn't a certified data. Schools were primarily listing second -- second -- or last year's spring sports and this year's winter and fall.

So, obviously, they don't know how many baseball, softball, track, and tennis participants we have coming up because we haven't had our teams yet.
MS. KANG: Okay. I think now is a good time for everybody to take a break, if that is all right with you, Mr. Dolan.
THE WITNESS: Sure.
Okay. Roberta, is that -- does that work for you?
MS. GREEN: Sure. Thank you.
MS. KANG: Of course.
THE VIDEOGRAPHER: This marks the end of Media Number 2.
Going off the record. The time is 2:49.
(Brief recess.)
THE VIDEOGRAPHER: This marks the beginning of Media Number 3 in the deposition of 30(b)(6) Witness Bernie Dolan.
Back on the record. The time is 3:01.
BY MS. KANG:
Q. Mr. Dolan, would it be harmful to a student if they were forbidden from playing school sports?
MS. GREEN: Object to the form.

THE WITNESS: There are lots of kids who are, I think, not allowed to participate for whatever reason. It could be eligibility things. So happens to a lot of kids right now.
We do think there are benefits to participation.
BY MS. KANG:
Q. What sort of benefits does playing a school sport afford?
A. Giving an opportunity for leadership, personal health, camaraderie, cooperation.
Q. I want to talk a little bit about House Bill 3293, or H.B. 3293, and a little bit more about the Commission's policy for H.B. 3293 was enacted.
A. Okay.
Q. Do you believe that H.B. 3293 forbids B.P.J. from playing on a girls' team?
MS. GREEN: Object to the perform.
THE WITNESS: I would believe it did before the court case. Yes.
BY MS. KANG:
Q. Have you ever talked to any organizations outside of the State of West Virginia regarding H.B. 3293?
A. Not that I know of.

Q. Have you ever talked to any organizations outside of West Virginia concerning transgender athletes generally? 15:02

A. We may have talked -- you know, our National Federation, it was probably on a -- one of our either winter meetings or summer meetings there was probably a topic. 15:02

And I would have to go back and look, but the state may have put up a presentation on whatever their -- whatever their rule was. 15:02

Q. Do you remember when this meeting occurred? 15:03

A. I do not. 15:03

Q. Do you know which state proposed a rule? 15:03

MS. GREEN: Object to the form. 15:03

THE WITNESS: I believe the presentation was from Connecticut. 15:03

BY MS. KANG: 15:03

Q. Do you remember what the rule they proposed was? 15:03

MS. GREEN: Object to the form. 15:03

THE WITNESS: I don't know. They weren't proposing a rule; they were explaining their rule. 15:03

BY MS. KANG: 15:03

Q. Do you remember what their rule was? 15:03

A. I believe it was full participation by gender identity. 15:03

Q. Okay. So I'm going to ask you a few questions about the Commission's policy. Before I do so, just to be totally clear on the record, I'm just going to give you some terms that I'll explain my definitions for. So whenever I ask you questions, this is what I mean. 15:03

When I use the term "cisgender," I am referring to someone whose gender identity matches the sex they were assigned at birth. So, for example, if someone was assigned male at birth and they identify as a male, that person would be a cisgender boy. 15:04

When I use the term "transgender," I am referring to someone whose gender identity does not match the sex they were assigned at birth. So, for example, if someone was assigned male at birth but then they identify as female, that person would be a transgender girl or woman. 15:04

And so for purposes of the questions I will be asking next, I'll be using these definitions for -- for clarity. 15:04

Are you all right with that? 15:04

A. Yes. 15:04

MS. GREEN: Objection to form. 15:04

THE WITNESS: Sorry. 15:04

Yes. 15:04

BY MS. KANG: 15:04

Q. And then you may already understand this, but when I use the phrase "H.B. 3293," I am referring to House Bill 3293. 15:04

Are you familiar with this bill? 15:04

A. Yes. 15:05

Q. To your knowledge, has a cisgender boy ever played on a girl's sports team? 15:05

MS. GREEN: Objection to the form. 15:05

THE WITNESS: Not to my knowledge. 15:05

BY MS. KANG: 15:05

Q. To your knowledge, has it ever been raised as an issue? 15:05

MS. GREEN: Object to the form. 15:05

THE WITNESS: No. 15:05

BY MS. KANG: 15:05

Q. Currently, if a cisgender girl wants to play football, is she permitted to do so on the boys' team? 15:05

A. Yes. Because there's no girls' team at the moment. 15:05

Q. Before H.B. 3293 was enacted, did the 15:05

Commission allow transgender students to participate on sports teams consistent with their gender identity? 15:06

MS. GREEN: Object to the form. 15:06

THE WITNESS: Our policy ident- -- whatever the school identified them in WVEIS was how we recognize them. 15:06

BY MS. KANG: 15:06

Q. Can you tell me a little bit more about this policy? 15:06

MS. GREEN: Object to the form. 15:06

THE WITNESS: Basically, it was to protect athletes from harm or unfairness because of physical abilities. So whatever the school identified them at if -- if everybody was okay with that, they got to participate. 15:06

If it ever came to a point where somebody was too big, too strong, or it wasn't safe for that person to play, then they could appeal to the Board. 15:07

BY MS. KANG: 15:07

Q. Can you tell me a little bit more about what you mean by "it wasn't safe" for them to play? 15:07

A. Could be a volleyball player who could jump much higher than the girls, much stronger. And when he hits the ball, could hurt the -- hurt the 15:07

other participants. 15:07
Q. How did the Commission come up with this 15:07
policy? 15:07
A. It was actually created by my predecessor. 15:07
And just came in in the beginnings of my time. And 15:07
they were just addressing an issue that hadn't come 15:07
to West Virginia at this point, but they wanted to 15:08
have something in there as a temporary stopgap 15:08
measure. 15:08
And to this point, no one has written a 15:08
rule to be voted on -- our -- by our membership. So 15:08
that has been the -- our guidance since 2016. 15:08
Q. Who was your predecessor? 15:08
A. Gary Ray. 15:08
Q. And why did he feel the need to enact this 15:08
policy? 15:08
MS. GREEN: Object to the form. 15:08
THE WITNESS: As we went to the national 15:08
meetings more and more, people were saying this was 15:08
an issue, and so they wanted -- you know, it had not 15:08
hit West Virginia yet but wanted to have something 15:08
in place to protect the kids. 15:09
BY MS. KANG: 15:09
Q. Did you ever receive any complaints about 15:09
this policy? 15:09

A. No. 15:09
Q. Do you know who specifically drafted the 15:09
policy? 15:09
A. I believe it was probably my predecessor 15:09
Gary Ray and -- and the legal counsel at the time. 15:09
Q. Do you know if anyone else participated in 15:09
the drafting? 15:09
A. I don't think so. 15:09
Q. Was this policy ever implemented? 15:09
A. We have never used it, if that's what you 15:09
are asking. 15:09
Q. What do you mean by "never used it"? 15:09
A. Nobody ever brought up a case -- I'm not 15:09
even aware of any case of transgender participating. 15:09
Therefore, nobody ever brought it to the Board to 15:10
decide whether or not it was fair or safe. 15:10
Q. When a school determines a student's 15:10
gender, is that always put into WVEIS? 15:10
MS. GREEN: Object to the form. 15:10
THE WITNESS: I am not sure what they put 15:10
in WVEIS, to be honest with you. I'm not -- you 15:10
know, each school, I would assume, has rules and 15:10
regulations they have to do. 15:10
BY MS. KANG: 15:10
Q. Is it fair to say that the Commission 15:10

looked to WVEIS to determine a student's gender? 15:10
A. We have -- we don't have access to WVEIS. 15:10
We would ask the school to provide what they have 15:10
designated the student as in WVEIS. 15:10
Q. Has this always been the case? 15:11
A. I would assume that it's always been the 15:11
case. Even before we had a policy, the school 15:11
determined what they put in WVEIS. 15:11
Q. Have you received any complaints about 15:11
B.P.J.'s participation? 15:11
A. Not that I know of. 15:11
Q. And to be clear, you haven't received any 15:11
complaints about transgender students participating 15:11
in West Virginia? 15:11
A. No. 15:11
Q. Have any transgender students ever asked 15:11
the Commission if they could participate in sports 15:11
at a secondary school level? 15:11
MS. GREEN: Object to the form. 15:11
THE WITNESS: I had one boy who wanted to 15:11
be a -- play volleyball, and we told him he couldn't 15:12
play volleyball because it was a girls' sport. And 15:12
he said, "Then I'll be a boy -- I'll be a girl." 15:12
And -- but he wasn't -- he never did 15:12
anything else with it. And we assumed he just 15:12

wanted to play volleyball because it never came back 15:12
up. 15:12
I did have contact with a school who said 15:12
they had one student who one day identified as a 15:12
girl, next day a boy, and back and forth. But we 15:12
have not heard anything more from that student. 15:12
So... 15:12
BY MS. KANG: 15:12
Q. When was that? 15:12
A. That would have been in the last year. 15:12
Q. Do you remember which school it was from? 15:12
A. Yes. 15:12
Q. Which school was it? 15:12
A. South Charleston High School. 15:12
Q. So I'm going to introduce a document 15:13
that's going to be marked as Exhibit 6. 15:13
I'll let you know when it's available in 15:13
your folder. 15:13
(Deposition Exhibit 6 was marked for 15:13
identification and is attached hereto.) 15:13
MS. KANG: Exhibit 6 is now available in 15:13
the shared exhibit folder. 15:13
BY MS. KANG: 15:13
Q. Mr. Dolan, let me know when you have had a 15:13
chance to look at it. 15:13

A. [Witness reviews document]. 15:13
Okay. 15:13
Q. Do you recognize this document? 15:14
A. Yeah. This was our transgender Board of 15:14
Directors policy. 15:14
Q. Is this the same policy that we were 15:14
discussing earlier? 15:14
A. Yes. 15:14
Q. So I want to draw your attention to Bullet 15:14
Point 1, which says [as read]: 15:14
"The transgender student's school 15:14
shall make the initial determination as 15:14
to whether a student may participate in 15:14
interscholastic athletics in a gender 15:14
that does not match the gender assigned 15:14
to him or her at birth." 15:14
Did I read that correctly? 15:14
A. Yes. 15:14
Q. Why did the Commission give the initial 15:14
determination to the transgender student's school? 15:14
MS. GREEN: Object to the form. 15:14
THE WITNESS: First of all, we -- we don't 15:14
know this student. There would be no way for us to 15:14
know all the factors. 15:14
So the school is the entity that works 15:14

closely with that student and the parents and the 15:15
family on a daily basis. 15:15
BY MS. KANG: 15:15
Q. Why did the Commission think transgender 15:15
students should be able to participate on teams 15:15
consistent with their identity? 15:15
MS. GREEN: Object to the form. 15:15
THE WITNESS: I assume that the school 15:15
would put them in the proper place, wherever the 15:15
school decided based on all the factors. 15:15
BY MS. KANG: 15:15
Q. Did you ever consider implementing a 15:15
hormone requirement in this policy? 15:15
MS. GREEN: I'm sorry. I didn't hear what 15:15
you said, Ms. Kang. 15:15
MS. KANG: Sure. 15:15
BY MS. KANG: 15:15
Q. Did you ever consider implementing a 15:15
hormone requirement in this policy? 15:15
MS. GREEN: Thank you. 15:15
Object to the form. 15:15
THE WITNESS: Our -- it was my 15:15
predecessor's. So I'm not sure of their discussion 15:15
as to whether or not they were going to put that in 15:16
or not. 15:16

BY MS. KANG: 15:16
Q. Did you or your staff ever consider 15:16
putting in this policy -- putting in a hormone 15:16
requirement? 15:16
MS. GREEN: Object to the form. 15:16
THE WITNESS: No. Because we would not 15:16
change the policy. I think it would -- if it was 15:16
going to change, it was going to be changed by a 15:16
rule by our membership and was never brought forward 15:16
as a rule proposal. 15:16
BY MS. KANG: 15:16
Q. Am I right to say that this policy was not 15:16
a rule? 15:16
A. That's correct. 15:16
Q. What's the difference between this policy 15:16
versus a rule? 15:16
A. This never went before the membership to 15:16
have a vote; so I don't think it has the power of a 15:16
rule. 15:16
Q. What sort of power would that be? 15:16
A. Well, this was giving guidance to a Board 15:16
of Directors. 15:17
But a rule is voted on and -- and approved 15:17
by the State Board of Education; so it is the rule 15:17
of law for high school athletics from the WVSSAC. 15:17

Q. What do you mean by it provided guidance 15:17
to the Board of Directors? 15:17
A. Would allow them to grant waivers if 15:17
somebody -- if it was unsafe or unfair to other 15:17
students or to this student. 15:17
Q. By unfair to the student, do you mean 15:17
unfair to the trans student? 15:17
A. Either one. Either one. For safety or 15:17
given them advantages that made it unfair. 15:17
Q. Am I right that this policy does not 15:18
mention anything about WVEIS? 15:18
MS. GREEN: Object to the form. 15:18
THE WITNESS: I don't believe it -- I 15:18
don't believe it mentions WVEIS. It does say that 15:18
the school will make the initial determination. 15:18
BY MS. KANG: 15:18
Q. Under this policy, what happens if a 15:18
student's gender marker in WVEIS is, let's say -- 15:18
let's say, male, but the school treats the student 15:18
as female? What would the SAC do in that situation? 15:18
MS. GREEN: I'll object to the form. 15:18
Speculative. 15:18
THE WITNESS: I think we would have to 15:18
look at all the factors that were involved in -- you 15:18
know, I'm not even sure what the factors would be, 15:19

but I think we would have to, you know, have everything presented to us to make a determination.
BY MS. KANG:
Q. So is it fair to say, in that case you would not strictly follow WVEIS?
MS. GREEN: Object to the form.
THE WITNESS: We would -- it would be in the cases where it was unsafe and unfair that we would not be following WVEIS. If we felt like it was unsafe or unfair to the participants, other participants or the transgender student, then the Board can override it.
BY MS. KANG:
Q. Okay. I'm going to ask you to turn your attention to a document that I'm going to be marking as Exhibit 7.
MS. KANG: And I'll let you know when it's available in everyone's folder.
(Deposition Exhibit 7 was marked for identification and is attached hereto.)
MS. KANG: Exhibit 7 should now be available in everyone's Marked Exhibit folder.
BY MS. KANG:
Q. And let me know, Mr. Dolan, whenever you have a chance to -- to look at it.

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A. Okay.
Q. So this is an email that was produced by your counsel in response to one of plaintiff's document request.
Do you remember this particular email?
A. After I went back and searched it, yeah. And I don't remember -- I didn't remember it until I was looking for it.
Q. Is bernie.dolan@wvssac.org your email address?
A. It is.
Q. Who is Daniel Swartos?
A. He is the executive director for the South Dakota High School Athletic Association -- or Activities Association.
Q. Is that an association in South Dakota?
A. Yes.
Q. So I'd like to draw your attention to Page 2 of this pdf that's been Bates Stamped -224. Let me know whenever you get there.
A. Okay.
Q. In this email you say [as read]:
"It has not been challenged yet."
To clarify, are you referring to the policy that we looked at in Exhibit 6?

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A. Right. It had not gone through any court action. Yes.
Q. Were you concerned that the policy was going to be challenged at some point?
A. All of our -- all of our policies get challenged at some point. So...
Q. Fair enough.
A. Yes.
Q. So now I'm going to introduce a document as Exhibit 8. One moment.
MS. KANG: Exhibit 8 is now available in everyone's Marked Exhibit folder.
(Deposition Exhibit 8 was marked for identification and is attached hereto.)
BY MS. KANG:
Q. Mr. Dolan, let me know whenever you have it open.
A. Okay.
Q. So I know this was a while ago, but do you remember the meeting that is referenced in Exhibit 8?
A. Not specifically. But yes.
Q. Do you remember at all who was present at this meeting?
A. It's probably in the minutes.

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THE WITNESS: Can you scroll down to the next page and see...
MS. GREEN: Okay.
THE WITNESS: Keep going. See if there's...
[Witness reviews document].
I do not remember. I would assume it was all of my Board of Directors, though.
BY MS. KANG:
Q. How often does the Board of Directors meet?
A. Mostly once a month. There a couple of months that we don't meet. So about ten times a year.
Q. Is this Board of Directors report given to anyone outside of the Board of Directors?
MS. GREEN: Object to the form.
THE WITNESS: I'm not sure because we don't give it out anymore. So I don't know if that's -- if this came from the interscholastic or if it was Board of Directors report that somebody would have submitted.
I don't do it currently; so I don't know if it was -- who it went to in the past.
///

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BY MS. KANG: 15:25
Q. Did it used to go to someone before? 15:25
A. I don't know. That's what I... 15:25
Q. So I want to draw your attention to Page 2 15:25
of the pdf. It's been Bates Stamped -283. And it's 15:25
Bullet Point 4 "Legal Update." 15:25
And in Bullet Point 4, you'll see another 15:25
Bullet Point iv that says "Transgender." 15:25
Read that paragraph and let me know when 15:25
you are finished. 15:25
A. [Witness reviews document]. 15:25
Okay. 15:25
Q. Regarding this specific topic, what was 15:25
discussed? 15:26
MS. GREEN: Object to the form. 15:26
THE WITNESS: Based on the information 15:26
there -- obviously, I can't remember in 2016 -- but 15:26
we were discussing the policy and how it was -- how 15:26
schools would -- how it would work with the schools. 15:26
BY MS. KANG: 15:26
Q. And what do you mean "how it would work 15:26
with the schools"? 15:26
A. Well, it says, Number 1, the school would 15:26
make the first determination; did they meet all 15:26
other eligibility requirements; was it fair 15:26

competition if the school allows; you know, was 15:26
there an appeal process; and then make sure that we 15:26
look at each case on an individual basis and kind 15:26
of -- where the Board stood. 15:26
Q. What do you mean by "where the Board 15:26
stood"? 15:26
A. I don't know what the discussion was at 15:27
that point. 15:27
Q. I notice that in this line it says 15:27
[as read]: 15:27
"Editing our transgender policy and 15:27
guidelines...." 15:27
As far as you know, was there any editing 15:27
that was done to the policy? 15:27
A. I don't believe we edited anything because 15:27
it's still the exact same policy that -- that they 15:27
approved months earlier. 15:27
Q. Do you remember if the Board of 15:27
Directors -- the Board of Directors unanimously 15:27
approved this policy? 15:27
A. I don't know. 15:27
Q. Do you remember if anything was ever 15:27
conveyed outside of the Board of Directors regarding 15:27
this policy? 15:27
MS. GREEN: Object to the form. 15:27

THE WITNESS: When we meet with our 15:27
principals and -- when we meet with our principals 15:27
and also at an administrative workshop for a number 15:28
of years, we indicated that whatever they determined 15:28
we would accept as long as it was not unsafe or 15:28
unfair. 15:28
BY MS. KANG: 15:28
Q. So is it fair to say that your member 15:28
schools were aware of this policy? 15:28
A. Well, I would think at different times. 15:28
Again, the turnover at schools is high. So if -- 15:28
did somebody -- every person -- did we verify that 15:28
they heard it? I don't know. 15:28
But the turnover is relatively high at all 15:28
of our schools, especially at the principal level. 15:28
So... 15:28
Q. Would it be fair to say that at one point 15:28
you did inform the member schools about this policy? 15:28
MS. GREEN: Object to the form. 15:28
THE WITNESS: As long as they attended our 15:29
meetings, yes. They might not -- 15:29
BY MS. KANG: 15:29
Q. And by -- 15:29
A. -- have attended. 15:29
Q. And by "meetings," do you mean the Board 15:29

of Directors meetings? 15:29
A. No. It would be our regional principals 15:29
meetings that we did at the beginning of each year. 15:29
Q. Does the Commission report H.B. 3293? 15:29
MS. GREEN: Object to form. 15:29
THE WITNESS: I don't think we ever -- 15:29
there was ever a position on it. I think our 15:29
position has been we support Title IX and try to 15:29
give more opportunities for girls. But bottom line 15:29
is we are not allowed to discriminate by our rule -- 15:29
by our policies. 15:29
BY MS. KANG: 15:29
Q. By "not allowed to discriminate," do you 15:29
mean also not allowed to discriminate against 15:29
transgender students? 15:30
A. I would think we are not allowed to -- we 15:30
are not allowed to discriminate against transgender. 15:30
That's correct. 15:30
Q. Could you tell me a little bit more about 15:30
what you mean by advance Title IX? 15:30
A. Well, we continued to offer more 15:30
opportunities and protect the opportunities that 15:30
girls have. 15:30
We have increased the opportunities for 15:30
girl golfers to participate just against girls. So 15:30

our number of girls' golfers has risen tremendously. 15:30
We also have supported a girls' only 15:30
wrestling invitational that has allowed more girls 15:30
to participate in wrestling. 15:30
We have encouraged schools to make sure 15:31
that Title IX is followed when they are putting in 15:31
fields, putting in locker rooms, money for programs, 15:31
and things like that. 15:31
Q. Do you believe that Title IX also protects 15:31
transgender girls? 15:31
MS. GREEN: Object to the form. 15:31
THE WITNESS: I -- I am not sure. I think 15:31
that it -- it has been ruled that way, yes. 15:31
BY MS. KANG: 15:31
Q. Have there ever been any safety concerns 15:31
with girls playing on the boys' team? 15:31
MS. GREEN: Object to the form. 15:31
THE WITNESS: The girls are choosing to 15:31
participate. So I think all kids there's -- there's 15:31
an oppor- -- there's a possibility of injury. And 15:31
so, you know, it -- it's brought out in their 15:31
preparticipation physical that, you know, there is a 15:31
possibility of injury. 15:32
BY MS. KANG: 15:32
Q. To your knowledge, have there been any 15:32

injuries from a girl playing on a boys' team? 15:32
MS. GREEN: Object to the form. 15:32
THE WITNESS: Oh, I'm sure. I mean, I 15:32
don't know specifically. But there's -- people get 15:32
hurt every day in every sport. So I'm sure somebody 15:32
has gotten hurt in football or wrestling. 15:32
BY MS. KANG: 15:32
Q. In the context of school sports, what is 15:32
competitive skill? 15:32
MS. GREEN: Object to the form. 15:32
THE WITNESS: Skill needed to be 15:32
successful in that sport. 15:32
BY MS. KANG: 15:32
Q. Does cross-country require competitive 15:32
skill? 15:32
MS. GREEN: Object to the form. 15:32
THE WITNESS: I would think so. 15:32
BY MS. KANG: 15:32
Q. Do you know whether any girls who tried 15:32
out for cross-country at Bridgeport Middle School 15:32
for the fall of 2021 were unable to join the team? 15:32
MS. GREEN: Object to the form. 15:33
THE WITNESS: We were not involved in the 15:33
selection. So I don't know. 15:33
///

BY MS. KANG: 15:33
Q. Believe it or not, I am on my last set of 15:33
questions. So thank you for bearing with me so far. 15:33
Hopefully, we can get this done early. 15:33
So now I want to talk a little bit more 15:33
about House Bill 3293. 15:33
Were you involved at all in the passage of 15:33
H.B. 3293? 15:33
MS. GREEN: Object to the form. 15:33
THE WITNESS: I wouldn't say I was 15:33
involved in the passage. 15:33
Oftentimes I get asked to come down and 15:33
speak. And I was asked to speak to the Democratic 15:33
caucus. And I pretty much said what I said earlier. 15:33
We support girls' sports and continued to offer more 15:33
opportunities for them. But we're not allowed to 15:33
discriminate. 15:34
BY MS. KANG: 15:34
Q. Besides the Democratic caucus, did you 15:34
speak to anyone else? 15:34
A. I had communication with Melissa White, 15:34
who was -- is the counsel for House Ed. 15:34
Q. And did you think -- 15:34
A. And I think that -- 15:34
Q. Go ahead. 15:34

A. I don't think -- I don't think we spoke 15:34
about it. She had sent me an email about it. 15:34
Q. Did you speak to any legislative committee 15:34
about H.B. 3293? 15:34
MS. GREEN: Object to the form. 15:34
THE WITNESS: I spoke to the caucus. I 15:34
was down there as a witness in front of finance, I 15:34
believe, Senate finance -- or House finance. But I 15:34
was never called in to -- to give an opinion or any 15:34
information. 15:34
BY MS. KANG: 15:34
Q. So you were called in as a witness but you 15:34
didn't testify? 15:34
A. They told me to be available. 15:34
Q. Were you told anything about H.B. 3293 15:35
before it was passed? 15:35
MS. GREEN: Object to the form. 15:35
THE WITNESS: Actually, I was sent an 15:35
email from Melissa White. But when I looked at it, 15:35
the beginning of it was a home school bill. 15:35
So I assumed she sent the wrong bill. 15:35
And -- but it did say "transgender" at the top. So 15:35
I sent it to the legal counsel who was helping us 15:35
with legislative activity. Or -- 15:35
MS. GREEN: And I'll object to the form. 15:35

THE WITNESS: Okay. 15:35
MS. GREEN: Caution him regarding 15:35
conversations with counsel. 15:35
THE WITNESS: Okay. 15:35
BY MS. KANG: 15:35
Q. By "counsel," was it counsel at the 15:35
Commission? 15:35
A. It is counsel -- 15:35
MS. GREEN: I'll just -- 15:35
THE WITNESS: Okay. 15:35
MS. GREEN: -- object to the form. 15:36
THE WITNESS: Okay. 15:36
It was counsel we've had at -- that we 15:36
used during legislative time. 15:36
BY MS. KANG: 15:36
Q. Who is this person? 15:36
MS. GREEN: I'll just object to the form. 15:36
I think they're in the privilege log. We identified 15:36
them. 15:36
Do you know the name of the firm? 15:36
THE WITNESS: Dinsmore & Shohl is the law 15:36
firm. 15:36
BY MS. KANG: 15:36
Q. Did any legislators tell you about the 15:36
purpose of H.B. 3293? 15:36

MS. GREEN: Object to the form. 15:36
THE WITNESS: I don't remember having that 15:36
conversation with any of them. I had one email from 15:36
Senator Unger, who sent me the NCAA guidelines at 15:36
the time. It was unsolicited and didn't have 15:36
anything, really, with it, just a link to the NCAA 15:36
guidelines. 15:37
BY MS. KANG: 15:37
Q. Did you respond to that email? 15:37
A. I did not. 15:37
Q. Has the Commission taken any steps to 15:37
contemplate policies or rules concerning the 15:37
implementation of H.B. 3293? 15:37
MS. GREEN: Object to the form. 15:37
THE WITNESS: The legislation 3293 charged 15:37
the Department of Ed with creating the rule. So 15:37
we're going to wait for those guidelines to come out 15:37
and then probably just bring them into our rule book 15:37
like we did the 2.0. 15:37
BY MS. KANG: 15:37
Q. But to be clear, if the State Board 15:37
promulgates a rule, will the Commission have to 15:37
follow that rule? 15:38
A. Our schools would have to follow it, 15:38
which, if all of our schools have to follow it, I 15:38

would say we're following it, yes. 15:38
Q. Okay. I'm going to introduce a document 15:38
as Exhibit 9, and I'll let you know when it's 15:38
available. 15:38
(Deposition Exhibit 9 was marked for 15:38
identification and is attached hereto.) 15:39
MS. KANG: Exhibit 9 is now available in 15:39
the Marked Exhibits folder. 15:39
BY MS. KANG: 15:39
Q. And let me know when you have a chance to 15:39
pull it up, Mr. Dolan. 15:39
A. Okay. 15:39
Q. So these are some text messages that your 15:39
counsel produced in response to Plaintiff's 15:39
discovery requests. It's been Bates stamped 15:39
WVSSAC000001. And I'm going to represent to you 15:39
that these are texts between you and 15:39
Stephen Baldwin. 15:39
Do you remember this conversation? 15:39
A. Yes. 15:39
MS. GREEN: Object to the form. 15:39
THE WITNESS: Yes, I do. 15:39
BY MS. KANG: 15:39
Q. Who is Stephen Baldwin? 15:39
A. Senator from Greenbrier County. 15:39

Q. Is this the same Democratic office that 15:40
you were just talking about? 15:40
A. Yes, ma'am. 15:40
Q. Why did you decide to participate in this 15:40
meeting? 15:40
MS. GREEN: Object to the form. 15:40
THE WITNESS: Oftentimes I -- I don't feel 15:40
like I have a choice. When the legislature calls, I 15:40
need to go down and be heard. 15:40
BY MS. KANG: 15:40
Q. Did you bring any documents with you to 15:40
this meeting? 15:40
A. Just the -- just our board policy. 15:40
Q. Do you remember if you were shown any 15:40
documents at the meeting? 15:40
A. I don't remember. 15:40
Q. Did the Democratic Caucus give you any 15:40
documents? 15:40
A. I don't remember if they gave me the bill 15:40
at that time or not. So I'm not sure. 15:40
Q. So if you scroll down to the document 15:41
that's Bates Stamped -006. And I believe it's 15:41
Page 6 of 7 of the pdf of Exhibit 9. 15:41
A. Okay. 15:41
Q. Do you know who Rucker is? 15:41

A. Senator Rucker is the Senate education chair. 15:41
Q. Do you agree with her statement that it is not a real policy? 15:41
A. I believe it is a policy that -- but it had not -- it didn't go through a rule-writing process and was never challenged in court and upheld. 15:41
So we think it was an internal policy, yes, that we give our -- 15:42
Q. What do you mean -- 15:42
A. We give our board the opportunity to hear cases of appeals. 15:42
Q. Can you clarify what you mean by "internal policy"? 15:42
A. Well, it wasn't in our rule book. 15:42
Q. So I'm going to introduce an additional document as Exhibit 10. 15:42
(Deposition Exhibit 10 was marked for identification and is attached hereto.) 15:43
MS. KANG: Exhibit 10 is now available in the Marked Exhibits folder. 15:43
BY MS. KANG: 15:43
Q. Let me know when you have it up, Mr. Dolan. 15:43

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A. [Witness reviews document]. 15:43
Okay. 15:43
Q. Do you remember this email? 15:43
A. After I looked it back up, yes. 15:44
Q. And is that still your email address at the top? 15:44
A. It is. 15:44
Q. Who is John Raby? 15:44
A. John Raby is an Associated Press reporter. 15:44
Q. Had you spoken to him before? 15:44
A. Probably in a different capacity. When I was the director of Super Six, he was a reporter that would come to games. So... 15:44
Q. So on the first page of Exhibit 10, Mr. Raby asks the question [as read]: 15:44
"What does the WVSSAC think of the bill?" 15:44
And then if you go to the next page of Exhibit 10, in response you write [as read]: 15:44
"The WVSSAC has supported Title IX for the last 50 years...Title IX has non discrimination language that we support." 15:44
What do you mean by "Title IX has non-discrimination language that we support"? 15:45

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A. I believe in the Title IX document it says you can't discriminate. And so we support Title IX; so we have to support the whole thing. 15:45
Q. You also say in your response that [as read]: 15:45
"This has increased the quantity and quality of opportunities for girls in our schools." 15:45
What opportunities do you believe has been increased? 15:45
A. Well, when I was in school, which would have been the early -- early '70s, may or may not have had girls' basketball at all and wouldn't have had volleyball or soccer, for sure, swim. So over the last 50 years, we have increased the sports that girls can participate in a hundred times over. 15:45
Q. Do you believe that B.P.J. should have the right to these opportunities? 15:46
MS. GREEN: Object to the form. 15:46
THE WITNESS: I believe we'll follow the rule -- the law. 15:46
BY MS. KANG: 15:46
Q. What do you mean by "follow the law"? 15:46
A. Whatever -- whatever the Department of Ed writes as the rule, then we have to implement that 15:46

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with all of our schools. 15:46
Q. Do you believe that B.P.J.'s participation in cross-country harms any of these opportunities? 15:46
MS. GREEN: Object to the form. 15:46
THE WITNESS: Well, "harm" is a -- a unique word because harm might be that it might not physically harm somebody, but they -- you know, harm might be that you take somebody's position on the team. 15:46
In cross-country, only the top seven kids get to compete on the varsity team, whether it's middle school or high school. If you are number seven and you get bumped out, there might be harm. 15:47
But, in general, physical harm, I don't believe so. 15:47
BY MS. KANG: 15:47
Q. Do you know if B.P.J. has, as you say, bumped out another girl? 15:47
A. I do not. 15:47
MS. GREEN: Object to the form. 15:47
THE WITNESS: Okay. 15:47
MS. KANG: So I am going to introduce another document as Exhibit 11. 15:47
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(Deposition Exhibit 11 was marked for identification and is attached hereto.)
MS. GREEN: Okay.
MS. KANG: Exhibit 11 is now available in everyone's Marked Exhibit folder.
BY MS. KANG:
Q. Let me know when you have it up.
And, Mr. Dolan, we can take a five-minute break, I think, after -- after this email, before we wrap up.
A. Okay.
Scroll down.
Okay.
Q. Do you recognize this email?
A. I do.
Q. Do you remember this email?
A. I don't know if I remember it. But I recognize it, yes.
Q. Who is Josh Weekley?
A. He runs RunWV which keeps track of all boys' and girls' track and cross-country times and posts them on runwv.com.
Q. Why did you contact him?
A. I was looking for data in comparing girls' times to boys' times.

Q. Why did you want that data?
A. Just curious to see if there were advantages that boy -- if -- what the actual data showed for comparison of boys' and girls' times.
Q. Did you ask in response to any questions from the West Virginia Legislature?
A. I don't remember the time frame of this; so I don't know if it was before or after or during the legislative time.
Q. Did you ever get the data from Josh Weekley?
A. Did not. Did not. They had computer problems and so...
Q. What did you mean by "a transgender issue" on the --
A. Again --
Q. -- first page?
A. I was asking -- I was just telling him. I was trying to compare boys' times and girls' times and what hap- -- you know, what the actual times were of boys and girls competing against each other.
MS. GREEN: Okay. I think if folks are all right, we will take a five-minute break, and then I should have -- let's see -- I should have a couple more exhibits to go through.

But we'll take a pause here and come back around 3:56.
THE WITNESS: Okay.
THE VIDEOGRAPHER: Going off the record. The time is 3:51.
(Brief recess.)
THE VIDEOGRAPHER: Back on the record. The time is 3:57.
BY MS. KANG:
Q. Mr. Dolan, I'm going to introduce another document as Exhibit 12.
A. Okay.
Q. And I'll let you know when it's in there.
(Deposition Exhibit 12 was marked for identification and is attached hereto.)
MS. KANG: Okay. Exhibit 12 is now available in the Marked Exhibits folder.
BY MS. KANG:
Q. Let me know when you have had a chance to pull it up.
A. Scroll down.
That's it. Okay.
Okay.
Q. Is this the same Melissa White as the one you were referencing earlier?

A. Yes.
Q. Do you know what Melissa White's position is?
A. Well, on the paper it says Chief Counsel for Committee on Education of West Virginia House of Delegates.
Q. Do you know why Melissa White reached out to you regarding H.B. 3293?
A. There may have been original language in there that may have identified the WVSSAC. I don't know. But it involves athletics; so I'm sure, as a courtesy, she was sending me something.
Q. Had you spoken to her about athletics before this email?
MS. GREEN: I'll object to the form.
THE WITNESS: This -- that -- last year or in general?
BY MS. KANG:
Q. In general.
A. Yeah. I mean, every time there is legislation involving athletics, home school, whatever, it's not unusual for them to contact me about our position or our input on it.
Q. So you notice in the top-right corner, Thursday, March 11th is underlined.

Was this the first time that Melissa White spoke to you about H.B. 3293?

MS. GREEN: Object to the form.

THE WITNESS: I believe it was. I may have been underlining that as I was gathering my documents to make sure I got them all out of my email. So that might be why that was underlined.

BY MS. KANG:

Q. In this email, she asks for your thoughts on H.B. 3293.

Did you provide her with any thoughts?

A. I did not. It was -- it -- I thought there was an attachment to that, and I sent it off.

Was there -- oh, yeah. There it is. Down at the bottom.

And I didn't -- I didn't open it. I sent it off to Dinsmore & Shohl.

Q. Did you ever have any verbal communications with Melissa White about this bill?

A. The only communication I could -- might have had is that when she asked me to come to the finance meeting and wait outside. And then I was told I wasn't needed.

MS. KANG: I'm going to introduce a document as Exhibit 13.

(Deposition Exhibit 13 was marked for identification and is attached hereto.)

MS. KANG: Exhibit 13 is now available in everyone's Marked Exhibit folder.

BY MS. KANG:

Q. So let me know when you have it up. And once you have it up, if you could scroll to the very last page that has been Bates stamped -370. Let me know.

A. Okay.

Q. Do you recognize this text exchange?

A. Yes.

Q. Is the Melissa at the top of the thread referring to Melissa White?

A. Yes.

Q. Do you know why she asked for the transgender policy?

MS. GREEN: Object to the form.

THE WITNESS: At some point, I don't -- I'm not sure of the date. But at some point we were -- you know, we had told them that we had a Board policy for transgender.

So I'm sure she was trying to get a copy of that.

///

BY MS. KANG:

Q. Who is "them"?

A. House -- House Education.

Q. Did you provide the policy to her?

A. I'm sure I did.

Q. Did she say anything to you afterwards about the transgender policy?

A. Not that I recall.

Q. Did the two of you discuss H.B. 3293 after this text conversation at any point?

MS. GREEN: Object to the form.

THE WITNESS: Not that I recall.

MS. KANG: I'm just going to introduce one last exhibit, Exhibit 14.

(Deposition Exhibit 14 was marked for identification and is attached hereto.)

MS. KANG: Exhibit 14 is now available in the Marked Exhibits folder.

BY MS. KANG:

Q. And let me know when you have it up.

THE WITNESS: That is 11.

MS. GREEN: Oh. I'm sorry. Uploaded error there.

THE WITNESS: It was 9. Yeah. There it is.

MS. GREEN: I'm sorry.

THE WITNESS: Okay.

BY MS. KANG:

Q. So on the first page that is Bates Stamped -286, you will see it reads "Regional Principals' Meetings."

What is the purpose of the Regional Principals' Meetings?

A. It's when we make sure that any new rules, we go over them. And then also -- most importantly, they get their C&I cards, which are all the coaches get in free to games.

And so that's the only reason why they come to the meeting, sadly to say, not to hear me speak.

Q. And apologies for my ignorance. But what's a C&I card?

A. Courtesy and identification card. It's like a free pass into all high school games.

Q. All right. Scroll down one page in Exhibit 14 to the page Bates Stamped -287.

A. Is it the schedule?

Q. No. It's just the first --

A. Regional Principals' Meeting?

Q. That's correct.

A. First slide? 16:06
Q. That's -- that's correct. 16:06
A. Okay. 16:06
Q. So are these the slides that were presented at this meeting? 16:06
A. Yes. 16:06
Q. Do you know who prepared these slides? 16:06
A. Each of us prepared our -- our portion, myself and the three assistants. So we all have different areas to cover. 16:06
Q. By "three assistants," you mean your three assistant executive directors? 16:07
A. Uh-huh. 16:07
Q. So I want to draw your attention to what's been Bates stamped -346. Apology if I -- will identify the page number in a moment. 16:07
So it is Page 61 of the pdf. 16:07
A. Okay. 16:07
Q. Do you recognize this slide? 16:07
A. I'm not there yet. 16:07
MS. GREEN: I'm sorry. 16:07
BY MS. KANG: 16:07
Q. Oh. I'm sorry. 16:07
A. Yes. 16:08
Q. Do you know who prepared this slide? 16:08

A. This would have been Cindy Daniel. 16:08
Q. And she is one of your -- 16:08
A. Assistant executive directors. 16:08
Q. So in the second bullet point here, it says [as read]: 16:08
"WVSSAC's current position is that gender is identified in WVEIS for athletic participation purposes." 16:08
What does this mean? 16:08
A. Well, I think this was before the ruling that B.P.J. could participate; so that we were still reiterating it in our policy at the time until we got the final ruling from the Department of Ed. 16:08
Q. Just to be clear, if someone's gender in WVEIS is male, does that mean they would have to play on the boys' team? 16:09
A. Yes. 16:09
Q. Before H.B. 3293 was enacted and under your trans policy, did you just rely on the school's determination of gender or would you go into WVEIS and look at WVEIS? 16:09
A. We don't have access to WVEIS; so we wouldn't be able to. And, to our knowledge, we didn't have any other cases prior to this. 16:09
Q. So in this slide, when it says "the 16:09

current position is that gender is identified in WVEIS," would you have to depend on the school's determination? 16:09
A. Yes. 16:09
Q. Can the information in WVEIS for someone's gender be changed? 16:10
MS. GREEN: Object to the form. 16:10
THE WITNESS: I'm not sure what the rules are for WVEIS. 16:10
BY MS. KANG: 16:10
Q. Do you know who contributes information to WVEIS? 16:10
MS. GREEN: Object to the form. 16:10
THE WITNESS: Each school does, but I'm not sure, like, who in each school. 16:10
BY MS. KANG: 16:10
Q. Do you remember if this slide was discussed during the regional principals' meeting? 16:10
A. Probably was. I would say yes. 16:10
Q. What was discussed? 16:10
MS. GREEN: Object to the form. 16:10
THE WITNESS: Just what was on the slide, that current law is being challenged, and we were waiting for final ruling from the Department of Ed. 16:10
///

BY MS. KANG: 16:10
Q. Anything else? 16:10
A. As it relates to transgender as it relates to this slide, you mean? 16:10
Q. That's correct. 16:11
A. I don't think there was anything more discussed, from my knowledge. 16:11
MS. KANG: So I believe that is all my questions. 16:11
I'm going to go off the record for about five minutes or so and see if there's anything else I need to ask. 16:11
But, otherwise, I think we're at the finish line, Mr. Dolan. 16:11
THE WITNESS: Good. 16:11
THE VIDEOGRAPHER: Off the record. The time is 4:11. 16:11
(Brief recess.) 16:17
THE VIDEOGRAPHER: Back on the record. The time is 4:18. 16:17
MS. KANG: Mr. Dolan, I am finished asking my questions. I will reserve the right to ask any questions depending on other parties' questions. 16:17
I'll also reserve the right to ask questions if there are changes in the errata. But otherwise I 16:18

think we're -- you're done with me for today. 16:18
THE WITNESS: Okay. Thank you. 16:18
THE VIDEOGRAPHER: Is there anybody else 16:18
with questions or should I go ahead and close out? 16:18
MR. SCRUGGS: This is Jonathan Scruggs for 16:18
the intervenor. No questions from us. 16:18
MS. MORGAN: This is Kelly Morgan. 16:18
No questions for the State Board and 16:18
Superintendent Burch. 16:18
MR. CROPP: This is Jeffrey Cropp for 16:18
Harrison County Board of Education and Dora Stutler. 16:18
16:18
EXAMINATION 16:18
BY MR. CROPP: 16:18
Q. I just have a couple of follow-up 16:18
questions, Mr. Dolan. 16:19
A. Okay. 16:19
Q. Regarding Exhibit 6, which is the 16:19
transgender policy, was a copy of that policy ever 16:19
distributed to the member schools? 16:19
A. I don't believe so. 16:19
Q. Okay. Was a copy of the transgender 16:19
policy ever given to the principals? 16:19
A. I don't believe so. 16:19
Q. Was a copy of that transgender policy ever 16:19

given to the County Boards of Education? 16:19
A. I don't believe so. 16:19
Q. Was a copy of the transgender policy ever 16:19
given to the county superintendents? 16:19
A. I don't believe so. 16:19
Q. You mentioned that -- at a regional 16:19
meeting that that policy was reviewed with the 16:19
principals who attended the -- that meeting. 16:19
But my question is, is that -- was that 16:19
just at the first meeting where the policy was 16:19
introduced, or did you go over that policy every 16:19
regional meeting after it was introduced? 16:19
MS. GREEN: Object to the form. 16:19
THE WITNESS: Normally, we would -- you 16:20
mean each year? Or do you mean, like, when we do 16:20
ten of them, was it brought up at each ten? 16:20
BY MR. CROPP: 16:20
Q. Each year. So it was introduced in one 16:20
year. My question is at the subsequent years -- did 16:20
you go over that policy during the subsequent years 16:20
at that -- at all ten regional meetings? 16:20
A. I would say it was -- I don't know when it 16:20
came off, but it was on the agenda for a number of 16:20
years, yes. 16:20
Q. Whether you say -- 16:20

A. I don't -- 16:20
Q. Go ahead. 16:20
A. I don't remember if it was on this past 16:20
year -- it was on this year with Cindy's slide, but 16:20
normally it was on mine. 16:20
So I don't -- I would have to go back and 16:20
check all my -- if we record them. And if you 16:20
didn't go to the meeting, then you were able to 16:20
listen to the recording. 16:20
Q. Okay. This policy -- excuse me. 16:20
The policy was never voted on by the 16:21
member schools, the transgender policy? 16:21
A. That's correct. 16:21
MR. CROPP: I don't have any further 16:21
questions. 16:21
Thank you. 16:21
MR. CAPEHEART: Curtis Capeheart for the 16:21
State. 16:21
I have no questions. 16:21
Thank you, Mr. Dolan. 16:21
THE WITNESS: Thank you. 16:21
THE VIDEOGRAPHER: Okay. That looks like 16:21
everybody. So I'll go ahead and close out unless 16:21
there is anything else. 16:21
THE REPORTER: And this is the reporter. 16:21

I did hear that there will be an errata 16:21
sheet. So is the witness reviewing? 16:21
MS. GREEN: Yes. We'll read and sign. 16:21
And if I could -- 16:21
This is Roberta Green. 16:21
So if I could please have it sent to me, 16:21
and I'll get with Mr. Dolan. 16:21
THE REPORTER: Thank you. 16:21
THE VIDEOGRAPHER: Thank you. 16:21
We are off the record at 4:22 p.m. EST, 16:21
and this concludes today's testimony given by 16:22
30(b)(6) Witness Bernie Dolan. The total number of 16:22
Media Units used was three. And will be retained by 16:22
Veritext Legal Solutions. 16:22
(Whereupon, at 4:22 p.m., the deposition
of BERNARD DOLAN was adjourned.)
--- oOo ---

I, BERNARD DOLAN, hereby certify under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed this _____ day of _____, 2022, at _____, California.

_____

BERNARD DOLAN

30(b)(6) DEPOSITION

WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) SS.

I, Dayna Hester, C.S.R. No. 9970, in and for the State of California, do hereby certify:

That, prior to being examined, the witness named in the foregoing deposition was by me duly sworn to testify to the truth, the whole truth, and nothing but the truth;

That said deposition was taken down by me in shorthand at the time and place therein named and thereafter reduced to typewriting under my direction, and the same is a true, correct, and complete transcript of said proceedings;

That if the foregoing pertains to the original transcript of a deposition in a Federal Case, before completion of the proceedings, review of the transcript { XX } was { } was not required;

I further certify that I am not interested in the event of the action.

Witness my hand this 26th day of February, 2022.

Certified Shorthand Reporter
for the State of California

ROBERTA F. GREEN, ESQ.
RGREEN@SHUMANLAW.COM

February 28, 2022

RE: B.P.J. vs. WEST VIRGINIA STATE BOARD OF EDUCATION
February 11, 2022, BERNARD DOLAN, JOB NO. 5079532
The above-referenced transcript has been completed by Veritext Legal Solutions and review of the transcript is being handled as follows:

__ Per CA State Code (CCP 2025.520 (a)-(e)) – Contact Veritext to schedule a time to review the original transcript at a Veritext office.

__ Per CA State Code (CCP 2025.520 (a)-(e)) – Locked .PDF Transcript - The witness should review the transcript and make any necessary corrections on the errata pages included below, notating the page and line number of the corrections. The witness should then sign and date the errata and penalty of perjury pages and return the completed pages to all appearing counsel within the period of time determined at the deposition or provided by the Code of Civil Procedure.

__ Waiving the CA Code of Civil Procedure per Stipulation of Counsel - Original transcript to be released for signature as determined at the deposition.

__ Signature Waived – Reading & Signature was waived at the time of the deposition.

_x_ Federal R&S Requested (FRCP 30(e)(1)(B)) – Locked .PDF Transcript - The witness should review the transcript and make any necessary corrections on the errata pages included below, notating the page and line number of the corrections. The witness should then sign and date the errata and penalty of perjury pages and return the completed pages to all appearing counsel within the period of time determined at the deposition or provided by the Federal Rules.

__ Federal R&S Not Requested - Reading & Signature was not requested before the completion of the deposition.

B.P.J. vs. WEST VIRGINIA STATE BOARD OF EDUCATION
BERNARD DOLAN (#5079532)

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4:5,12,13,19 5:5
5:10,11,12,13,19
6:4,6,7,9 9:1,25
zoë 2:20 11:13

Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate. The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

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IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA
CHARLESTON DIVISION
* * * * * * * * *

B.P.J., by her next friend and Mother, HEATHER JACKSON, Plaintiff	*	Case No.
vs.	*	2:21-CV-00316
WEST VIRGINIA STATE BOARD OF EDUCATION, HARRISON COUNTY BOARD OF EDUCATION, WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION, W. CLAYTON BURCH in his official Capacity as State Superintendent, DORA STUTLER in her official Capacity as Harrison County Superintendent, PATRICK MORRISEY In his official capacity as Attorney General, and THE STATE OF WEST VIRGINIA, Defendants	*	CONFIDENTIAL VIDEOTAPED VIDEOCONFERENCE DEPOSITION OF KACIE KIDD, M.D. February 21, 2022

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CONFIDENTIAL VIDEOTAPED VIDEOCONFERENCE DEPOSITION

OF

KACIE KIDD, M.D., taken on behalf of the Defendant, State of West Virginia herein, pursuant to the Rules of Civil Procedure, taken before me, the undersigned, Nicole Montagano, a Court Reporter and Notary Public in and for the State of West Virginia, on Monday, February 21, 2022, beginning at 10:16 a.m.

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I N D E X

DISCUSSION AMONG PARTIES 10 - 15

WITNESS: KACIE KIDD, M.D.

EXAMINATION

By Attorney Tryon 16 - 134

DISCUSSION AMONG PARTIES 134 - 136

CERTIFICATE 137

EXHIBIT PAGE

NUMBER	DESCRIPTION	PAGE IDENTIFIED
16	Doctor's Note	--
33	Standards of Care for the Health of Transsexual, Transgender, And Gender Nonconforming People	--
35	Doctor's Note	--

OBJECTION PAGE

ATTORNEY	PAGE
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S T I P U L A T I O N

(It is hereby stipulated and agreed by and between counsel for the respective parties that reading, signing, sealing, certification and filing are not waived.)

P R O C E E D I N G S

VIDEOGRAPHER: We are now on the record. My name is Jacob Stock. I'm a Certified Legal Video Specialist employed by Sargent's Court Reporting Services. The date today is February 21st, 2022, and the current time is 10:16 a.m. Eastern Standard Time. This deposition is being taken remotely by videoconferencing. The caption of this case in the United States District Court for the Southern District of West Virginia, Charleston Division. BPJ by her next friend and mother, Heather Jackson v. West Virginia State Board of Education, et al. Case number 2:21-CV-00316. The name of the witness is Kacie Kidd, M.D. Will the attorneys present state their names and the parties they represent?

ATTORNEY LINKOUS: This is Tim Linkous on

behalf of Kacie Kidd, M.D.

ATTORNEY TRYON: This is David Tryon on behalf of the State of West Virginia.

ATTORNEY DENIKER: This is Susan Deniker on behalf of Defendants Harrison County Board of Education and Superintendant Dora Stutler.

ATTORNEY GREEN: This is Roberta Green on behalf of West Virginia Secondary School Activities Commission.

ATTORNEY MORGAN: This is Kelly Morgan on behalf of West Virginia Board of Education and Superintendant Burch.

ATTORNEY HOLCOMB: This is Christiana Holcomb on behalf of Intervenor, Lainey Armistead.

ATTORNEY HARTNETT: And sorry, I think I was on mute before. This is Kathleen Hartnett from Cooley for Plaintiff. And there are several others on the line for Plaintiff from Cooley.

ATTORNEY BARR: Yes. Good morning. This is Andrew Barr from Cooley on behalf of Plaintiff.

ATTORNEY KANG: Good morning. This is Katelyn Kang from Cooley on behalf of the Plaintiff.

ATTORNEY REINHARDT: Good morning. This is Elizabeth Reinhardt on behalf of Plaintiff.

ATTORNEY HELSTROM: Good morning. This is Zoe Helstrom from Cooley on behalf of Plaintiff.

ATTORNEY SWAMINATHAN: Good morning. This is Sruti Swaminathan from Lambda Legal on behalf of Plaintiff.

ATTORNEY BLOCK: Good morning. This is Josh Block from the ACLU on behalf of Plaintiff.

VIDEOGRAPHER: If that's everybody, the court reporter can swear in the witness, and we can begin.

ATTORNEY TRYON: Two things. So first of all, I went to mention that my colleague, Curtis Capehart, is on this call. And I wanted to take care of a housekeeping matter before we get started. I wonder if we could do that, if we could exclude Dr. Kidd for just a moment.

VIDEOGRAPHER:

Yes, give me one second.

ATTORNEY TRYON:

Thank you. So I just wanted to --- we had previously in other depositions we've talked about how we're going to handle objections. And Mr. Linkous, in some other depositions, we've said that we are going to handle by stating objection for form of the question

or directing the witness not to answer for privilege issues. And Kathleen, are you going to be handling this deposition?

ATTORNEY HARTNETT: Yes, David. And would you like to discuss this off the record first and then we can put our agreements on the record?

ATTORNEY TRYON: Okay.

ATTORNEY HARTNETT: Can we go off the record?

VIDEOGRAPHER: Yes. Going off the record. The current time is 10:20 a.m.

OFF VIDEOTAPE

(WHEREUPON, AN OFF RECORD DISCUSSION WAS HELD.)

ON VIDEOTAPE

VIDEOGRAPHER: Back on the record. The current time is 10:24 a.m.

ATTORNEY TRYON: Thank you. So while we were off the record we had a discussion and we've come to an agreement on how to handle objections, that primarily we would be handling objections by stating one of three things, either objection to form, objection as to technology --- or terminology, excuse me, or

objection to any privileges or scope. So I guess that's four. And Mr. Linkous has said he will strive for that, but has not specifically addressed --- agreed to that. And finally, the counsel for Defendants have indicated that they will --- if there is an objection by counsel for Dr. Kidd, then they will be included within that objection. So they don't have to object as well. Is that a fair summary of our discussion?

ATTORNEY HARTNETT: Just on the last point, it was objections by the witness to Counsel.

ATTORNEY TRYON: Thank you for correcting me.

ATTORNEY LINKOUS: Hey, Dave, can I ask a quick question?

ATTORNEY TRYON: Yes.

ATTORNEY LINKOUS: Ms. Holcomb, who was on just a second ago, I heard her say she represents an intervenor, and I didn't know there was an intervenor, so who intervened and what's the story there?

ATTORNEY TRYON: The intervenor is Lainey Armistead, I think that's how you say her last name, who is a colleague student, a female college student who has intervened.

ATTORNEY LINKOUS:

Okay. Thank you. I appreciate that.

ATTORNEY HARTNETT: And Tim, that's a gender college student who is seeking to intervene to defend the state law.

ATTORNEY LINKOUS: I see. Thank you.

COURT REPORTER: Josh, one second. It's the court reporter. Can you go off the record, please, Josh?

VIDEOGRAPHER: Going off the record, 10:26 a.m.

OFF VIDEOTAPE

(WHEREUPON, AN OFF RECORD DISCUSSION WAS HELD.)

ON VIDEOTAPE

VIDEOGRAPHER: Back on the record. The current time reads 10:32 a.m.

ATTORNEY DUCAR: My name is Tim Ducar. I'm entering an appearance on behalf of the intervenor, Lainey Armistead.

VIDEOGRAPHER: The court reporter can swear in the witness and we can begin.

- - -

KACIE KIDD, M.D.,

CALLED AS A WITNESS IN THE FOLLOWING PROCEEDINGS, HAVING FIRST BEEN DULY SWORN, TESTIFIED AND SAID AS FOLLOWS:

- - -

EXAMINATION

BY ATTORNEY TRYON:

Q. Dr. Kidd, my name is David Tryon. I represent the State of West Virginia. Can you, first of all, tell me how you would prefer that I address you?

A. Hi, I'm Kacie Kidd. I use she/her pronouns. You're welcome to address me as Kacie or Dr. Kidd.

Q. Very good. So Kacie --- well, let me call you Dr. Kidd. Dr. Kidd, are you represented by counsel today?

A. I am.

Q. And who is that?

A. Mr. Linkous.

Q. And how long has he represented you?

A. Well, I can't recall our exact first email exchange. I think it's been over a month.

Q. Okay.

Have you ever been deposed before?

A. I have not.

Q. Have you ever testified at trial before?

A. I have not.

Q. Excuse me. Sorry about that. Have you ever been sued before?

A. I have not.

Q. Have you ever been retained as an expert either as a testifying or consulting expert in any litigation or otherwise?

A. I have not.

Q. We are in Federal Court, so the Federal Rules of Procedure apply here. And under the Federal Rules of Procedures 30(c)(2) it provides for objections by your counsel or other counsel. And while we were off the record or before --- we have agreed to certain ways to make objections. And then even if there are objections, you'll still need to answer questions unless your counsel directs you to not do so.

Understand?

A. Yes.

Q. Do you have any questions about that?

A. No.

Q. Okay.

So when you answer, as you're doing now, please answer verbally rather than a nod or a shake. The court reporter, especially since she is not currently watching

us, will not be able to detect anything other than your actual words.

Okay?

A. Yes.

Q. Now, if you don't understand my questions, please say so, and I will try to reframe them or say it in a different way.

All right?

A. Okay.

Q. And if you need a break, let us know and we'll make --- we'll try and accommodate that. The only thing you can't do is take a break after I've asked a question. So we need to do it before I ask a question. And I'll also note that this deposition is being conducted as upon Cross Examination.

Now, are you familiar with the lawsuit that's involved here?

A. I know of the lawsuit loosely. I don't know significant details.

Q. Okay.

Just briefly, the Plaintiff in the case is BPJ. Are you aware of who BPJ is?

A. I am.

Q. And BPJ is suing various Defendants asserting

that a law known as HB-3293 is invalid at least as it pertains to BPJ. Were you aware of that much?

A. Not the numbers and name of that law, but loosely, yes.

Q. Okay.

Have you heard of the law, loosely known --- well, it is known as HB-3293, sometimes called the Women's Sports --- Save Women's Sports Act, and maybe there's other names for it, too. Have you heard of the law?

ATTORNEY HARTNETT: Objection to the form.

THE WITNESS: In lay media, yes.

BY ATTORNEY TRYON:

Q. You haven't actually seen the lawsuit.

Is that right?

A. That's correct.

Q. Have you read that law?

A. I can't recall if I read the actual law that passed.

Q. Okay.

Have you brought any documents to the deposition with you today?

A. I was told to have the two --- I think they're

called exhibits, the WPATH Guidelines and my clinical record.

Q. Okay.

And do you have those in hard copy or just electronically?

A. Both.

Q. Okay.

And have you reviewed any documents in preparation for this deposition?

A. Yes.

Q. Which documents are those?

A. They were documents provided by my lawyer telling me about depositions because I add ---.

ATTORNEY LINKOUS: Stop right there, Dr. Kidd. Communications from me to you and the substance of those communications are privileged. You don't have to talk about the substance of those.

BY ATTORNEY TRYON:

Q. Yes. All I need to know and I don't want to know what you and your lawyer talked about. I just want to know what documents you've looked at in preparation for your deposition today.

A. Sure. So those documents certainly.

Q. Okay.

So those are the medical records you mentioned, as well as the WPATH standards?

A. Yes.

Q. Anything else?

A. I've certainly reviewed the medical literature in this case but that is an ongoing process that I'm always engaged in.

Q. Okay.

Now, on Saturday we received some additional documents from your office, which appear to be similar to what's previously been marked as Exhibit 16. Do you have those in front of you as well?

A. I'm not familiar with what Exhibit 16 includes.

ATTORNEY LINKOUS: Mr. Tryon, I will just interrupt and say that those records didn't really come from her office, they came from me. And I sent them to Plaintiff's Counsel, who then provided them to you.

ATTORNEY TRYON: Got it. And do you know if Dr. Kidd has those in front of her as well?

ATTORNEY LINKOUS: She should, yes.

ATTORNEY TRYON: Okay.

BY ATTORNEY TRYON:

Q. So having gone through those --- excuse me one moment. So just some quick background. Can you give me

your full name and address, please?

A. My home address or my work address?

Q. Both, please.

A. My full name is Kacie Marie Kidd. My work address is --- depends on if you're looking at my office or clinical practice, but my office is 1 Medical Center Drive, Morgantown, West Virginia, 26506, I believe. And my home address ---.

Q. Can you slow down just a little bit, please?

A. Sure.

Q. Go ahead.

A. Do you need me to repeat? My home address is 106 Canyon Ridge Drive, Morgantown, West Virginia, 26508.

Q. And can you give me your work phone number, please?

A. I would need to check my business card. Is it okay if I do that?

Q. Yes.

A. My work phone (304) 293-6307.

Q. And I would also like to ask you for your personal phone number, which I would use only in the event that for some reason you were no longer represented by counsel. Otherwise, I would contact you

through counsel.

ATTORNEY LINKOUS: I would --- I just object and instruct her not to answer on that. I will accept subpoenas and you can contact me through her. I will continue representing her. And if not, there will be new counsel assigned and you will be informed of that.

ATTORNEY TRYON: Well, I've never had anyone instruct a witness not to do that before, but I'll move on.

BY ATTORNEY TRYON:

Q. Can you tell me where you went to --- about your education, your undergraduate education first, please?

A. Sure. I received my Bachelor's Degree in biology and women's studies from West Virginia University. I then went to medical school at West Virginia University School of Medicine. After that I completed a four-year residency in internal medicine and pediatrics at West Virginia University School of Medicine. I then completed a three-year fellowship in adolescent medicine at the University of Pittsburgh.

Q. What was your major in your pre-Bachelor's Degree?

A. It was biology and women's studies.

Q. And when did you get your Bachelor's Degree?
A. I graduated with my Bachelor's in 2010.
Q. And medical school, when did you graduate there?
A. 2014.
Q. Did you have any particular emphasis at the West Virginia School of Medicine?
A. It's not customary for people to have emphasis in medical school but instead in residency.
Q. Okay.
And in your residency what was your specialty or emphasis?
A. I did a dual residency in internal medicine and pediatrics.
Q. And when did you get that? When did you complete your residency?
A. In 2018.
Q. And then your fellowship, what was that in?
A. Adolescent medicine.
Q. And when did you complete that?
A. In 2021.
Q. Any particular reason that you chose adolescent medicine?
A. Supporting adolescents and young adults is my favorite part of medicine.

Q. Have you had any other specialized training other than what you just discussed?

A. Within adolescent medicine there are several ways to have additional training and I did pursue one of those ways.

Q. And what was that?

A. Gender affirming care.

Q. And in what way did you pursue that?

A. I dedicated much of my clinical training to learning under experts in this space. I also dedicated my research training in a similar vein, and I engaged in organizations and groups and additional educational opportunities to round out that training.

Q. What experts are you referring to?

A. Doctor Gerald Montano, Doctor Selma Witchell among others.

Q. I'm sorry. Montano and who is the other one?

A. Selma Witchell.

Q. Can you spell that, please?

A. W-I-T-C-H-E-L-L.

Q. And what was the first name?

A. Selma, S-E-L-M-A.

Q. And where is Selma Witchell?

A. The University of Pittsburgh.

Q. Do you have a license to practice medicine?
A. I do.
Q. Where?
A. In the State of West Virginia.
Q. Any others?
A. I previously held a training license in the State of Pennsylvania when I was a trainee there.
Q. But currently you do not?
A. I do not.
Q. And do you have any --- you may have answered this, but do you have any specific specialties?
A. My specialties are pediatrics, internal medicine, adolescent medicine and gender affirming care.
Q. I was wondering if that was my computer dinging or someone else's.
A. I think it may be mine. Give me a second. I'll sign out of my email.
Q. Okay.
A. Okay.
Q. Do you have Board Certifications?
A. I do.
Q. What are those?
A. I'm Board Certified in Internal Medicine and Pediatrics.

Q. What was necessary to get Board Certification for internal medicine?

A. I was trained in internal medication and many of my patients are adults by legal definition.

Q. I'm sorry. You broke up. Can you repeat that please?

A. Sure. I was trained in internal medicine and eligible to sit that Board Examination. Additionally, a lot of my patients are over the age of 18.

Q. So you had to sit for a Board Examination.

Is that right?

A. I sat for two Board Examinations in Pediatrics and Internal Medicine as well as numerous Board Examinations to be allowed to get to that point.

Q. Okay.

And you passed those boards?

A. I did.

Q. Are you a member of any medical societies?

A. I am.

Q. What are those?

A. I am currently a member of the American Academy of Pediatrics. I'm a member of the Society for Adolescent Health and Medicine. I am also a member of the World Professional Association for Transgender

Health.

Q. Any others?

A. Not that I can recall.

Q. When you said the Society for Adolescent Medicine, did I hear that right?

A. The Society for Adolescent Health and Medicine, abbreviated SAHM, S-A-H-M.

Q. And what do you need to be a member of that, what do you need to do?

A. Most of these organizations have membership tiers for a variety of persons and you need to pay a fee. But for the purpose of my membership, it's as a physician. And for the American Academy of Pediatrics I have a special notation in my membership as someone who has passed the board exam for that field.

Q. For WPATH, what do you need to do to be a member there?

A. You need to sign up and pay a fee and check your membership category. Mine, again, is physician and although I think I may be still listed as a student member based on my training time at the University of Pittsburgh for that membership, but I am also part of their global education initiative, which is an additional training on top of being a member.

Q. I'm sorry, global what initiative?
A. Education initiative.
Q. Are you a member of the ---?
A. I am not.
Q. Are you a member or on the board of any educational organizations?
A. I think it depends on what you mean by educational organization.
Q. Any organizations that try and educate on any issues?
A. Well, broadly, I'm faculty at West Virginia School of Medicine and I routinely educate a variety of learners at a variety of levels. I'm also part of something called the Tri-State Gender Collaborative, which is a community-based organization that does provide education.
Q. And do you have privileges at any hospitals?
A. I do have privileges at Ruby Memorial Hospital in Morgantown, West Virginia.
Q. Any others?
A. No.
Q. So tell me of your work experience, your professional work experience.
A. Can you restate your question?

Q. Yes. So I'm interested to learn your work experience, where you have worked and what you have done starting --- I'm not sure exactly --- you've told me about your internship and then I know that you are doing some other things. So after your internship, did you have any professional --- did you start working right away or did you just do the fellowship or is fellowship considered work? Help me out, understand your work history.

ATTORNEY HARTNETT: Objection to the form.

THE WITNESS: Medicine training is complicated, and so the internship is part of residency. That was part of the four years that I spent in internal medicine and pediatrics training. During that time I was working in a variety of settings to obtain training in both of those fields.

After that was completed I was also doing training at the University of Pittsburgh. One could consider all of those work. And I was a paid employee during that time when I was a trainee as well.

BY ATTORNEY TRYON:

Q. What's the first job in which you were actually treating patients?

A. I have been treating patients since I was a medical student.

Q. Okay.

And your first paid job where you were treating patients?

A. That would have been the beginning of my residency, which is often called an internship in internal medicine and pediatrics.

Q. And then how about your fellowship, were you treating patients during your fellowship?

A. Yes.

Q. What is your current --- I don't know what the right term would be profession --- excuse me, profession or your work status?

A. I am currently an assistant professor in the Department of Pediatrics at the WVU School of Medicine. I am also the Medical Director of the WVU Medicine Children's Gender and Sexual Development Clinic.

Q. And then do you have a separate practice where you diagnose and treat patients?

A. Under those titles, yes.

Q. Okay.

So it's not separate from those?

A. No.

Q. Do you get paid directly by the patients or just only get paid by the West Virginia University?

A. I am dual employed as is the customary practice for physicians who are working at the WV School of Medicine, and so my dual employment goes both through West Virginia University as well as --- I believe it's called UHA, the University Health Associates, but I may need to clarify that.

Q. Okay.

As assistant professor what do you do?

A. Assistant professor is my title in my tenure track of employment, and so it's fairly traditional for assistant professors to be the entry point of tenure track position, if that makes sense. And my role in that is to provide medical care as well as to conduct research and to provide teaching.

Q. So I understood conduct research and also teaching. What was the first thing you said?

A. To provide clinical care.

Q. What do you teach?

A. I teach a variety of learner types and topics, but they typically center adolescent medicine and gender affirming care or both.

Q. Are there classes specifically on those topics

or is it part of a more general class?

A. Most often my teaching is as a guest lecturer for a medical student class or a residency training program or something called grand rounds, which is a teaching opportunity for faculty-level positions.

Q. What types of research do you do?

A. I conduct mix methods research, including qualitative and quantitative analyses, centering gender adversity in people and their experiences as well as the experiences of their family.

Q. How many papers have you published?

A. I don't know that I could give you a complete answer to that question. I suspect --- I know that it is more than 12. I suspect less than 20. It also depends on what you mean by paper.

Q. Okay.

When you say provide clinical care --- well, let me come back to that in a minute. As Medical Director of the West Virginia University --- excuse me, West Virginia University Medicine Children's Gender and Sexual Development --- do I have that title right?

A. Almost. It's the WVU Medicine Children's Gender and Sexual Development Clinic.

Q. And what is your role? What do you do in that

role?

A. I direct the clinical care of gender diverse intersex and questioning youth, ages approximately 3 through 26 in our multi-disciplinary team.

Q. So how is that different then from where you provide clinical care as an assistant professor?

A. Those two jobs descriptions overlap quite a bit.

Q. Are there any parts that do not overlap?

A. I would argue that it's outside of my role as an assistant professor but definitely in my role as the Medical Director of the clinic to have meetings where we discuss the care we provide, to meet with our DEI head more promptly, diversity, equity and inclusion, those sorts of things.

Q. Do you supervise anyone in either of your roles?

A. I often precept trainees, residents and medical students.

Q. Could you repeat that?

A. I often precept trainees, including residents and medical students.

Q. You said preset?

A. Precept, P-R-E-C-E-P-T. It's a word used in medical care to discuss supervision of trainees. I'm their preceptor.

Q. And do you supervise them as they are giving medical care?

A. Yes.

Q. Would it be fair to say that you are currently a treating physician?

A. Yes.

Q. And just so I have it right rather than me trying to restate it, in what areas do you treat patients?

A. I provide care for adolescents and young adults.

Q. In what areas?

A. In adolescent medicine, in gender affirming care.

Q. Do you provide general --- are you a pediatrician as well?

A. It's complicated. Adolescent medicine is a complicated --- and there are many adolescent specialists who do provide well child care for young people. I do that infrequently. And so for example, if a young person wishes for me to be their primary care provider, I can do that on a limited basis, but the majority of my care is subspecialty care and consultation.

Q. When patients need to come to you do they come

to you directly or through the University?

A. Can you restate the question?

Q. So it's my understanding that you do treat patients. And so my question is do they come to you directly or do they go through the University?

A. I'm not understanding what you mean by coming through the University.

Q. How do you --- how do patients come to you?

A. They can call our scheduling line that is available on our website or they can be referred from another physician or provider.

Q. How much of your time is spent with patients versus your time in doing research and teaching and other things?

A. I am 20 percent clinical and 80 percent research.

Q. So when a new patient comes in what is the --- let me back up for a second. Have you been --- one second. When you have a new patient come in --- I'm sorry, let me go back to my other question. Have you been asked to be an expert witness in this case?

A. No.

Q. Tell me about the intake process for a new patient.

A. Well, depending on how a new patient finds us, either through direct scheduling or referral, once they have the visit they usually meet with us for a longer than perhaps expected visit to compare to other pediatric practices. New patients visit with my team are usually between two and two and a half hours. An hour of that is typically spent with me and we have a fairly long conversation with the young person, with family members together and separately and then we work together to help support that young person together.

Q. When you say your team, who is on your team?

A. Our team, from my practice, currently includes myself, a child and adolescent psychiatrist, whose name is Dr. Deci, and a clinical therapist, whose name is Ms. Brianna Hayes.

Q. Doctor Steven --- what is his last name?

A. Deci, D-E-C-I.

Q. And Brianna Hayes, what is ---?

A. H-A-Y-E-S.

Q. What's her practice?

A. She is a clinical therapist.

Q. And Doctor Deci, what's the practice?

A. He is a child and adolescent psychiatrist.

Q. When the patient first is coming in --- let me

back up just a little bit for some more nuts and bolts in my question. Do they first meet with a secretary or nurse or fill out papers online? How does that process --- let's start with someone who is just direct scheduling.

A. And so if someone calls our scheduling line, they are scheduled for a visit. And they would arrive at their visit time, they would check in. They would sit in the waiting room. A nurse would call them back, take their vital signs and they would be put in an exam room with their family. They arrive with family. And then our team would see them.

Q. As far as the initial record, setting up the initial record of who this person is and what they're coming in for, who does that?

A. The family when they call when to make a visit will ask for a gender visit, and that's the only questioning that happens at that time.

Q. And then everything else that is input into the patient's records would either be from the nurse or from you or your team?

A. For those who are directly scheduling. If someone has been referred, it may be that they're referring provider or a scheduler from their referral

team put additional documentation in.

Q. Is there any --- okay.

So when you meet with the patients, is it initially just you or is it with the entire team first?

A. So it depends. We like to do a greeting where we all pile in these exam rooms and say hello and introduce ourselves so young people and families know our names and faces. Sometimes that is not possible for a variety of reasons. And also sometimes families don't need all of us and may or may not be interested in seeing all of us. Sometimes families just want to see me or sometimes they just want to see the mental health providers, and we try to accommodate that where we can.

Q. Do you gather their past medical history?

A. Yes.

Q. And is their medical history important?

A. I think that every patient's medical history, medication list, allergies, things like that can be important to their care.

Q. Can you explain to me why? I mean it may seem obvious to you, but I would like to just understand it.

A. Okay.

And so, someone's past medical history could certainly impact their present health, and so part of my

routine practice is to ask young people and their families what kind of diagnoses they have had in the past, including things like asthma, allergies, if they've broken their arm before, a whole host of questions.

Q. Are those things relevant to gender care?

A. They could be.

Q. How would allergies be related to gender care?

A. If you had an allergy to a medication that was related or the same as a medication that I could provide, that would be a concern to me.

Q. And do you typically take the history just from the patient or do you reach out to other healthcare providers?

A. I take my history from the patient and parent or guardian in front of me, but I also have access to our electronic health record and I review that as well for meeting new patients.

Q. Tell me about the electronic health record.

A. Our health system uses an electronic health record called Epic.

Q. And what is located in the Epic system?

A. A variety of things, including vital signs from previous visits, notes from prior visits and prior

providers, information about the family address and phone number, should we need to mail anything or call them, things like that.

Q. Does the Epic system --- let me back up. So the Epic system is a system used by West Virginia University.

Is that right?

A. WV Medicine specifically and UHA uses Epic I believe in most, if not all, of their hospitals. I think a couple hospitals are going live with Epic soon. I think it's an incredibly common electronic health record in this country and others I believe.

Q. I've heard of it. I don't know a lot about it. So tell me, would Epic system that WVU Medicine is using, does it just have information from within the WVU Medicine medical system or does it expand out to all providers in the country, for example?

A. It would be wonderful if it did that if an effective way. There's a bit of capitalism involved there I suspect, but we do have something called Care Everywhere, which is a tab that you can select and for some circumstances it allows you to see notes from other Epics systems outside of WVU Medicine.

Q. So what is the WVU medical system? Where else

are they tied into?

A. Can you restate your question?

Q. First of all, let me make sure I get my terminology correct. It's WVU Medical?

A. WVU Medicine. I think that's the brand name for the UHA health family of hospitals and clinics and that sort of thing.

Q. So WVU Medicine uses the Epic system and also you can utilize Care Everywhere. So my question is, Care Everywhere ties you into what other systems?

A. I don't know the comprehensive list. It's kind of a bit of luck I think sometimes navigating Care Everywhere. It's a little bit of what I would consider a clunky system, but Care Everywhere is within Epic. It is not itself a separate system.

Q. Understood. But can you recall any other organizations that you can access through Care Everywhere?

A. I know that I can access the University of Pittsburgh in some capacity. I previously worked in that system, and so I wasn't seeing exactly what it looked like if I was in their system, but I can't really speak to other systems that are connected.

Q. And if a patient comes in and they've had prior

medical providers, do they typically bring in any copies of medical records?

A. That would be wonderful, but it doesn't happen very often.

Q. Is the intake process any different for when someone comes in as a referral patient?

A. It depends on how they've been referred. So for example, sometimes providers will reach out to me through secure communication within Epic and say they have a patient they wish to refer and they might have questions about how to make that happen. So there may be an additional layer of communication there. I often ask questions about urgency of need. Sometimes patients are needing to see me sooner for a variety of reasons, maybe mental health concerns, that may be just stress about getting a visit, and so I can accommodate those things.

Q. So if the referred physician had information, they can send that to you through the Epic system?

A. They can send me a communication and that may include information that they feel is relevant for me to know about the patient they're sending me.

Q. When they send that communication, what does that look like? Is that email, texting?

A. It's --- it's neither. It's actually a communication system within Epic. It's called Inbasket.

Q. And does Inbasket provide for just communications or also sending documents?

A. I believe you can attach documents within those, but I have very intermittent luck of doing so and most folks do not use that feature.

Q. Anything else different about when you receive a referral as opposed to a direct contact?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Not that I can think of.

BY ATTORNEY TRYON:

Q. Let me ask you generally what types of information do you need to diagnose a problem?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Can you restate the question?

BY ATTORNEY TRYON:

Q. Yes. So in your field, are you --- do you diagnose patients?

A. If it is within my scope of practice, yes.

Q. And what type of --- what information do you need to make a diagnosis of your patients?

A. It depends on the patient and the diagnoses I'm

considering.

Q. Is there something called objective versus subjective symptoms?

A. Yes.

Q. Can you explain what those are and the difference?

A. Objective tends to refer to things like vital signs or labs, things that we measure. Subjective tends to refer to things that patients tell us, like that they have headaches or the severity of their headaches.

Q. How do you measure subjective symptoms?

A. You talk with your patient.

Q. Anything else?

A. That's the primary way to diagnose most things is to have a conversation with your patient.

Q. Is there a --- an objective way to measure the subjective symptoms?

A. We have a lot of scales for a lot of things. We have a lot of diagnostic criteria for a lot of things, but most of medicine would not exist in my opinion if we didn't talk with our patients.

Q. I understand that. So it sounds like there's not a good way to actually put a measurement on subjective symptoms.

Is that a fair statement?

ATTORNEY HARTNETT: Object to form.

THE WITNESS: They are by nature subjective.

BY ATTORNEY TRYON:

Q. So when someone comes to you for gender dysphoria issues as opposed to other types of medical issues --- actually, let me start that all over again. Do you ever treat patients or diagnose patients for things other than gender dysphoria issues?

A. Yes.

Q. What other medical issues do you diagnose or treat?

A. It's a very extensive list.

Q. Okay.

Then I won't make you go through it, but can you give me some just general ideas?

A. Dysmenorrhea is an incredibly common thing that I treat and diagnose.

Q. Can you repeat that or spell that, please?

A. Dysmenorrhea, D-Y-S-M-E-N-O-R-R-H-E-A. Dysmenorrhea.

Q. What is that?

A. Dysmenorrhea is difficult periods. It's a whole

host of things that lead to heavy bleeding, uncomfortable bleeding, pain with bleeding, and can really impact live experience with young people.

Q. Okay.

Anything else?

A. As I said, there are many things that I diagnose and treat.

Q. Give me a few examples just so I sort of understand your practice.

A. Okay.

Sexually transmitted infections. I'm an adolescent medicine doctor, so really anything in the pubertal period or young period is in my practice. But I often screen and treat for sexually-transmitted infections. I also manage contraception. I also talk about mood, anxiety, depression. Would you like more?

Q. I think I'm getting the sense of it. So let me ask you about gender dysphoria. Can you give me your definition for what gender dysphoria is?

A. My definition is loosely based on the DSM-V, which has criteria for the diagnosis of gender dysphoria, but it is stress, significant distress often associated with the inconference between one's sex assigned at birth and gender identity lasting longer

than six months with accompanying things like seeking to present one's self gender expression in line with one's affirmed gender and in opposition to one's sex assigned at birth as well as some other criteria.

Q. Is the actual intake process that we have discussed for someone coming to you for gender dysphoria different than some of these other issues that you've mentioned to me?

A. Can you restate the question?

Q. Sure.

When someone comes to you, you have given me sort of the --- explained to me how the intake process works in general. And my question is, is it any different in general than with respect to someone coming to you with gender dysphoria specifically?

A. In some ways. I ask a whole lot more questions about gender when we are talking about gender dysphoria, although I ask all of my patients about gender identity.

Q. Why do you ask all of your patients about gender identity?

A. It's important that I'm respectful of them and their name and pronouns, and also we know that gender diverse young people, and by my definition that is anyone who's sex assigned at birth and gender identity

do not fully align, we know that those young people face health disparities and inequities associated with mental health, and I want to make sure I can address those if they are present.

ATTORNEY TRYON: Let me just ask the court reporter if you're able to keep up with this?

COURT REPORTER: Attorney Tryon, if the doctor could speak a little bit slower because I'm --- yeah, a little bit slower, Doctor, please.

THE WITNESS: Absolutely.

ATTORNEY HARTNETT: She is doing a great time on the real time, though, but appreciate the point.

BY ATTORNEY TRYON:

Q. What is --- what percentage of your practice involves gender dysphoria or gender identity issues?

A. I couldn't give you an exact number, but my guess would be 80 percent.

Q. Now, you mention there's --- this may not be your word, but there's a process for diagnosing gender dysphoria.

Is that right?

A. There are diagnostic criteria, yes.

Q. And can you list those for me again? You started to go through that a little bit, but if you

could go through that I would appreciate it.

A. These are located in the DSM-V, and I cannot recite them by memory.

Q. Well, as best as you can, can you tell me what they are?

A. Loosely, the definition of gender dysphoria by my interpretation is that there is distress, often significant distress, associated with an incongruent between one's sex assigned at birth and one's gender identity lasting for at least six months and also inclusive of some other criteria, which include things like desiring to align one's gender expression with one's affirmed gender and in opposition to one's assigned sex.

Q. About how many people have come to you to get an initial diagnosis of gender dysphoria?

A. I want to clarify that most folks, at least a substantial portion of folks don't come to me asking for that diagnosis specifically, but more broadly to have conversations about means of support, although I am able to provide that diagnosis.

Q. Okay.

And about how many people have you given that diagnosis to?

A. I couldn't give you an exact number. I can approximate and say that I have seen well over a hundred patients in my clinic.

Q. And in which or for which you've given a diagnosis or gone through that --- let me start that over. Of those hundreds, those are the --- those you've actually gone through the process to make a diagnosis of gender dysphoria?

A. I've certainly asked all of the relevant questions. Sometimes young people and their families don't desire to have that diagnosis listed in their chart due to fear of discrimination.

Q. But you would say you've given that diagnosis for over a hundred patients?

A. I've certainly asked the questions associated with that diagnosis, yes.

Q. Okay.

But I'm asking where you've done the actual initial diagnose --- given actual diagnosis of that gender dysphoria, would you say over a hundred or not?

A. It's really hard to say because there is no --- there is no way that one gives a formal diagnosis kind of as a here it is. It's more of a you meet these criteria. Let's explore what that means. Does that

feel in line with your life experience. Sometimes I have to write it in the chart for the purpose of insurance coverage, for medication for example. But it's a bit more complicated than just saying you checked the boxes, here is your diagnosis.

Q. Okay.

Have you ever had a patient that came to you and you discussed gender dysphoria with that patient and ultimately you concluded that the patient did not have gender dysphoria?

A. I have.

Q. Are those patients who initially thought they had gender dysphoria and you concluded they did not?

A. Not usually, no. Those are more often patients who are questioning this part of themselves and exploring their identities as a normal part of adolescent development.

Q. For any of the patients that have come to you and said they thought they had gender dysphoria, have you arrived at a different diagnosis of what was causing their concerns?

A. I can't recall an occasion like that.

Q. Are you familiar with the concept of watchful waiting?

A. I am.
Q. Have you ever recommended that to a patient?
A. I have not because it is not recommended by the American Academy of Pediatrics.
Q. Tell me how you are familiar with that.
A. I'm familiar with it through the policy statement on the care of this population of young people from the American Academy of Pediatrics by Rafferty, et al., 2018.
Q. Have you --- tell me that citation again.
A. Sure. Rafferty, et al., 2018, the American Academy of Pediatrics.

ATTORNEY LINKOUS: Mr. Tryon, I know we've been going about an hour-and-a-half. When you get to a logical breaking point, I could use three minutes.

ATTORNEY TRYON: Okay.

Give me just another couple of minutes and then we will break.

BY ATTORNEY TRYON:
Q. Have you read any literature other than that about watchful waiting?
A. That is the literature that most specifically sticks out in my mind. I'm sure I've read countless articles that discuss this in one form or another.

Q. Are you aware that there are other articles that do recommend watchful waiting?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: I am not familiar with articles like that from highly-respected medical organizations.

BY ATTORNEY TRYON:

Q. Are you aware of any, whether or not they are from highly-respected medical organizations?

A. Not off the top of my head, no.

Q. Have you read their studies? I mean, this is a Dutch concept.

Right?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: I'm not familiar with what you're talking about.

BY ATTORNEY TRYON:

Q. It's called the Dutch Approach, and you're not --- you haven't heard that?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: I certainly am familiar about the Netherlands and the Dutch and the work they've been doing in this space for more than a decade.

BY ATTORNEY TRYON:

Q. And over there watchful waiting is considered an appropriate recommendation.

Right?

A. I can't speak to that. I know from their literature they've demonstrated that the approach we take here in this country when done in their country was very helpful and reduced mental health concerns in their young people. I believe that's a DeVry study from more than ten years ago.

Q. What is the difference between gender dysphoria and gender nonconformity?

ATTORNEY TRYON: You know what, I will withdraw that question. We can take a break right now. When we come back we can talk about that. Okay?

ATTORNEY LINKOUS: We can go off the record.

VIDEOGRAPHER: Going off the record. The current time reads 11:26 a.m.

OFF VIDEOTAPE

(WHEREUPON, A SHORT BREAK WAS TAKEN.)

ON VIDEOTAPE

VIDEOGRAPHER: We are back on the record.

The current time reads 11:37 a.m.

BY ATTORNEY TRYON:

Q. Dr. Kidd, when we concluded, when we took our break we were just finishing up talking about watchful waiting. Let me ask you just one or two more questions about that. Is watchful waiting something that --- is the only reason that you don't ever recommend that is because of the Rafferty study?

A. So Rafferty is not a study. It's a policy statement from the American Academy of Pediatrics that summarizes best practice guidelines for gender diverse young people. And so in that it does not recommend watchful waiting.

Additionally, based on my own literature view conducted over the course of my career thus far I have never seen medical literature that supports the use of that practice and is associated with positive mental health outcomes for youth.

Q. Okay.

Let me ask you about gender dysphoria versus gender non-conformity. You're familiar with both those terms.

Right?

A. I am.

Q. What's the difference between those two things?

A. Gender conformity is simply someone rejecting some tenet of what society presumes they should look like, act like, think like as it pertains to gender. And so that could be someone who, like myself, was assigned female but who is very interested in building and construction, right. Typically, that is considered a more masculine pursuit. And so that could be gender non-conformity, and that could extend through my expression. Perhaps I would want to present myself in a way that is more masculine or more androgenous. That would also be reflective of gender nonconformity.

Where this enters into the territory of gender dysphoria is when you have that significant distress associated with that encumbrance between my sex assignment and my gender identity. That is the difference.

Q. Could you repeat that last part again?

A. From where?

ATTORNEY TRYON: Can I ask the court reporter to read back that answer?

COURT REPORTER: It is simply someone rejecting of what society presumed they should look like, act like, think like as it pertains to gender.

And so that could be someone, who like myself, was assigned female but who is very interested in building and construction, right. Typically that is considered a more masculine pursuit, and so that could be gender non-conformity and that could express through my expression perhaps. I would want to perhaps myself in --- want to present myself in a way that is perhaps more masculine or androgenous, where this enters into the area of territory of gender dysphoria where you have that significant distress encumbrance in between my gender society. That is the difference. That's the part I messed up.

BY ATTORNEY TRYON:

Q. Isn't there always some level of anxiety or distress when someone has a gender non-conformity?

A. No, not always.

Q. So then in every event where there is some level of stress or anxiety does it then turn into gender dysphoria?

A. No. The word that I use is significant or severe, and I believe that language is also echoed in diagnostic criteria.

Q. So when I use the name BPJ, do you know who that is?

A. I do.
Q. Who is that?
A. That is B[redacted], my patient.
Q. Last name J[redacted]?
A. I believe it's a hyphenated last name, P[redacted]-J[redacted], but yes.
Q. Very good. Thank you for correcting me on that. Any --- prior to --- strike that.
Do you have any personal relationship with either BPJ or BPJ's family?
A. I am a physician caring for this young person. That is the extent of my relationship with this family and this young person.
Q. When did you first hear of BPJ, with that --- those initials or any other name?
A. I believe the first time I heard about B[redacted] was when Dr. Someshwar, an adolescent medicine specialist who i work with, recommended that she see me.
Q. Remind me how to spell that doctor's name?
A. S-O-M-E-S-C-H-W-A-R (sic), Someshwar.
Q. And how did that come about?
A. So Dr. Someshwar is the division head of Division of Adolescent Medicine and WVU Medicine Children's and my direct supervisor in my current

position, but also Dr. Someshwar provides care for gender diverse people, as I do, but she does not provide care for those who are interested in or have received pubertal blockers.

Q. Why not?

A. That is outside of her scope but well within my own, and that is why she wished for me to see B[redacted].

Q. And how did --- and I'm also going to use BPJ because that's the name on the Complaint, number one, and number two, since BPJ is a minor, that's my practice is to refer to people in court proceedings by their initials, all minors.

ATTORNEY HARTNETT: And if I could just --- for the record, this is Kathleen Hartnett for Plaintiff. It's acceptable to us for you to refer to her as B[redacted] or BPJ in this deposition. We marked the Complaint BPJ per rules of Court, and we'll mark the parts of this deposition about her medical records, if any, confidential, but Plaintiff has no objection to referring to her in either way. Thank you.

ATTORNEY TRYON: Well, to be clear, I'm going to continue doing that because if I make the mistake elsewhere, I can be sanctioned by a court, so I'm going to stay with that.

BY ATTORNEY TRYON:

Q. So how did BPJ come to the attention to Dr. Someshwar?

A. It is my understanding that Dr. Someshwar had provided care to B[redacted].

Q. Do you know what care?

A. I had seen a note from Dr. Someshwar.

Q. And what did that note say?

A. I can't recall the contents of that note, simply that I do remember seeing one.

Q. Is that in the records that you mentioned before or the Epic records?

A. It would be in the Epic record, yes.

Q. Do you remember when you had your first contact with BPJ and BPJ's family?

A. I know from my records the exact date. But without I could easily tell you it was in the fall. I can look at my records to get you the exact date if that would be helpful.

Q. Before we go there, let me ask you if you have a specific recollection of meeting with BPJ and Heather Jackson.

A. I do.

Q. What do you remember right now about that

encounter?

A. I have a mental picture of where B[redacted] and her mom were sitting in the exam room. That's most of the extent of what I recall just from my own memory and not reviewing the note.

Q. Do you have a mental memory of the discussions you had with BPJ and BPJ's mother?

A. That would certainly refresh from my review of my own note but also my practice is to have fairly similar structured conversations with families, and so I have a rough template in my brain of what we would have talked about.

Q. Tell me about that template.

A. It involves asking lots of questions about young people, their interests, their journey with gender identity, their family. Sometimes I ask about pets. It's a whole host of things to get to know the young person and their family.

Q. What does that term mean journey with gender identity?

A. We are all forever growing and evolving and changing as humans. It's part of the human experience, but particularly as it relates to gender for my patients that's often a bit of a long journey, and so that may be

starting from when they are young children. It may be starting from when they are adolescents. But regardless, there is always much to talk about with regard to a young person's experience of their own gender identity over time.

Q. And is that gender identity sometimes fluid?

A. It absolutely can be.

Q. Somebody may be for one period of time have a gender identity as one gender and then that can change?

A. Yes.

ATTORNEY HARTNETT: Object to form.

BY ATTORNEY TRYON:

Q. How many genders are there?

A. There are more genders than we understand, can conceptualize or can count.

Q. So over a hundred?

A. Gender is a spectrum. There is no solid number. It's someone's lived experience. It's much more complicated than we try to make it by binarizing people.

Q. So setting aside binder --- how do you say that, binderizing?

A. Binarizing people. Forcing folks into a binary.

Q. I've read some place there's 27 genders. Would you agree with that or not?

ATTORNEY HARTNETT: Object to the form.

THE WITNESS: I'm certainly not familiar with that particular study, but I would dispute it as I could probably list more than 27 myself.

BY ATTORNEY TRYON:

Q. And when someone is gender fluid what does that mean?

A. It depends on the individual, and so these terms tend to be applied to folks but what matters to me is the individual's definition of themselves.

Q. Have you had any --- well, let me move on to Exhibit 16.

ATTORNEY TRYON: And let me try to bring this up. This is going to be a first for me on doing this on the system.

VIDEOGRAPHER: And I'm here if you need some help or I can pull it up as well.

ATTORNEY TRYON: So Jacob, when I pull up exhibits file sharing, it wants me to enter a password.

VIDEOGRAPHER: Did you join with a new link when you rejoined after we got everything fixed?

ATTORNEY TRYON: I attempted to join with the same link.

VIDEOGRAPHER: I can set that new one or

I can just pull it up for you, either/or.

ATTORNEY TRYON: Why don't you do that. Can you pull up Exhibit 16, please?

VIDEOGRAPHER: Yes, just give me one second.

ATTORNEY TRYON: No, I had uploaded. Maybe you can't access them. I had uploaded three documents. One was Exhibit 16 just so we would only have to look at that one.

VIDEOGRAPHER: Got you. If you have them uploaded, then I would not have access to them unless you share them as host and share them with me.

ATTORNEY TRYON: Let me see if I can do this.

VIDEOGRAPHER: Also, when you upload if you check mark any of the boxes --- like if you check mark like Defendant's Counsel, they would also all have access to that as well.

ATTORNEY TRYON: Well, it's now rejecting my password.

VIDEOGRAPHER: It might be since it's a probably a different link that you joined the meeting with you might have to hit the forget password and set up a new one. That one --- the old one that you made

might be tied to the old link.

ATTORNEY TRYON: Let's go off the record for a second so I can get this straightened out.

VIDEOGRAPHER: Going off the record. The current time reads 11:52.

OFF VIDEOTAPE

- - -

(WHEREUPON, A SHORT BREAK WAS TAKEN.)

- - -

ON VIDEOTAPE

VIDEOGRAPHER: We are back on the record. The current time reads 11:59 a.m.

BY ATTORNEY TRYON:

Q. Dr. Kidd, this is what we've marked as Exhibit 16. Do you recognize this?

A. I'm not able to read any of it due to size.

Q. Okay.

I'm trying to blow it up. Does that help?

A. I have not seen it change. I may be able to do --- I can do it on my end specifically. Let me do that. I can only see the first page so far, but this does look familiar, yes.

Q. I believe you can click the different pages, 1 through 9.

A. I see that now. Yes. This looks like my note.
Q. Do you have a hard copy of that in front of you as well?
A. I do.
Q. Feel free to use either one, just to go through this.
A. Yes.
Q. So my first question is simply what is this document?
A. So certainly there are pages associated with this packet that I'm not familiar with. I think they are part from the pull from the health system. But specifically as it relates to the section that begins B[redacted] is a 11-year-old patient, that is the beginning of my clinical note from our patient visit.
Q. How is the information in here populated into this document?
A. The note itself?
Q. Well, everything in here. I'm just trying to understand how this document is created.
A. I can't speak to the ancillary information outside of my patient note. I can tell you how my note was created.
Q. Well, let's start with that then.

A. Okay.

I use a note template that has spaces for me to fill in information, as well as some information that is already populated that I can adjust accordingly.

Q. Is that note template in Epic?

A. It is.

Q. And then Epic takes that information and would populate it into a document that looks like what we have before us?

A. Specifically the section that begins B[redacted] is an 11-year-old patient, yes.

Q. The other information in here, for example, the visit date, the name, those sorts of things, do you know how those are populated into this document?

A. So let me --- I don't know that you can see where I am in the document, but this portion here that has the WVU Medicine Children's logo, I think it copied poorly. But from this section down, this is my note template. Above that ---.

Q. I cannot see where you're at.

ATTORNEY TRYON: Jacob, can you enable her to show that?

ATTORNEY LINKOUS: Jacob, you're on mute.

VIDEOGRAPHER: I have you enabled to mark

up the document. You should be able to put in highlights or drag us around. Whatever you do we should see.

THE WITNESS: Okay.

VIDEOGRAPHER: If you highlighted that right there, that's --- I see the highlight. Does everyone else see that highlight?

ATTORNEY TRYON: No, I can't see it.

VIDEOGRAPHER: On page three, around the it looks like the logo.

ATTORNEY LINKOUS: I see it.

ATTORNEY HARTNETT: This is Kathleen Hartnett. Just to make sure I'm clear, is the witness able to move the exhibit in the window but the others who see it cannot?

VIDEOGRAPHER: Right now I have the witness set to move it. I can give anybody permission to alter it and move it around and stuff. And it does that for everybody. So right now I just have the witness with the permission for that. Does that make sense?

ATTORNEY TYRON: Yes.

ATTORNEY HARTNETT: Yes.

ATTORNEY TYRON: Yes.

BY ATTORNEY TRYON:

Q. Is it highlighted in color?

A. It is yellow.

ATTORNEY LINKOUS: Mr. Tryon, she is also on BPJ099. I don't know if you're on that same page or not. I think she moved us down to that page.

VIDEOGRAPHER: Let me try something to synch it back up for you, Mr. Tryon.

ATTORNEY TRYON: Okay.

VIDEOGRAPHER: Do you see it now?

ATTORNEY TRYON: I see the document. I don't see any yellow highlighting.

BY ATTORNEY TRYON:

Q. Well, go ahead and describe where you're at.

A. Sure. There's a logo on one of these pages that has some cookie-cutter people holding hands and it says WV Medicine Children's, although I think the photocopy did not do that logo any justice. But that is the logo located on the top of my note. And that logo and everything beneath it is part of my note template. I am not familiar with how Epic aggregates the additional information in this packet.

Q. Okay.

Do you know who enters in the information, for

example, the date of birth and the visit date?

A. That information is likely entered at the time of the visit being scheduled, although that is not part of my role and so I cannot be certain.

Q. At the very top of that page, I think it's the same page, do you see it's got a number --- MRN number. Is that the patient's number that's assigned?

A. I have an E number on my screen that's below the date of the visit encounter. That is in my note template. That is the patient's medical record number, that E number.

Q. So I'm seeing MRN: E2003446?

A. Yes. And I know that you're having trouble seeing my highlighting, and I don't know if you can see that piece. I pulled that number into my notes. I'm not sure where you're referring to it, but that is the number.

Q. Right at the top, I'm looking at the very top of this page, page --- it's labeled BPJ099, and it's page one.

A. I can see it here.

Q. Yes. Now I see you're highlighting, although it's not yellow. Okay. So then if you move over to the right and it says sex M. Does that stand for male?

A. It does.
Q. And who would input that that BPJ's sex is male?
A. I cannot speak with certainty, but my guess would be the person who collected the insurance information.
Q. And why would --- if BPJ identifies as a female, as I think you say later on, why would that be put there as male?
A. The sex marker has to line up with the insurance for the purposes of billing in the medical system.
Q. Is that the only reason?
A. That's the reason that I'm familiar with.
Q. So you did not put that information in there?
A. I did not.
Q. If you can scroll down where it says desired to be treated as other gender.
A. Sure.
Q. It shows the name pronouns of she and her.
Right?
A. Yes.
Q. And if I scroll down further I look at and I see under gender dysphoria patient describes this experience for themselves as --- why do you use a different pronoun down there?

A. That's part of my standard note template. The things before the colons in these sections are part of a note template.

Q. Okay.

Then back up to desire to be rid of secondary sex characteristics. It says expectations for today's visit. That's part of the template?

A. It is before the colon.

Q. Right. And so that template is something that's created by Epic or by someone else?

A. That's a note template that I created within Epic.

Q. I see. And so it says want to establish care. That seems obvious to me, but can you explain that?

A. This was my first time seeing B[redacted]. And as part of my first visit with all of my patients I ask, you know, what are their expectations or goals for today's visit. And when I asked that question, B[redacted] and her mom responded that they wanted to establish care today. I'm not sure exactly who said that. I suspect it was mom.

Q. And next it says has [redacted] since June 2020 placed by Dr. Montano at UPMC. And you put that in there?

A. I did.
Q. And how did you know about that [redacted]?
A. I suspect that mom told me. That information was provided to me during this visit. But also it was in the medical record that I would have briefly reviewed prior to this visit.
Q. What medical record is that?
A. The notes that are available for me in Epic.
Q. So you're telling me that in Epic there would be some notes that stated that there was an [redacted], a [redacted]?
A. I believe Dr. Someshwar's note referred to it, yes.
Q. Did you ever ask Dr. Montano if he had placed that [redacted]?
A. I don't recall specifically asking Dr. Montano if he placed the [redacted], no.
Q. Did you do anything to confirm that the [redacted] was in place?
A. I examined B[redacted]'s arm. I palpated the [redacted]. I noted the small scar at the insertion site. I also confirmed it based on lab testing.
Q. Next, under desire to gain secondary sex characteristics of other gender, slash --- other gender,

colon, that was part of the form?

A. That was part of my note template, yes.

Q. And you created that?

A. I did. I should note it's based off of a template from those that taught me.

Q. Which would be whom?

A. Dr. Montano.

Q. Under there it has --- under severity, wanting to be other gender, other gender is based on the following, hair style and clothing and desire for hormone therapy, which you created that template.

Right.

A. Yes, everything before the colon.

Q. And you inputted feminine, feminine in the future.

Right?

A. I did, based on our conversation during this visit.

Q. Are those the things upon which you made a determination --- strike that.

Did you make a determination that B[redacted] was gender dysphoric?

A. If you review the criteria for diagnosis for gender dysphoria it's that essentially insistent,

persistent, consistent, incongruence associated with significant distress, as I discussed earlier, plus two or more of a list of criteria. This note outlines those criteria. And so based on the responses to questions that I asked in relation to my documentation here, yes, B[redacted] does meet the diagnostic criteria for gender dysphoria.

Q. Did you actually make a diagnosis?

A. B[redacted] already had that diagnosis prior to seeing me.

Q. And that was --- who made that diagnosis?

A. I suspect the first person was Dr. Montano, although I don't know that for sure.

Q. And who told you that she already --- that BPJ already had such a diagnosis?

A. The medical record.

Q. And that medical record which was from Dr. Someshwar?

A. And Doctor Someshwar would have had one of those notes, yes.

Q. Any other notes that would have said that?

A. Likely notes from B[redacted]'s therapist.

Q. And you have access to B[redacted]'s therapist's --- excuse me, BPJ's therapist --- let me start that over.

You had information from BPJ's therapist?

A. I had documentation.

ATTORNEY HARTNETT: Object to form.

THE WITNESS: Of her record.

BY ATTORNEY TRYON:

Q. Is that also on Epic?

A. Yes.

Q. So I want to go back to this part where it says desire to gain secondary sex characteristics. So are hairstyle and clothing the only bases to determine if someone is gender dysphoric?

ATTORNEY HARTNETT: Object to form.

THE WITNESS: No.

BY ATTORNEY TRYON:

Q. What other?

A. Potential criteria, potential things that we look for. There's no one single criterion.

Q. But those are the only things that are listed in this form.

Right?

ATTORNEY HARTNETT: Object to form.

THE WITNESS: In that particular section.

BY ATTORNEY TRYON:

Q. And desire for hormone therapy in the future.

What additional hormone therapy was desired?

A. Estrogen.

Q. And were you told why?

A. I can't recall our exact conversation, but it is my typical practice to have pretty detailed conversations about where a young person is in their chem thought process and understanding of what estrogen could mean for them.

Q. And what could it mean for them?

A. It could meaning gaining secondary sex characteristics of the other gender.

Q. Such as?

A. Breast growth.

Q. Any others?

A. Several others.

Q. What are those?

A. Thinning of hair follicles, softening of skin. Those are the primary.

Q. I'm sorry. What did you say about hair follicles?

A. Thinning, making the hair follicles less apparent on the body especially.

Q. And do you recall discussing those with BPJ and BPJ's mother?

A. I can't recall the specifics of that encounter, but is my standard practice to have those discussions.

Q. Up at the top of that page, do you see at the very top where it says P[redacted]-J[redacted], comma, and it's blocked out?

A. Yes.

Q. So --- let me back up. This document was produced to Plaintiff's Counsel then gave it to us. Were you involved in that production to Plaintiff's Counsel?

A. I was not.

Q. Okay.

Let me move on to the next page. And let me ask you, during this conversation was BPJ joined by Heather the entire time?

A. It is my standard practice to talk to young people alone for at least a portion of their visit, and so I suspect I did that during this visit.

Q. Do you recall during this visit anyone other than you were involved as far as healthcare providers?

A. It is often that I have trainees with me, most often in the role of shadows to witness how I talk to patients, how I gather this information, that sort of thing, how I provide care. I do not recall having a

trainee with me that day, but my memory could be mistaken there.

Q. And in your memory was anyone else from WVU in that meeting?

A. From WV Medicine?

Q. Yes.

A. I don't think so because I know that the other members of my multidisciplinary team were not a part of this conversation as B[redacted] was already established with a mental health therapist.

Q. Under past medical history --- and I'm now on page two of this document, it shows mental health HX. What is that? What does HX stand for?

A. It's a common medical abbreviation for the word history.

Q. In this past medical history that you have put here, the source is --- what was the source?

A. This source was very likely B[redacted]'s mother.

Q. Under social history do you see that?

A. I do.

Q. Is there anything in there that affects or would affect a determination or a diagnosis of BPJ having gender dysphoria?

A. These items in the social history are really

about getting to know B[redacted] and her family dynamic and more about her generally. These are not directly related to her gender identity.

Q. And let me just confirm up at the top of the page it says --- it shows the date being 9/16/2021. Was that the date of the visit?

A. To the best of my recollection, yes.

Q. On the next page it shows patient active problem list. Do you see that?

A. I do.

Q. And what --- it says WCC well check. Is that something that you inputted?

A. It is not. So this is a problem list that is maintained in Epic usually by the patient's primary care provider.

Q. Who is this patient's primary care provider?

A. I do not recall.

Q. Is there anything on this form that would tell you?

A. On this particular form, no, although in the Epic record that would likely be noted, at least to the extent of my note. It is not written in my notes. It may have been in some of these ancillary pages that I'm not as familiar with.

Q. During the visit did you discuss any of these items under the diagnosis --- well, excuse me, under the patient active problem list?

A. Not to my recollection, no.

Q. I'm sorry. Let me finish my question. The six bullet points that are listed there, you did not input any of those?

A. That is correct.

Q. And you didn't discuss any of those with BPJ or BPJ's mother?

A. Not to my recollection, no.

Q. Now, the next paragraph of notes, was that something that you inputted?

A. It is.

Q. And you ordered labs to confirm that the [redacted] was likely to release medication. Do I understand that correctly?

A. I ordered labs to confirm that the [redacted] was continuing to release the medication, as I suspected it would be, yes.

Q. Why do you do that?

A. It's routine and to make sure that the [redacted] is functioning as we expect it to. And for my practice I usually check those labs every 6 to 12 months.

Q. How is the [redacted] supposed to function?

A. So the [redacted] has a medication called [redacted]. [redacted] is a gonadotropin-releasing hormone agonist, or abbreviated a GRNHA. A GRNHA works at the level of a hypervolemic pituitary gonadal access to suppress that access and subsequent release of sex hormones, either testosterone or estrogen, depending on the sex assigned at birth.

Q. Is it the same medication for both to stop either testosterone or estrogen or is it different?

A. It is the same medication. It works in the same way.

Q. And did you also discuss that a [redacted] scan be done?

A. I had a discussion with B[redacted] and her mother about why I thought a [redacted] scan could be helpful and they opted to get one.

Q. It says I shared resources with mom to connect her to local parents support programs. Who were those resources?

A. I am connected to community organizations run by parents wherein parents can talk with other parents of gender diverse people. My abbreviation for the program I referred B[redacted]'s mom to is, in fact, next to B[redacted]'s

mom's email. It's abbreviated POT for the Parent Outreach Program.

Q. At the bottom it says on the day of the encounter a total of 60 minutes was spent on this patient encounter, including review of historical information, examination, documentation of post activities. And my question is what was the historical information?

A. That would have been the conversation with B[redacted] and her mom talking about the medical history as well as my pre-review of the chart prior to this visit.

Q. And then the examination, what would that entail?

A. For B[redacted], to my memory, that included making sure that B[redacted]'s heart and lungs sounded normal and generally evaluating how she was able to communicate, how she moved about the room, those sorts of things are the aspects of my physical exam.

Q. And when it refers to documentation, what is that referring to?

A. The actual writing of this note.

Q. Anything that is not in this note?

A. It would have also involved me ordering the labs and the [redacted] scan, writing why I was ordering the [redacted]

scan, things of that nature.

Q. And what would the post visit activities refer to?

A. That could be things like reviewing the labs if they came back the same day. This is a billing statement and only includes the time spent during that same day.

ATTORNEY LINKOUS: I'm sorry. Can you repeat that?

THE WITNESS: It is a billing statement and so it is referring to activities that were undertaken on that day.

BY ATTORNEY TRYON:

Q. In your discussion with BPJ and BPJ's mother was there any indication that BPJ had ever had any suicidal ideations, suicide plans, threats or attempts?

A. Not to my recollection.

Q. Did you ask?

A. I likely did. That is part of my standard practice.

Q. Why do you ask that?

A. Because gender diverse young people like B[redacted] base health inequities particularly as it relates to mental health, although that's at population level and

does not necessarily apply to B[redacted].

Q. Why wouldn't it apply to B[redacted]?

A. That's a population statistic, and so B[redacted] is her own person and may or may not be in line population statistics more promptly.

Q. And now I understand. Do you know if BPJ has ever been hospitalized for anything?

A. I reviewed the chart and don't recall a specific example of hospitalization. I think there may have been notes from emergency sorts of visits, but I don't remember an inpatient hospitalization.

Q. Before this visit had BPJ ever been diagnosed with any mental or emotional illnesses?

ATTORNEY HARTNETT: Object to form.

THE WITNESS: Mom specifically mentioned gender dysphoria, which is a diagnosis within the DSM-V, which is a diagnostic and statistical manual and so I suppose that could count.

BY ATTORNEY TRYON:

Q. Well, is that a mental or emotional illness?

ATTORNEY HARTNETT: Object to form.

THE WITNESS: It depends on your interpretation. It is a diagnosis in the DSM-V.

BY ATTORNEY TRYON:

Q. Okay.

It is a diagnosis. Is it a diagnosis of mental illness?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: That is a very challenging question, and so the short answer is gender dysphoria is significant distress, and it is that distress that can be considered a mental health concern. Being gender diverse or transgender is not a pathology.

BY ATTORNEY TRYON:

Q. Can you define then for our purposes what you consider --- or based on DSM-V, what is a mental illness?

ATTORNEY HARTNETT: Object to form.

THE WITNESS: Can you rephrase the question?

BY ATTORNEY TRYON:

Q. Yes. So you referred to the DSM-V.

Right?

A. I mentioned it, yes.

Q. Does that define what a mental illness is?

A. The DSM-V is the diagnostic and statistical manual of essentially all of the things that the American Psychiatric Association considers in their

wheelhouse for diagnoses. And so things like depression and anxiety are certainly in there but also things like gender dysphoria.

Q. Does it define the term mental illness?

A. I can't recall. It's a very broad term.

Q. Other than gender dysphoria, were there any other mental or emotional issues or problems that you were aware that BPJ had been diagnosed with?

A. Not that I can ---.

ATTORNEY HARTNETT: Object to the form.

ATTORNEY TRYON: Jacob, can you pull up Exhibit 33, please? Actually, I take that back. Let's stick with this exhibit a little bit longer.

VIDEOGRAPHER: You got it.

ATTORNEY TRYON: I apologize for that.

BY ATTORNEY TRYON:

Q. So turning to page six of this exhibit?

A. I'm unable to do that on my end.

Q. I can.

A. I can now, yeah.

Q. Okay.

If you can go down to where it shows --- sorry, it would be on actually page eight, eight of nine, I believe. And this was part of the testing that you

would have requested.

Is that right?

A. This is one of those forms that Epic has compiled for you, but it does look like it is of the labs that I ordered, yes.

Q. When this came back did you review it?

A. I did.

Q. And it shows under components testosterone total serum. Do you see that?

A. Let me highlight and make sure we're looking at the same thing. Here?

Q. Yes.

A. Yes.

Q. And if you go lower it shows the total serum and it shows value of less than 7.0.

Right?

A. Yes.

Q. And down below it shows the Tanner reference stages and for prepubertal, 7-20 for Stage 1.

Right?

A. I can see that.

Q. So does that testosterone level indicate that BPJ was at Tanner Stage 1?

A. No, that is not a correct interpretation.

Q. Could you please interpret it for me?

A. Sure. So the testosterone level demonstrates that it is suppressed, actually below a detectable threshold of 7.0 for the purposes of this lab. It is important to note that all bodies, unless they are too young or being blocked, make testosterone and that includes people who are assigned female. And so I myself right now very likely, in fact I'm extremely confident, have a level much higher than seven of testosterone because that is normal for an adult female. And so B[redacted]'s testosterone based on this level is fully suppressed. The reason that the Tanner stage reference guidelines are in this record is that other folks use this lab to monitor pubertal progression. B[redacted] was Tanner stage prior to the rod and was at Tanner 2 at that time. And so this table is not relevant to B[redacted], just a refresh in the lab that her testosterone is fully suppressed.

ATTORNEY TRYON: Okay.

Now let's turn to Exhibit 33.

VIDEOGRAPHER: Before I show it, you said 33.

ATTORNEY TRYON: I didn't hear you.

VIDEOGRAPHER: Before I show it, you said

33.

Correct?

ATTORNEY TRYON: Right. I sent you two other forms.

VIDEOGRAPHER: I just wanted to make sure before I showed it.

ATTORNEY TRYON: Yes.

VIDEOGRAPHER: And does everybody see that.

THE WITNESS: Yes.

ATTORNEY TRYON: I do.

BY ATTORNEY TRYON:

Q. Great. So if we could go forward into page 11. Sorry, it's going to be page 11 of the document itself, so it looks like that will be page --- I'm not sure.

And Dr. Kidd, if you have the hard copy it might be easier to read. It depends on which one you want to look at. So the first two sentences of this read through --- actually maybe the first three sentences. Why don't you go ahead and read them to yourself. We don't need to read them out loud.

VIDEOGRAPHER: While she's reading that, Mr. Tryon, I also gave you permission to mark the document as well if you need to highlight something or

guide the witness.

ATTORNEY TRYON: Thank you.

VIDEOGRAPHER: You're welcome.

BY ATTORNEY TRYON:

Q. Have you finished?

A. I have.

Q. Great. So this indicates that gender dysphoria during childhood is not evidently continued to childhood rather than the dysphoria persists and resulted for only 6 to 23 percent of the children.

Right?

ATTORNEY HARTNETT: Object to form.

THE WITNESS: I believe, which are a bit dated, but yes, that is what it says.

BY ATTORNEY TRYON:

Q. Do you think that percentage has changed?

A. I think our understanding of diagnostic criteria, for example many of those studies were from when we used GID, a different diagnostic criteria, that has evolved additional these guidelines from WV are from 2012, I believe. There is a new version that is set to come out in the I think late winter of this coming year that I was involved in giving feedback for.

Q. Yes. That version has not yet been accepted or

issued, has it?

A. Not yet. It's expected like within the winter.

Q. Assuming that's accepted, since it's still out for comment, but assuming it's accepted, how does it change in the eighth version, how does it change this language?

A. To be clear, it's still not out for comment. The comment period has ended and it's now back with its writing committee. But there is more space given, to my recollection, for exploring those differences by diagnostic criteria that we did inform this prior studies. I think it's important, though, to center B[redacted] in this conversation. B[redacted] is an adolescent, meaning that the second paragraph discussing the likelihood of her gender identity is more relevant.

Q. And under these guidelines what is the percentage of persistence for adolescents?

A. I couldn't cite a specific number because again it's complicated, but it is the majority is my understanding.

Q. So when BPJ originally identified as being a girl, BPJ was a child.

Right?

A. I believe social transition was in third grade,

so into adolescence but perhaps not quite there yet depending on your definition of adolescence.

Q. How do you define adolescence?

A. It depends. The World Health Organization puts numbers on young people, and so I believe they say age 10 to 19. But that's not necessarily reflective of pubertal changes, which is how I would define adolescence. And it's normal for pubertal changes to begin at age nine.

Q. And for --- well, let me just ask you, so since this is the current and existing guideline and --- or excuse me, standard of care, which you said you subscribe to.

Right?

ATTORNEY HARTNETT: Object to form.

THE WITNESS: Well, I think it is important to note if I may in this document.

BY ATTORNEY TRYON:

Q. I apologize. I didn't hear that.

A. It's possible, I would like to point out on page two, page number two on that part of it where it lists the standards of care are flexible clinical guidelines, that's a critical piece of all of this. And so they are not a kind of rule book but instead a

guideline and there are many circumstances to deviate based on an individual patient circumstance.

Q. So you pick and choose what you agree with?

ATTORNEY HARTNETT: Object to form.

THE WITNESS: Not at all. I follow numerous guidelines, including those from the American Academy of Pediatrics, but I also shape them to fit the needs of the patient.

BY ATTORNEY TRYON:

Q. Do you share with BPJ and BPJ's mother the statistics that 6 to 23 percent of children due to dysphoria --- excuse me, that the dysphoria persists into adulthood for only 6 to 23 percent of children? Did you share that with BPJ or BPJ's mother?

ATTORNEY HARTNETT: Object to form.

THE WITNESS: I believe the comment was not relevant to the patient in front of me.

BY ATTORNEY TRYON:

Q. Did you share with BPJ or BPJ's mother the fact that not all adolescents persist into adulthood?

A. I create space for people to explore their gender identities. I do not assume that any of us will wake up tomorrow feeling the way we feel today about our gender identity.

Q. So the answer is no, you did not share that with them?

A. I create space to have that conversation.

Q. Did you have a discussion in which you told BPJ or BPJ's mother that BPJ's gender dysphoria may not persist into adulthood?

A. I specifically in my practice make space to have conversations about fluidity and gender identity.

Q. That doesn't mean anything to me. What do you mean create space?

ATTORNEY HARTNETT: Object to form.

THE WITNESS: We have a conversation where I explain to young people that I don't expect them to be the same person every day for the rest of their lives. And if they feel that circumstances have changed or if their family feels that circumstances have changed the rod that B[redacted] has is fully reversible and it's always an option to remove that rod if it was in B[redacted]'s best interest, which I did not feel it was at the time of our encounter.

BY ATTORNEY TRYON:

Q. Did you tell BPJ or BPJ's mother that gender dysphoria does not always persist for adolescents into adulthood?

A. I don't think I said that exact thing, no.
Q. As I understand it --- well, let me back up. Did BPJ or BPJ's mother tell you how it came about that BPJ identified as being a girl instead of a boy?
A. I can't remember our exact conversation, but it is my standard practice to ask questions relative to that point and so I suspect, yes, we had that conversation.
Q. You don't remember anything about that conversation relative what I just asked you?
A. Not beyond what is documented in my note.
Q. In your notes it says that patient has identified gender diverse since, and then you inserted around age two. Does that refresh your recollection at all as far as what happened at around age two?
A. I document what is talked about during the visit, and so yes, that would have been the conversation.
Q. Do you remember anything else about BPJ identifying as a girl around age two?
ATTORNEY HARTNETT: Object to reading from the document that is not before the witness.
ATTORNEY TRYON: She has a hard copy.
ATTORNEY HARTNETT: I don't know where

you're reading from. Can you tell us where you are reading from?

ATTORNEY TRYON: Sure. It's on page one of the --- well, it's on page three of the actual exhibit and page one of Dr. Kidd's office notes.

ATTORNEY LINKOUS: It's okay. I think Dr. Kidd has her office notes in front of her. Go ahead, Doctor.

BY ATTORNEY TRYON:

Q. So I'm just asking when it says patient has identified as gender diverse since and then you inputted around age two, comma, she said she was a girl around age three, does that refresh your recollection about your conversation about how that came about?

A. Somewhat, yes.

Q. Okay.

And what do you remember now?

A. Specifically that B[redacted] and her mom more likely in this conversation would have told me that for me to write it down and so likely B[redacted]'s mom said that she identified as gender diverse in some capacity, be that a girl or otherwise, but first said she was a girl at age three. And that's a common differentiation. It's often children exhibit behaviors and interests that are

gendered in a direction parents may not expect. And that aligns with that question you had earlier about non-conformity.

Q. Do you remember anything else about that conversation relating to that?

A. Well, my next line is that third grade was when she started to wear girl clothes comfortably. I think I had a typo there. I meant to write comfortably instead of comfortable. And that social transition was the summer before third grade.

Q. And you have no other recollection about the conversation?

A. I do not.

Q. Very good.

ATTORNEY HARTNETT: I object to form on the last question. Sorry.

BY ATTORNEY TRYON:

Q. Was the father, Wesley Pepper, in this meeting?

A. No. My appointment with B[redacted] was with B[redacted] and her mom.

Q. Did you ever talk to Wesley Pepper?

A. I have not yet, though I expect to in the future.

ATTORNEY TRYON: Let's take a quick ---

off the record for just one moment.

VIDEOGRAPHER: We are going off the record. The current time reads 12:48 p.m.

OFF VIDEOTAPE

- - -

(WHEREUPON, A SHORT BREAK WAS TAKEN.)

- - -

ON VIDEOTAPE

VIDEOGRAPHER: We are back on the record. The current time reads 12:48 p.m.

BY ATTORNEY TRYON:

Q. So back in Exhibit 33, if we go to what's at the bottom of the page, page 15 of the document itself. And I have a question for you on paragraph two. If you can take some time and review that and then I will ask you a question.

A. Beginning with assessment of gender dysphoria?

Q. Correct.

A. Okay.

Q. Are you ready?

A. Yes.

Q. Great. So the second sentence says a psychodiagnostic and psychiatric assessment covering the areas of emotional functioning, peer and other social

relationships and intellectual functioning, slash, school achievement should be performed.

Did I read that correctly?

A. I believe so.

Q. Do you know if a psychodiagnostic and psychiatric assessment was performed?

A. And so during my visit, portions of that were absolutely performed. But B[redacted] had those kinds of discussions previously based on my review of the notes and my experience working with Dr. Montano.

Q. So and --- okay.

I understand you have had experience with Dr. Montano, but how do you know that those were performed for BPJ specifically?

A. I know Dr. Montano's routine practice because he is one of my teachers and I'm very confident in his skills.

Q. I understand that. But for BPJ specifically, are you aware if it was done?

A. Based on my review of the chart, I had every indication that --- and I want to quote this, a psychodiagnostic assessment covering areas of emotional functioning, peer and other social relationships and intellectual functioning and school achievement was

performed.

Q. By whom?

A. By Dr. Montano.

Q. Okay.

And there was something in the records that shows that?

A. I was able to see portions of Dr. Montano's note. It's that Care Everywhere thing we were talking about before, that they're not complete notes. But based on my understanding of what I was reading, Dr. Montano had the same conversation with B[redacted] that he had with all of the patients that I have witnessed him talking to.

Q. What were in his notes that said that since we don't have those?

A. And so I can't recall exactly what was in his notes, but his notes are templated very similarly to my notes in that they explore things like mental health concerns, like school functioning, like peer support and family support, things of that nature.

Q. And what does --- what's his title or his specialty?

A. So Dr. Montano is the Clinical Director of the Gender and Sexual Development Clinic at the Children's

Hospital of Pittsburgh. He is Board Certified in Pediatrics and he is an expert in pediatric gender affirming care.

Q. Is he a psychologist or a psychiatrist?

ATTORNEY HARTNETT: Object to form.

THE WITNESS: He is an adolescent medicine specialist. And adolescent medicine specialists have extensive training and experience in mental health support for young people.

BY ATTORNEY TRYON:

Q. Is that a qualification --- does he have qualifications that you don't?

ATTORNEY HARTNETT: Object to form.

THE WITNESS: I am not aware. He may well. But he certainly had tons of training in the space as have I.

BY ATTORNEY TRYON:

Q. Okay.

But you are not a psychiatrist or a psychologist.

Right?

A. I am neither of those two things. That is correct.

Q. So when it says psychiatric assessments, what

qualifications do you believe is necessary to do a psychiatric assessment?

A. Someone who has extensive training and background in psychiatric diagnoses like anxiety, depression, and for these purposes gender dysphoria.

Q. And you're asserting you have that qualification?

A. I do have that qualification, yes.

Q. Now, if we wanted these notes out of Epic that you referenced, how would we get those?

A. I honestly am not sure how that system works or the process of you getting those notes works.

Q. Who has control over those?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: I don't know.

ATTORNEY LINKOUS: Mr. Tryon, I can be of benefit if you would like.

ATTORNEY TRYON: Sure.

ATTORNEY LINKOUS: Health Information Management at West Virginia University Hospitals, Inc. is the owner of the Epic medical records. I can also send you an address for that.

ATTORNEY TRYON: That would be wonderful if you would do that.

ATTORNEY LINKOUS: I would be happy to.

ATTORNEY TRYON: Can you email that to me?

ATTORNEY LINKOUS: Yes, absolutely.

ATTORNEY TRYON: You have either mine or ---?

ATTORNEY LINKOUS: Yes.

ATTORNEY TRYON: If not, you have Curtis'.

Right?

ATTORNEY LINKOUS: I do, yes.

ATTORNEY TRYON: That would be wonderful. Thanks.

ATTORNEY HARTNETT: This is Kathleen Hartnett. Are you asking for the full Epic records for Dr. Kidd or --- I just was unclear of what records you're asking for.

ATTORNEY TRYON: Well, I'm a little unclear what exactly there is in Epic, so it's hard for me to ask. So I guess I would be probably asking for all of the records in Epic for BPJ.

ATTORNEY HARTNETT: Okay.

Just for the record, as you know, the Plaintiff has requested BPJ's records from WV Medical,

produced what we have and this Saturday --- and maybe Mr. Linkous can speak to it further, we produced additional records that were apparently the printout that Dr. Kidd was able to see, even though that's not what the records department produced. Just for the record, we produced all records that we received from WVU Medical, which was in our requests were all records that exist.

ATTORNEY LINKOUS: Sure. And to expedite things, I can certainly --- if counsel agree, I can certainly produce to Kathleen the records I have obtained from WVU, because I represent WVU, obviously, and then Kathleen can redact and send them on.

ATTORNEY HARTNETT: We have done that. Is that the records that you sent this weekend.

ATTORNEY LINKOUS: That is Dr. Kidd's office visit. I have access to BPJ's records from the health system that go beyond Dr. Kidd's visit.

ATTORNEY HARTNETT: Okay.

I mean, obviously whatever you would like to do would be helpful, but I guess for the record to be clear we've asked for and to our knowledge received all documents related to BPJ's treatment by WVU Medical. And that's what we produced to the other parties. And

then we understood this weekend that you were able to --- Dr. Kidd is able to see something different in her interphase, and so --- which appeared to be largely additional administrative information, and we produced that document as soon as we received it from you on Saturday.

ATTORNEY LINKOUS: That's correct. I can do it however you would like.

ATTORNEY TRYON: So Mr. Linkous, we would like to get the rest of the documents that are in the Epic system that we don't already have. And we will go over the other documents that I got over the weekend next. But if there are additional documents in the Epic system, we'd like to obtain those.

ATTORNEY LINKOUS: Okay.

ATTORNEY HARTNETT: Just to be clear, are you asking for the --- sorry, the documents from the Epic system from WVU Medical?

ATTORNEY TRYON: Are you asking me?

ATTORNEY HARTNETT: Yes, just because I think what the witness has stated is that the Epic system is used by different institutions, and so I think --- I'm just trying to be clear if you are asking Mr. Linkous for the documents from WVU Medical's Epic system

or you are trying to seek more broadly all of the documents about BPJ that may be out there in the, you know, in the Epic systems of other institutions, which it doesn't sound like he is the person that would be able to get that for you.

ATTORNEY TRYON: Right. That's my understanding. So whatever Mr. Linkous has access to, including Epic and the Care System, which is part of Epic.

ATTORNEY LINKOUS: I only have access to West Virginia University records, and that would include these --- what was the tab called again, Care Everywhere tab. And I can certainly produce that. I would prefer to produce that in a link to Kathleen and then let Kathleen look at it. It may be duplicative of what she already has and then she can produce.

ATTORNEY TRYON: I will agree to that.

ATTORNEY HARTNETT: And I will just make a representation for the record that we'll produce it even if it's duplicative just to make clear to the Defendants that we are producing everything we have. And I would expect that those --- any records that were referred to in a different institution have been sought and received from that institution, such as Dr. Montano.

ATTORNEY LINKOUS: And just, Mr. Tryon, I want to be completely transparent with you so when you get the records you can understand any distinction or differences that might be in them. When I get records from West Virginia University I have my nursing staff organize them, Bates stamp them and bookmark them in a PDF document so they're in a format that I typically use for case by case by case. So for instance, the exhibit you are about to use will have my unique Bates stamp number on it at the bottom center. I can produce them certainly in that Bates stamped organized, bookmarked fashion to Kathleen or I can produce the native documents as they came to me, however you would like. Does that make sense?

ATTORNEY TRYON: Native, you mean without the Bates stamp?

ATTORNEY LINKOUS: Yes. So for instance, West Virginia University may end me --- I'm making it up --- a thousand pages of medical records for a patient. I give that to my nursing staff who organizes it by provider, by date, and they bookmark it so you can go to this date, this date, this date, this lab result, this admission, this ER, this pediatrician and you can navigate the records quickly. So I have my nursing

staff do that for me.

ATTORNEY TRYON: That's great.

ATTORNEY LINKOUS: I can produce that if you'd like. That way there's a Bates stamp and it shows you every one through how many ever there are.

ATTORNEY TRYON: That's fantastic. I appreciate it.

ATTORNEY LINKOUS: Sure.

ATTORNEY TRYON: So I would like to now turn to Exhibit 35. If you could pull that up, Jacob.

VIDEOGRAPHER: Can you see that?

ATTORNEY TRYON: Yes.

ATTORNEY TYRON: Yes.

VIDEOGRAPHER: And again, the witness and Mr. Tryon, you have permission to move to pages, highlight that, et cetera.

ATTORNEY TRYON: Thank you.

BY ATTORNEY TRYON:

Q. So Dr. Kidd, my first question simply, do you recognize this document?

A. I recognize that it is a face sheet, and I think this may have been part of the packet that I was sent.

ATTORNEY HARTNETT: Could I ask for the record what --- we can only see one page at a time and I

don't have this exhibit. So I'd be happy to pull the document that Mr. Linkous gave us and that we produced to you, but what Bates numbers are on this document?

ATTORNEY TRYON: Sure. They got cut off because the Bates number is so close to the bottom that when I printed it out ---.

VIDEOGRAPHER: And Attorney Hartnett, I did submit this document, which basically means it is now shared with everybody. If you go to the top and click on files, then that --- exhibit file sharing, you should be able to see it off to the right.

ATTORNEY HARTNETT: I do.

VIDEOGRAPHER: And you should be able to download that yourself.

ATTORNEY HARTNETT: Appreciate it. Thank you.

VIDEOGRAPHER: You're welcome.

ATTORNEY TRYON: And Mr. Linkous' Bates numbers are 101103 through 101137.

ATTORNEY HARTNETT: And these were, just for the record, the documents that we produced on Saturday from Mr. Linkous with Bates BPJ 02510 to BPJ 02545.

BY ATTORNEY TRYON:

Q. Okay.

Dr. Kidd, I'm not sure I understood your answer. What do you understand this document to be?

A. I just scrolled through it and it looks like some supportive documentation around my note.

Q. Would there be any information in this document that's not in Exhibit 16?

A. Is Exhibit 16 the document we reviewed previously.

Q. Yes, it is the --- it's your notes and the lab information.

A. I can't speak to the nuance in this ancillary documentation. I'm sure that there is information on the face sheet if it was not present in the prior packet, Exhibit 16, but my notes should be the same in both packets.

Q. Now, there are places where there have been redactions of names.

Do you see that?

A. Are you referring to --- let me use my highlighter again.

Q. On the very first page that you look at there are three places where information is blocked out, which yeah, you've highlighted it.

A. Yes, I can see that.

Q. Did you have any involvement in that --- in blocking that out or redacting it?

A. No, no, I did not.

ATTORNEY HARTNETT: For the record, Plaintiff produced these to you with that information redacted at the request of Mr. Linkous.

BY ATTORNEY TRYON:

Q. On the second page of this exhibit, if you can go there, under the organs inventory, none of that is filled out. Is there a reason for that?

A. So this is a form that is optional to complete in Epic and is not part of my standard practice for adolescents.

Q. So underneath admission diagnosis, slash, and reasons for visits, do you see that?

A. I do not --- oh, down here at the bottom, yes, I see that now.

Q. What is ICD-10-CM?

A. That is the system that we use for billing codes ICD-10 specifically, I'm not sure what the -CM refers to.

Q. And under it, it says long-term, parentheses, current, closed paren, use of other agents affecting

estrogen receptors and estrogen levels. And that's under the admission diagnosis and reason for visit. So tell me what that means.

A. I have to assume because I myself did not enter in that code I believe that that is an umbrella code that the code I actually entered falls under. But again, I can't be positive about that. The code I would have ---.

Q. Go ahead.

A. The code I would have entered was likely something along the lines of long-term use of a gonadotropin-releasing hormone agonist or GRNHA.

Q. And is that a diagnosis or reason for visit?

A. So that is a reason to get the labs and the [redacted] scan that I subsequently ordered. And so when you order labs or imaging you have to tell insurance why it is medically relevant. And so that is the purpose of that code.

Q. During your visit with BPJ and BPJ's mother, did you actually make any diagnoses?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: To my recollection, no new diagnoses that had not already been made.

BY ATTORNEY TRYON:

Q. On the fourth page, which at the bottom center is 101 to 106, do you see --- let's see. I'm blowing it up on my screen. Does it get any larger on yours?

A. No, but I have it zoomed in on mine.

VIDEOGRAPHER: Mr. Tryon, if you highlight or write with the pencil tool, that will share it with everybody. But the zoom feature --- or the zooming is specific to each person. So each person can zoom in on the page that whatever their preference is.

BY ATTORNEY TRYON:

Q. Okay.

So I tried to highlight this one part that says it says gender dysphoria. Did it highlight on your screen?

A. Where patient describes this experience for themselves as?

Q. Yes.

A. Yes.

Q. So before the colon that's part of the form.

Is that right?

A. That's correct.

Q. And then the rest of that language you added?

A. That language came from B[redacted] and I typed it in to this note.

Q. Do you remember any more about the conversation with BPJ about those words?

A. I can't speak more to what other words were said, but I try to write these as directly as the young person provides them to me, and I didn't make any additional notation. I make additional notation if the young person's experience is unexpected or different from my experience in working with gender diverse young people. And so in my practice this would suggest that this was what B[redacted] said and that her experience she described was very similar to other young people that I have cared for.

Q. What does it mean angel, slash, devil on shoulder kind of feeling?

A. To my recollection, B[redacted] kind of described that what you often see depicted in media, that there were kind of parts of who she was that were in conflict. And my interpretation based on my memory was that those parts of her were her gender identity and what society kind of expects of her because of her sex assignment. That's that distress that is associated with the gender dysphoria diagnostic code.

Q. What did society expect from BPJ?

A. Typically when babies are assigned male at birth

we expect them to identify as boys and eventually men and to live their lives as such.

Q. Do you remember anything specifically about BPJ, though, about what BPJ thought society expected of BPJ?

A. I can't recall specifically if B[redacted] spoke to that.

Q. What does society expect of boys and men?

ATTORNEY HARTNETT: Object to form.

THE WITNESS: Can you restate that question?

BY ATTORNEY TRYON:

Q. Well, I'm just going back to what you said, you said society expects certain things of boys and I think you used the terminology of those that are assigned male at birth and they expect certain things of boys and certain things when they grow up to be men.

A. Society.

ATTORNEY HARTNETT: Object to form.

THE WITNESS: To be very clear on this, society expects --- in my experience if someone is assigned male that they identify as male, simply put.

BY ATTORNEY TRYON:

Q. Okay.

Well, what specifically does society expect of

men?

ATTORNEY HARTNETT: Object to form.

THE WITNESS: Can you rephrase that?

BY ATTORNEY TRYON:

Q. Well, you're telling me that society expects certain things of boys and men. I want to know what you are saying that society expects from them.

ATTORNEY HARTNETT: Object to form.

THE WITNESS: I'm simply stating is that folks who are assigned male are expected to identify as male. That is what society expects.

BY ATTORNEY TRYON:

Q. And what does that mean to identify as male?

A. To have one's sense of gender for one's self be on the masculine spectrum.

Q. What's on the masculine spectrum?

A. There is a very helpful tool for this that I often use in talking about gender identity. It's called the gender unicorn, and it diagrams this out really nicely. But essentially there are masculine and feminine and nonbinary and other gender components in all of us to some varying degree. And when I say masculine I mean that the masculine component is dominant.

Q. What are masculine components?

A. It's a bit of a cultural and time, so temporally associated sort of thing, and I talk about this with patients and families, but it's often how we communicate, how we carry ourselves, what our place and role in society is, lots of expectations. But when we're talking about gender identity, it's this inherent sense of self as it relates to gender.

ATTORNEY TRYON: I would ask the court reporter to read back my question, please.

COURT REPORTER: What are the masculine components?

BY ATTORNEY TRYON:

Q. Please answer that question.

ATTORNEY HARTNETT: Object to form.

THE WITNESS: They are not specific components but instead a sense of self.

BY ATTORNEY TRYON:

Q. So there are no masculine components?

ATTORNEY HARTNETT: Object to form.

THE WITNESS: There is not a checkbox for masculinity, although society does impose ideas on us.

BY ATTORNEY TRYON:

Q. Well, you used term masculine components. I

didn't. What were you referring to?

A. Those thoughts that society has about what is masculine.

Q. Which are what?

A. I think it depends on the society in question.

Q. Okay.

Our society here in West Virginia?

ATTORNEY HARTNETT: Object to form.

THE WITNESS: Here in West Virginia one may masculine things are --- things like I gave the example earlier of interest in construction, right, and what we were discussing earlier, interest in hunting. While there are many folks who consider those things feminine as well, they stereotypically masculine in our society by my interpretation.

BY ATTORNEY TRYON:

Q. So that would be your stereotype?

ATTORNEY HARTNETT: Object to form.

THE WITNESS: The stereotype that I observe in our society as part of my job.

BY ATTORNEY TRYON:

Q. So how have you reported your observations as to what constitutes a masculine component?

ATTORNEY HARTNETT: Object to form.

ATTORNEY TRYON: Do you have a list?

THE WITNESS: Could you repeat the question?

BY ATTORNEY TRYON:

Q. Do you have a list of what you've observed to be masculine components in our society here in West Virginia?

ATTORNEY HARTNETT: Object to form.

THE WITNESS: I do not have a list, no.

BY ATTORNEY TRYON:

Q. So just when you're talking to a young person how do you know what constitutes a masculine component?

A. I think that's irrelevant for the purposes of discussing someone's gender identity as they see it themselves and instead more relevant to conversations about society's expectations of them.

Q. You say it's relevant or irrelevant?

A. It is relevant in some ways as to how they see themselves certainly. The primary thing we focus on is how the young person experiences their gender identity.

Q. How did BPJ experience BPJ's identity?

A. She identified as a girl.

Q. And what does that mean then?

A. It means that in her own mind and her own sense

of self she is a girl. She sees herself as a girl. Her relationships with people are based on her own internal sense of self as a girl.

Q. Did BPJ tell her what components constitute being a girl?

ATTORNEY HARTNETT: Object to form.

THE WITNESS: Not to my recollection.

BY ATTORNEY TRYON:

Q. So just the fact that BPJ said I identify as a girl, that was enough?

ATTORNEY HARTNETT: Object to form.

THE WITNESS: No one knows their own lived experience better than the individual themselves. And so when young people tell me how they identify, I explore what that mean for them. But B[redacted] identifies as a girl and so she is a girl.

BY ATTORNEY TRYON:

Q. So you explored that with BPJ. Can you tell me about that exploration, what it meant for BPJ to be a girl?

A. Only to the extent that I documented it and based on my standard practice. I don't recall the specifics of our conversation beyond that.

Q. So if someone comes to you and says --- who is a

girl who was, as you say, assigned the sex of female at birth, that says I identify as a male, but all outward appearances --- let me rephrase that. Let me just start over. If a young woman of any age comes to you and says I identify as a male, is that in and of itself enough to establish gender --- now I'm forgetting the terminology, sorry, gender dysphoria?

ATTORNEY HARTNETT: Object to form.

THE WITNESS: It is not because, as we discussed, there are specific diagnostic criteria for that diagnosis.

BY ATTORNEY TRYON:

Q. And that is they have to identify as such for six months?

ATTORNEY HARTNETT: Object to form.

THE WITNESS: I'm happy to review based on my memory, but I would refer to the DSM-V and that specific diagnostic criteria.

BY ATTORNEY TRYON:

Q. What if that persons says I don't care about DSM-V, you know, I was assigned girl at birth, but I identify as a girl, that's not good enough?

ATTORNEY HARTNETT: Object to form.

THE WITNESS: I think you are confusing

the difference between gender dysphoria, the diagnosis, and gender identity, the experience.

BY ATTORNEY TRYON:

Q. Thank you for clarifying. So for someone to have a gender identity different than what they are quote assigned at birth, they just simply need to say that they have a different gender identity.

Is that right?

ATTORNEY HARTNETT: Object to form.

THE WITNESS: They also don't have to say it. It's something they know in their own minds for themselves and for them to share or not.

BY ATTORNEY TRYON:

Q. But if they share that, is it your view that that person needs to accept that, that other folks need to accept that?

ATTORNEY HARTNETT: Object to form.

THE WITNESS: It's my view that no one can know inside someone's else's mind better than that person themselves.

BY ATTORNEY TRYON:

Q. Do others --- should others be required to accept that or not?

ATTORNEY HARTNETT: Object to form.

THE WITNESS: I can't speak to that more broadly. All I can talk about is B[redacted] and what she told me.

BY ATTORNEY TRYON:

Q. Okay.

If we could turn now to page --- okay. I'm looking at what is page 18 of 36. Do you see that?

A. I do.

Q. Okay. So ---.

ATTORNEY HARTNETT: Could I just say for the record it's the document with the 101120 at the bottom?

ATTORNEY TRYON: Correct.

ATTORNEY HARTNETT: Thank you.

BY ATTORNEY TRYON:

Q. And it says --- under messages sent it shows delivery and it shows on 10/25/2021 it looks like a message was sent to Matthew Bunner. Is that a correct interpretation of that?

A. That would be my guess, although I'm not familiar with that exact message nor is this kind of usually how I see this report. So outside of this setting, I wouldn't necessarily have access to this view.

Q. Do you remember talking to or sending a message to Mr. Bunner on 10/25/2021?

A. No, I don't have recollection of that and I suspect it was not me who sent the message.

Q. Okay.

Then down below further it says call information and it references Steven Deci and you and --- that's all. It references a call apparently on 9/16/2021. Do you know what that is about?

A. I don't. I don't recall receiving a phone call. I do know that is the date of the visit and the time of the visit, and so this may be what it is referring to.

Q. Okay.

Now, I'm on page 21, which is at the bottom of the page. The bottom is 101123. And under here it shows today's visit. There's a box there. Do you see that?

A. I do.

Q. And who inputted this information?

A. It depends on what information you're referring to, and I only know partial answers to that question.

Q. Okay.

The blood pressure?

A. It is our standard practice that the nurse takes

the blood pressure and then enters it into the chart.

Q. The same thing with the BMI and the weight?

A. So the nurse would take a weight and measure height and then the computer would automatically calculate a BMI.

Q. Okay.

And the temperature, the nurse does that as well?

A. Yes.

Q. And the pulse?

A. Yes.

Q. And it says under that percentiles calculated using cc, paren, boys 2, dash, 20 years, closed paren. Do you see that there?

A. I do.

Q. And so why is that percentage using the boys chart as opposed to a girls chart?

A. Because in Epic the sex designation carries over to the gender marker, and so that is what chart is used.

Q. Is there a reason to determine percentiles for the child?

A. The BMI percentiles are important for youth as BMI itself is a poor measure and so BMI percentile is the standard based on my training that is used.

Q. And why is that important?

A. It's important to look at growth and development throughout childhood. Children are not fixed as adults often are in their height, for example.

Q. So if BPJ identifies as a female, why not use the female chart?

ATTORNEY HARTNETT: Object to the form.

THE WITNESS: It's a question and it's a limitation of our health system and our health record.

BY ATTORNEY TRYON:

Q. So you don't think it matters which chart is used, whether it's a male or female?

ATTORNEY HARTNETT: Object to form.

THE WITNESS: I certainly think it matters.

BY ATTORNEY TRYON:

Q. And why does it matter?

A. It matters because these charts are slightly different and based on a child's growth trajectory it may be better to use one chart over the other or even both to make sure that a child growth trajectory is on target.

Q. Did you prescribe any treatment for BPJ?

ATTORNEY HARTNETT: Object to form.

THE WITNESS: No new treatment. I did continue with [redacted]. For example, we did not discontinue the [redacted] during my visit.

BY ATTORNEY TRYON:

Q. Is --- let me see if I can pronounce this right. [redacted] hormone, what is that?

A. [redacted] hormone or LH is a hormone that is downregulated by the presence of the [redacted]. It is a hormone that goes on to stimulate a secretion of sex hormone in the body throughout.

Q. Do you anticipate any of --- prescribing any further treatment?

A. So I think I have a visit with B[redacted] coming up next month and at that point we will be discussing B[redacted] and her family's goals and discussing options like [redacted]. We began that conversation at our first visit.

Q. And what about options such as surgery?

A. I'm not a surgeon, and in my experience, B[redacted] is very young to be making kind of long-term plans in that direction, although if she has questions I will answer them to the best of my ability.

Q. So if that's something that BPJ wanted, is there something that you would --- is that something you would

refer BPJ to someone else?

ATTORNEY HARTNETT: Object to form.

THE WITNESS: When appropriate.

BY ATTORNEY TRYON:

Q. Do you have someone in particular --- well, have you ever referred anybody to another specialist for surgery?

A. Yes.

Q. Who have you referred them to?

A. Well, there are usually surgical centers as well as individual surgeons, but it depends on what the young person is seeking and what their insurance coverage is, where their family is located, and a host of other factors.

Q. How many referrals have you made for surgery?

ATTORNEY HARTNETT: Object to form, scope. Go ahead.

THE WITNESS: I couldn't speak to that specifically. I don't know off the top of my head.

BY ATTORNEY TRYON:

Q. More than one?

A. Yes.

ATTORNEY HARTNETT: Same objection.

BY ATTORNEY TRYON:

Q. Can you just give me the names of a couple of folks who do this type of --- do surgery for gender transition?

ATTORNEY HARTNETT: Objection, form, scope.

THE WITNESS: What type of surgery are we talking about?

BY ATTORNEY TRYON:

Q. Sex reassignment surgery.

ATTORNEY HARTNETT: Objection. This deposition concerns the diagnosis and treatment of Plaintiff, BPJ aka B[redacted] P[redacted]-J[redacted]. I would like to understand how this line of questioning is at all relevant to that.

ATTORNEY TRYON: To understand the future of possible treatments.

ATTORNEY HARTNETT: She has not testified to any such future possible treatment with BPJ or --- I just don't understand why having her list the names of providers to conduct surgeries has anything at all to do with BPJ's diagnosis or treatment.

BY ATTORNEY TRYON:

Q. You can answer the question.

A. Can you restate the question?

Q. Can you give me a list of providers for a sex reassignment surgery that you've referred people to?

ATTORNEY HARTNETT: Object to the form and scope.

THE WITNESS: Sex reassignment surgery is very broad, and so I'm not able to give you a specific list of surgeons without further clarity.

BY ATTORNEY TRYON:

Q. Then I guess I need to ask you what is included within sex reassignment surgery.

A. It's a rather long list, but none of this pertains to B[redacted] right now and may not in the future.

Q. But you have referred folks out for some form of sex reassignment surgery or not?

ATTORNEY HARTNETT: Object to form.

THE WITNESS: I have referred patients for a variety of needs outside of my scope of practice, yes.

BY ATTORNEY TRYON:

Q. Can you recall the name of even one of the surgeons you've referred people to?

ATTORNEY HARTNETT: Same objection and asked and answered.

THE WITNESS: John Pang.

BY ATTORNEY TRYON:

Q. How do you spell the last name?

A. P-A-N-G.

Q. Give me two more and we will be done.

ATTORNEY HARTNETT: Objection to scope and form and harassing the witness.

ATTORNEY LINKOUS: If you can recall, you can tell him.

THE WITNESS: And there are usually teams and not individual surgeons, but Toby Meltzer is someone whose name I had mentioned previously. And I'm thinking of centers, and so there's lots of folks in centers.

BY ATTORNEY TRYON:

Q. Give me a center name?

A. The Hopkins Clinic.

Q. Is that in West Virginia?

A. It is not. In fact, none of these providers are.

Q. I see. Okay.

ATTORNEY TRYON: Let's go off the record. Let me take just a very short break and see if there are any other questions that I have.

VIDEOGRAPHER: Going off the record. The current time reads 1:32 p.m.

OFF VIDEOTAPE

- - -

(WHEREUPON, A SHORT BREAK WAS TAKEN.)

- - -

ON VIDEOTAPE

VIDEOGRAPHER: We are back on the record. The current time reads 1:41 p.m.

ATTORNEY TRYON: Dr. Kidd, I want to thank you very much for your time. I have no further questions for you at this time. In the rare event that, unlikely I will say, event that the Epic records somehow show something that we need to reconvene this for, then I would want to reconvene this. Otherwise, I have no further questions. And you have the option to --- well, your counsel will advise you you have the option to read this or waive reading. So that's all I have. Thanks again.

ATTORNEY HARTNETT: And this is Kathleen Hartnett for Plaintiff. I just would like to provisionally mark the transcript as confidential in light of the discussion of medical records. And we'll do a more specific designation when we review.

And I also just wanted to state from the Plaintiff's perspective, the deposition is closed

because we made the production requested of us, but we will, as I noted, review with what Mr. Linkous sent and we will send to Defendants anything responsive to RFP-1 per the way we have responded to date in this litigation.

ATTORNEY LINKOUS: If there are no more questions, we will read and sign. And you may send her deposition transcript to me and I will facilitate the errata process to the doctor.

ATTORNEY TRYON: Any other Defendants have any other questions?

ATTORNEY CROPP: This is Jeff Cropp for Defendant Harrison County Board of Education and Doris Stutler. I came on for Susan Deniker who had to leave early. We have no questions today.

ATTORNEY GREEN: This is Roberta Green here on behalf of West Virginia Secondary School Activities Commission. No questions.

ATTORNEY TAYLOR: This is Michael Taylor on behalf of the West Virginia State Board of Education. Kelly Morgan had to step off, so I jumped on, and we have no questions.

ATTORNEY TRYON: Mr. Ducar, you are muted.

ATTORNEY DUCAR: Thank you. Timothy Ducar on behalf of the Intervenor Lainey Armistead. We have no questions.

ATTORNEY TRYON: Thank you, everyone.

VIDEOGRAPHER: That concludes this deposition. The current time reads 1:43 p.m. Thank you, Counsel.

* * * * * * *

VIDEOTAPED VIDEOCONFERENCE DEPOSITION

CONCLUDED AT 1:43 P.M.

* * * * * * *

STATE OF WEST VIRGINIA)

CERTIFICATE

I, Nicole Montagano, a Notary Public in and for the State of West Virginia, do hereby certify:

That the witness whose testimony appears in the foregoing deposition, was duly sworn by me on said date, and that the transcribed deposition of said witness is a true record of the testimony given by said witness;

That the proceeding is herein recorded fully and accurately;

That I am neither attorney nor counsel for, nor related to any of the parties to the action in which these depositions were taken, and further that I am not a relative of any attorney or counsel employed by the parties hereto, or financially interested in this action.

I certify that the attached transcript meets the requirements set forth within article twenty-seven, chapter forty-seven of the West Virginia.

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
Nicole Montagano
Sargent's Court Reporting Service, Inc.
HUB Business Center Suites
Martinsburg WV 25401
My Commission Expires November 26, 2026

Nicole Montagano,
Court Reporter

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA
CHARLESTON DIVISION
* * * * * * * * *

B.P.J., by her next friend and Mother, HEATHER JACKSON,	*	
Plaintiff	*	Case No.
vs.	*	2:21-CV-00316
WEST VIRGINIA STATE BOARD OF EDUCATION, HARRISON COUNTY BOARD OF EDUCATION, WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION, W. CLAYTON BURCH in his official Capacity as State Superintendent, DORA STUTLER in her official Capacity as Harrison County Superintendent, PATRICK MORRISEY In his official capacity as Attorney General, and THE STATE OF WEST VIRGINIA,	*	VIDEOTAPED VIDEOCONFERENCE DEPOSITION OF BPJ January 21, 2022
Defendants	*	

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VIDEOTAPED VIDEOCONFERENCE DEPOSITION

OF

BPJ, taken on behalf of the Defendant, State of West Virginia herein, pursuant to the Rules of Civil Procedure, taken before me, the undersigned, Nicole Montagano, a Court Reporter and Notary Public in and for the State of West Virginia, on Friday, January 21, 2022, beginning at 10:09 a.m.

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NUMBER	DESCRIPTION	PAGE IDENTIFIED
Exhibit 12	UPMC Children's Medical Records	--*
Exhibit 13	UMPC Children's Medical Records	--*
Exhibit 14	WVU Medical Records	--*
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Exhibit 16	WVU Medical Records	--*
Exhibit 17	Gender Support Plan	--*
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NUMBER	DESCRIPTION	PAGE IDENTIFIED
Exhibit 25	WV Record	--
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S T I P U L A T I O N

(It is hereby stipulated and agreed by and between counsel for the respective parties that reading, signing, sealing, certification and filing are not waived.)

VIDEOGRAPHER: We're now on the record. My name is Jacob Stock. I'm a Certified Legal Video Specialist employed by Sargent's Court Reporting Services, which is located at 210 Main Street, Johnstown, PA 15901. The date today is January 21st, 2022. The current time reads 10:09 a.m., Eastern Standard Time. This deposition is being taken remotely by Zoom conference. The caption of the case is in the United States District Court for the Southern District of West Virginia, Charleston Division, BPJ, by her Next Friend and Mother, Heather Jackson versus West Virginia State Board of Education, et al. Civil Action Number 2:21-CV-00316. The name of the witness is BPJ.

Will the attorneys present state their names and the parties they represent?

ATTORNEY CAPEHART: This is Curtis Capehart for the State of West Virginia. And with me is

my colleague, David Tryon.

ATTORNEY HARTNETT: Good morning. This is Kathleen Hartnett from Cooley, LLP, for Plaintiff BPJ, who is the witness today. And the other Plaintiff's Counsel could introduce themselves, first with the others from Cooley and then we could go to ACLU, ACLU of West Virginia and Lambda.

ATTORNEY BARR: Good morning. This is Andrew Barr from Cooley, LLP, on behalf of the Plaintiff.

ATTORNEY VEROFF: Good morning. This is Julie Veroff from Cooley, LLP, on behalf of the Plaintiff.

ATTORNEY HELSTROM: Good morning. This is Zoe Helstrom from Cooley, LLP, on behalf of the Plaintiff.

ATTORNEY BLOCK: Good morning. This is Josh Block from ACLU on behalf of Plaintiff.

ATTORNEY STARK: Good morning. This is Loree Stark with the ACLU of West Virginia on behalf of the Plaintiff.

ATTORNEY SWAMINATHAN: Good morning. This is Sruti Swaminathan from Lambda Legal on behalf of Plaintiff.

ATTORNEY DENIKER: Good morning. I'm Susan Deniker with Steptoe and Johnson, counsel for Defendants Harrison County Board of Education and Harrison County Superintendant Dora Stutler.

ATTORNEY GREEN: Good morning. This is Roberta Green on behalf of West Virginia Secondary School Activities Commission, and I will let me colleagues introduce.

ATTORNEY BANDY: Hello. This is Kimberly Bandy also on behalf of West Virginia Secondary School Activities Commission.

ATTORNEY HAMMOND: Good morning. This is Kristen Hammond. And Kelly Morgan is also on here with Bailey and Wyant and we represent the West Virginia State Board of Education and Superintendant Burch.

ATTORNEY DUCAR: Good morning. Timothy Ducar here on behalf of the Intervenor, Lainey Armistead.

ATTORNEY HOLCOMB: Good morning. Christiana Holcomb with Alliance Defending Freedom on behalf of the Intervenor.

ATTORNEY CSUTOROS: Good morning. This Rachel Csutoros on behalf of Alliance Defending Freedom on behalf of the Intervenor.

ATTORNEY BROWN: And good morning. Josh Brown on behalf of the Intervenor.

VIDEOGRAPHER: And if that's everybody, the court reporter can swear in the witness so we can begin the deposition.

COURT REPORTER: Can you please raise your hand, BPJ?

BPJ,

CALLED AS A WITNESS IN THE FOLLOWING PROCEEDING, AND HAVING FIRST BEEN DULY SWORN, TESTIFIED AND SAID AS FOLLOWS:

COURT REPORTER: Thank you.

ATTORNEY HARTNETT: Before we begin this morning, if it's okay with Mr. Capehart, the parties were going to put on the record a couple of stipulations about objections that they had reached for today's proceedings. I would just direct the record in this case to the record of the deposition yesterday of Heather Jackson held on January 20th, and the same stipulations with respect to objections for legal/medical and expert testimony with respect to terminology and with respect to potentially

mischaracterization of the evidence. Those same stipulations would hold today. And so for the record, the Plaintiff agrees to that. And it would be helpful I think if the other Defendants could just assent to those stipulations for today on the record.

ATTORNEY DENIKER: This is Susan Deniker. I stipulate to that.

ATTORNEY GREEN: This is Roberta Green on behalf of WVSSAC. We stipulate to that.

ATTORNEY HAMMOND: This is Kristen Hammond, and we also stipulate to that.

ATTORNEY DUCAR: This is Tim Ducar. We also stipulate to that.

ATTORNEY CAPEHART: And the State does as well.

ATTORNEY CAPEHART: Anything else, Kathleen, or should I go ahead?

ATTORNEY HARTNETT: Nothing here.

ATTORNEY CAPEHART: All right. Thanks very much.

EXAMINATION

BY ATTORNEY CAPEHART:

Q. Well, good morning. Nice to finally get to meet you. My name is Curtis Capehart, as I said just a minute ago. I represent the State of West Virginia in this. Now up to this point we've been referring to you by the initials as BPJ because that is the way you have been identified in the Complaint that started this lawsuit. Now, is that okay or would you prefer that I call you something else while we're talking here today? Because initials can be a little awkward. So if you feel more comfortable with me calling you something else, that's perfectly fine. You just let me know what that could be.

A. You can call me B[redacted]

Q. Okay.

ATTORNEY HARTNETT: If I could just say for the record, not to interrupt, that we filed with the BPJ initials in light of the Rules of Court, but the Plaintiff Counsel has no objection to you referring to her as B[redacted] in this deposition.

ATTORNEY CAPEHART: Okay.

BY ATTORNEY CAPEHART:

Q. You are represented by counsel here today and is that Kathleen, Ms. Hartnett, that was speaking just now?

A. Yes.

Q. Have you ever been involved in a lawsuit before?
A. No.
Q. So you've probably never been deposed before, have you?
A. Can you repeat the question?
Q. Sure. You haven't been deposed before then, have you?
A. No.
Q. Okay.

Also if there is a time where you have trouble understanding me or hearing me, just do what you just did there, let me know and I'll try and speak up a little bit. We don't have the best microphone placements in here, so that might be a thing as we go through today.

So as I go through and answer --- I'm sorry, if I go through and ask you questions today, I just need you to try to remember to answer verbally, not just nod your head or shake your head because there is a video, but we need to have those verbal responses so we can truly understand what your answer is. And if you do not understand a question, that's fine. You just need to say so so that I can try and put together a better question or try to explain more of what I'm trying to

learn. Okay?

Now, if you answer one of questions that I ask you today, we are going to assume that you understand it. So if there is any kind of confusion, we don't want to deal with any of that. It's better you just ask me and I'll try and improve my question for you.

Does that all make sense?

A. Yes.

Q. Okay.

Also, I want to kind of touch on a couple of other things here before I get started with some questioning. Just understand that we are not here to judge you. We're just trying to learn some of the facts here, things we don't know. This lawsuit was filed trying to have a West Virginia State Law declared invalid under the U.S. Constitution and another Federal Law referred to as Title 9. And that's --- that's pretty serious. So we, as the lawyers for the State, have an obligation to defend that law. That means I have to ask you some questions that might make all of us uncomfortable a little bit, but I have an obligation to try and get through these. That's not my goal. I'm just trying to find out information. Okay?

Now, also if I ask you a question that makes

you very uncomfortable, tell me, and I can try, if I can, to rephrase it in a way to make you not uncomfortable. I can't say that I won't ask those kinds of questions because there's some things that we have to ask questions about, some things that we need to get your testimony on, but I'm not trying to make you feel bad or upset you in any way.

Okay?

A. Okay.

ATTORNEY HARTNETT: I would just object to the extent you're seeking the witness to agree with your description of your role. But on the other hand, I appreciate you letting her know that she can let you know if she has an upsetting question.

BY ATTORNEY CAPEHART:

Q. Also, I'm just going to --- a word about objections. Sometimes when we go through these, your lawyer might make an objection. I may ask a question, Kathleen may same objection, something else. Now, if that happens, the lawyers may have to have a conversation. It's unlikely, but the lawyers may have to talk about something, at which point you wouldn't be able to hear us or see us. We don't think that's going to happen, but we at least want to let you know.

Also, generally, if your lawyer says objection, you can go ahead and answer the question unless your lawyer directs you not to.

A. Okay.

Q. Oh, and one last thing. If you need to take a break for any reason, go to the bathroom, get more water, something of that nature, just let me know and we will take a break as soon as we can. We just can't take a break if I've asked a question and we are waiting for you to finish your answer.

Does that make sense?

A. Yes.

Q. Okay. Great.

We will try and get through this as quickly as we can. I'm sure you have a lot of other things that you would rather do on a Friday. So with that, let me ask you, if you can, to please state your name for the record.

A. First and last?

Q. Yes, please.

A. B[redacted] P[redacted] J[redacted].

Q. Great. What is your address?

A. Could you repeat the question?

Q. Sure. What is your home address?

A. I'm not sure.
Q. Okay.
And where do you go to school?
A. Bridgeport Middle School.
Q. Do you remember signing a document called a Declaration back when this lawsuit was first getting started?
A. I can't remember.
Q. Okay.
If you could look at --- it's marked Exhibit 31.

ATTORNEY CAPEHART: Court Reporter, if you could pull up that exhibit also.

BY ATTORNEY CAPEHART:
Q. So do you have Exhibit 31 in front of you?
A. Yes.
Q. It's also up on the screen, just to make sure that we're all looking at this document here?

MS. JACKSON: This is this.

BY ATTORNEY CAPEHART:
Q. There's on the screen electronic version of it, too.

ATTORNEY HARTNETT: For the record, we have copies of the exhibits face down in the room with

the witness, and the witness may feel free to pick up the exhibit once it's referred to by the questioning counsel and look at the hard copy.

BY ATTORNEY CAPEHART:

Q. Okay.

Looking at this, now if you look at the last page, I believe it is number page four, it has the initials BPJ there and then some handwritten signature-like initials of BPJ. Looking at those, do you recognize those?

A. Yes.

Q. And that's your handwriting, I guess?

A. Yes.

Q. Okay. Thanks very much.

Looking at this, does it jog your memory a little bit that this is something you had to deal with back when the lawsuit was started?

A. Not really.

Q. Okay.

And do you remember signing it?

A. A little bit.

Q. I know it's been a while, so I thought you might want to go and look at a couple of these things to remember what was in here.

MS. JACKSON: Do you want to read through it?

THE WITNESS: No.

BY ATTORNEY CAPEHART:

Q. If you want to take a minute, you can kind of read all through it. You just go ahead and let us know when you've had a chance to do that.

MS. JACKSON: You need to tell them when you're done.

THE WITNESS: Oh, I'm done.

BY ATTORNEY CAPEHART:

Q. Thank you.

Now, since you signed this back in May of last year, obviously it's been quite a while since May. And is anything --- well, let me rephrase. Back at that time, if you look on page two, this was --- in paragraph 11 you were talking about trying out for cross-country and track. And obviously, with the passage of time, you tried out for the track team, right, cross-country track team.

ATTORNEY HARTNETT: Objection, form.

THE WITNESS: I tried out cross-country. Track is not a sport that was available at that time.

BY ATTORNEY CAPEHART:

Q. Is track a spring sport?
A. Yes.
Q. Okay.
So you tried out for cross-country. Did you make the cross-country team?
A. Yes.
Q. Back on the bottom of the first page, under the paragraph number four, it describes that you when you were younger would play with your mom's clothes, liked paint and girly items. Whenever you said girly items there with the quotations around it, what kind of items are those?
A. Items that had maybe unicorns on it, sparkles, anything that would stick out in general that was maybe a mystical creature that was like a unicorn maybe. I had some stuff that was pandas because I really like pandas, and they were always multi-colored. And that's about it.
Q. Okay.
I'm going to set that off to the side for a minute and just ask you a few other questions. Your mother told us that you are comfortable explaining your gender identity. Are you?
ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Yes.

BY ATTORNEY CAPEHART:

Q. Can you explain to me what is your gender identity?

A. I am female and I go by the pronoun she or her.

Q. Do you also refer to yourself as a transgender girl?

A. No. I refer myself as a girl because I am a girl, and that's it.

Q. Okay.

Does it bother you if someone does refer to you as a transgender girl?

A. No, because that's still calling me a girl, but I prefer to be called as just a girl.

Q. Okay.

Did you have a problem with --- looking back at your Declaration, at Exhibit 31, in paragraph 12 it says, the second line, I am a transgender girl. Is that okay with you that that's written that way?

A. Yes, that is fine because that is --- that's still showing that I am a girl and that is on a --- that's on my Declaration.

Q. And transgender female or transgender girl, are both of those terms accurate?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Yes, because I am a transgender female and a transgender girl.

BY ATTORNEY CAPEHART:

Q. Okay.

I just want to make sure I got the terminology down. Do you remember the first time you heard the term transgender?

A. I can't remember.

Q. Okay.

As long as you remember, you just --- have you always had an understanding of what transgender means?

A. I don't know, I don't think so.

Q. So --- and I'm not trying to put words in your mouth. I'm just trying to understand. So do you think there was a time that you didn't, but at some point you learned it, you just don't remember when that was?

A. Yes.

Q. All right.

Do you have any recollection of a time when you were not a transgender girl?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: A little bit of a memory, but not much.

BY ATTORNEY CAPEHART:

Q. What kind of a memory do you have --- let me back up. How old is that memory?

A. Four or five years.

Q. Okay.

Was that memory --- what were you doing that you can remember, I guess, maybe not being a transgender girl at that time?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: I think I was learning something in school and I found it really interesting.

BY ATTORNEY CAPEHART:

Q. Okay.

You don't remember what that was that you were learning, do you?

A. No.

Q. Your mother also told us that at some point when you were younger you told her that you were a girl. Do you remember the first time you told your mother that?

A. I can't remember.

Q. Okay.

Do you remember the first time you told someone other than your mother that you were a transgender girl?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: I --- can you say it again?

BY ATTORNEY CAPEHART:

Q. Sure. I will try to make it a little bit better, too. Do you remember the time that you first told someone other than your mother that you were a girl?

A. Yes.

Q. Okay.

Can you tell me about that?

A. It was in school. It was new, whenever I just came out, and it was the year of 4th grade.

Q. Okay.

Do you remember who you were talking to?

A. I don't remember.

Q. Now, you said that was 4th grade, that that was the year that you came out. Do you use terminology like socially transition when you talk about that time?

A. Could you repeat the question?

Q. Sure. Let me ask a different one. Are you familiar with the term social transition or to socially transition?

A. No.

Q. Okay.

When you --- and I'm going to use your term,

okay. When you said you came out in 4th grade and that was the time when you maybe started talking to other people about being a girl, you don't really remember who that was, but generally how was that time for you?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: It was good because I made a lot of new friends. A lot of people were really nice to me.

BY ATTORNEY CAPEHART:

Q. Were your old friends nice to you, too?

A. Yes.

Q. How was everybody at your school, teachers and other folks that worked there?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: They were very good about it.

BY ATTORNEY CAPEHART:

Q. Did you have any bad experiences that year?

A. No.

Q. Okay.

B[redacted], for you what does it mean to be female or to be a girl?

A. Could you repeat the question?

Q. Sure. I'm trying to understand your perspective

on things, and so that's why I'm just asking, to you, what does it mean to be a girl or to be female?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: It means --- it means everything. I've always wanted to be a girl.

BY ATTORNEY CAPEHART:

Q. Okay.

And what is it about a girl or female that makes them different from boys or males?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: How they act and how they dress their selves.

BY ATTORNEY CAPEHART:

Q. Okay.

Anything else other than how they act or how they dress?

A. Not that I can think of right now.

Q. Okay.

How do girls or females dress differently than boys or males?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Females would wear --- normally wear dresses and males would normally wear tuxedos and suits. And their casual clothes are most of

the time different but sometimes can be the same.

BY ATTORNEY CAPEHART:

Q. Okay.

So do I look like I'm dressed like a male because I'm wearing a suit jacket and tie?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Yes.

BY ATTORNEY CAPEHART:

Q. Okay.

A. Because that is also how you present yourself.

Q. Okay.

Is presenting one's self, when you say that, is that different than how one dresses and how one acts or is it both of those together?

ATTORNEY HARTNETT: Objection to form. Sorry.

THE WITNESS: It's kind of a mix of all of it.

BY ATTORNEY CAPEHART:

Q. Now, when you say that how someone acts is different regarding girls to boys, what do you mean by that?

A. Normally ---.

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Most of the time males will look very big and buff and females most of the time do not like that look, but some can.

BY ATTORNEY CAPEHART:

Q. Okay.

What else about how a person acts puts them in a more of a female category than a male category?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: They would maybe --- they wouldn't want to look like a guy. A guy wouldn't want to look like a girl and a girl wouldn't want to look like a guy unless --- unless you do, which sometimes people do do that.

BY ATTORNEY CAPEHART:

Q. Okay.

So if someone is trying to look like a guy, then they are going to wear more what I'll call traditional attire, like you said, maybe like a tuxedo or a suit with a coat and a tie and they may want to look bigger and buff and in an overall way present themselves as male.

Is that right?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Most of the time but not

all the time.

BY ATTORNEY CAPEHART:

Q. Okay.

Are there actions or things that people do that make you think this person is acting more like a male or someone is acting more like a female?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Sometimes.

BY ATTORNEY CAPEHART:

Q. Okay.

When you say sometimes what are you thinking about?

A. Maybe people are walking around because sometimes it's how they walk that you can tell and their hair sometimes.

Q. What kind of hair is more male as compared with hair that is more female to you?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: I think longer hair is more ladylike and short hair is more manly, but sometimes people do like an option of that where people --- where guys will like long hair and girls will like short hair.

BY ATTORNEY CAPEHART:

Q. I think my father would agree with you on what

you said there. Are there other kind of behaviors that people exhibit that are more male or more female besides walking and maybe kind of their physical posture?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Not really, no.

BY ATTORNEY CAPEHART:

Q. Okay.

Besides, as you said, males would be more big and buff and females not really liking that look as much, although some of them do, are there other physical attributes that makes you think someone is more male or more female?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Not really.

BY ATTORNEY CAPEHART:

Q. Does height have anything to do with it?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: No, because that can go either way. That's genetics if you're tall or not.

BY ATTORNEY CAPEHART:

Q. As you have been growing up, from what I understand, you talk with your mom a lot.

Right?

A. Yes.

Q. Have you ever talked with your mother about what it means to be female?

A. Yes.

Q. Okay.

What did your mother --- strike that.

Did your mother try to help you as you were going through this process to kind of understand this a little bit more what is male and female?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Could you repeat the question?

BY ATTORNEY CAPEHART:

Q. Sure. As you've been growing up and as you've been talking with your mother over the years as you realized, as you said, you're a girl and as we were just talking about, that there are certain things in your mind that go more with being female rather than being male, did you and your mom have conversations about that same kind of thing we were just discussing?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Yes.

BY ATTORNEY CAPEHART:

Q. Okay.

What did you all talk about?

A. We talked about looks and --- mainly looks and that was about it.

Q. Okay.

Did you talk about makeup?

A. Yes.

Q. Okay.

Is that something to you that is more female or more male?

A. More female, but some males do wear them --- wear it.

Q. Did you and your mom talk about jewelry?

A. Ish, not really because jewelry can be worn by males and females.

Q. That's fair. I'm wearing some myself right now. Did you all talk about anything else other than those few things that you just provided to me and also the makeup?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Not really.

BY ATTORNEY CAPEHART:

Q. Okay.

Have you ever had any of those kinds of conversations with your father?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Not really because I don't think he would understand it because he is a guy that is --- he really --- he likes doing manly stuff and I don't think he'd understand makeup.

BY ATTORNEY CAPEHART:

Q. So with all that in mind, I'm just trying to understand how you think about some of these things. How do you define girls and boys?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Males try to look muscular and they do --- they lift weights and have short hair, but girls can also do that, but it's most commonly found with guys. With girls, they usually have long hair, but guys can have that, too. They wear makeup and have different clothing than males.

BY ATTORNEY CAPEHART:

Q. Okay.

Are there activities that girls or females like to do that men don't like to do or that males don't like to do?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Not really because sports are for everyone and they should --- and every --- and any person should be able to play.

BY ATTORNEY CAPEHART:

Q. I thank you for that. I was making it a little bit more broad than that even though. Are there other things outside of sports that may be girls and females like to do that typically, from your experience, boys and males don't like to do?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Not really because anything that a female could do a male could do, and anything a male could do a female could do.

BY ATTORNEY CAPEHART:

Q. And among all of your friends, are they mostly girls, mostly boys or all across both boys and girls?

A. They are mostly girls, but I do have some guy friends.

Q. What do you like to do with your friends that are girls?

A. We hang out, sometimes we play video games.

Q. Do you go --- do you like going to the mall or shopping? I know that has been harder recently since COVID?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Sometimes, but not really because of COVID.

BY ATTORNEY CAPEHART:

Q. Do you do the same kind of things with your friends that are boys?

A. We also hang out. We talk about video games, we play video games, so, yes, about the same.

Q. Okay.

At some point you decided to change your name. Do you remember when you decided to do that?

A. When I came out.

Q. So in 4th grade, as you mentioned earlier?

A. I came out in the third --- the summer of third grade. But when I was like actually talking to people and stuff about it, it was 4th grade. So yes, when I came out.

Q. Okay.

And so when did you start going by B[redacted]?

A. The summer of third grade.

Q. Did you go by B[redacted] at school at that time, too, or did you wait until fourth grade for that?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: It was the summer of third grade and I was kind of presenting through third grade, but I didn't go by B[redacted], just --- at that point I waited until fourth grade.

BY ATTORNEY CAPEHART:

Q. Okay.

How did you select your new name?

A. I've always liked the name, so that's what I liked.

Q. Okay.

And why did you decide at that time that you needed a new name?

A. Because I didn't think my name fit for me.

Q. Okay.

And you're familiar with the term dead name. Right?

A. Yes.

Q. Okay.

Do you remember the first time that you encountered that word --- or I'm sorry, that term?

A. That term? When I came out, I was told that I could be dead named and they told me what that was. And then later I looked it up and figured out what it was more in depth.

Q. Okay.

Do you remember who it was that had told you that you could be dead named?

A. I can't remember.

Q. Was it your mom?
A. It may have been, but I can't remember.
Q. From what your mother and your father told us, it sounds like your mother has been the parent that has taken you to all but maybe one of your appointments to talk to people about being a transgender girl. Is that about right from your recollection?
ATTORNEY HARTNETT: Objection to form.
THE WITNESS: Yes, that is about right.
BY ATTORNEY CAPEHART:
Q. Have you had a lot of appointments to talk with doctors or other healthcare providers about being a transgender girl?
ATTORNEY HARTNETT: Objection to form.
THE WITNESS: I wouldn't say it was a lot, but I also wouldn't say it was like a little. It was a good amount of appointments.
BY ATTORNEY CAPEHART:
Q. Okay.
After one of those appointments you received a diagnosis of gender dysphoria. Have you been told that before?
A. Yes.
Q. Okay.

When was the first time you remember encountering that term gender dysphoria?

A. I don't know the date, but I think my mom told me that I had it.

Q. Okay.

Do you remember generally when that was?

A. I can't remember. It may have been 2021 or 2022.

Q. Also, when you're remembering something, if you remember it by year, I know that is how I remember a lot of things growing up, if something happened at a particular year of school rather than a calendar year. You know, if that's a frame of remembering for you, too, that is fine also. Calendar years aren't as important.

Do you know what gender dysphoria is?

A. A little bit about it, but I don't know the actual definition.

Q. Okay.

Did you look it up and research it like you did dead name after you heard it?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: I don't think so because if I did I'd probably know more about it.

BY ATTORNEY CAPEHART:

Q. And you said --- do you remember the doctor visit where you first heard one of your doctors use that term?

A. I can't remember.

Q. Do you remember an appointment with Dr. Montano?

A. Yes, I remember some of the appointments with him.

Q. Okay.

There is some medical records that show that you had an appointment with Dr. Montano where he did a full assessment of you in the summer of 2019. Do you remember that by any chance?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Not really because that was a long time ago.

BY ATTORNEY CAPEHART:

Q. Do you remember any appointment with Dr. Montano that was a longer appointment where you talked about a lot of things?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Not really because they all felt like they went by so fast because during the things I usually had to miss a day of school, and I was always thinking about what I missed.

BY ATTORNEY CAPEHART:

Q. I did the same thing at your age.

Whenever you had those appointments with Dr. Montano or at Dr. Montano's office, I know oftentimes at those appointments it's not just the doctor, that there are sometimes other people that work there that will come in and see a patient during the appointment time. What do you recall about those appointments and who you met with?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: I can't remember, but I --- I don't remember their name, but I remember a time where someone else went in there.

BY ATTORNEY CAPEHART:

Q. Do you remember the kinds of things that you would talk about with Dr. Montano or any of the other people at those appointments?

A. Maybe --- I don't know. I can't remember.

Q. When you were at appointments at Dr. Montano's office, do you recall him or any of his staff running tests on you?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: I can't recall.

BY ATTORNEY CAPEHART:

Q. Okay.

At those appointments do you remember hearing people talking about how to treat gender dysphoria?

A. I can't remember.

Q. Has your mother discussed with you how your gender dysphoria is being treated now?

A. Maybe back whenever I --- whenever I was diagnosed with it, but I can't remember.

Q. Whenever there's any decisions that have to get made about your treatment for your gender dysphoria, does your mother talk with you about that and explain everything that's happening?

A. Yes.

Q. Okay.

When you all are having those conversations and a decision has to be made, does your mother let you make those decisions?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Yes, I am part of the making of the decisions what happens to me.

BY ATTORNEY CAPEHART:

Q. Okay.

Do you and your mother ever disagree about what should be done?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Not --- not --- I don't think we have, but there is a possibility that could happen or could have happened and I don't recall.

BY ATTORNEY CAPEHART:

Q. Okay.

Give me just a second.

ATTORNEY HARTNETT: Also, I think it might be a good time to take a quick break just given the youth and amount of water consumption. So maybe we can take a five to ten-minute bathroom break when it's good for you, Curtis.

ATTORNEY CAPEHART: Oh, yeah, that's actually perfectly fine.

ATTORNEY HARTNETT: Can we take a ten-minute break? Yeah, let's just take a ten-minute break so we're are not all back too early.

ATTORNEY CAPEHART: Sounds great.

VIDEOGRAPHER: Going off the record. The current time reads 11:01 a.m.

OFF VIDEOTAPE

(WHEREUPON, A SHORT BREAK WAS TAKEN.)

ON VIDEOTAPE

VIDEOGRAPHER: We are back on the record. The current time reads 11:13 a.m.

BY ATTORNEY CAPEHART:

Q. Okay.

Well, during the break I was going back over some notes and just have a couple of questions that kind of relate to some things we already talked about and then I'm going to move on.

Okay?

A. That Declaration that we had looked at earlier, I recall that you had mentioned when you first looked at it you didn't recall seeing it, you didn't recall signing it, you then looked at your initial signatures and then you had read the rest of the document. After we went through all of that, did that jog your memory any. Do you remember signing it?

A. I do remember signing it, but I kind of have a little bit of memory seeing it, but I do have a memory signing it.

Q. Okay.

Also, when you recalled learning and hearing the term about dead name and that someone might do that to you at school, did anyone actually do that to you at

school?

A. Not that I can remember.

Q. Okay.

I think you had also said you kind of did some research. What kind of research did you do looking into that term?

A. Just looking what it meant, looking up what it meant.

Q. Did you look it up in a book or on the internet?

A. The internet.

Q. Okay.

Do you recall where on the internet you found it?

A. I think I looked it up on Google and I did another one, but I can't remember what it was. It was one of the unpopular ones.

Q. Okay.

Also, when you were --- or when we were talking about the characteristics or things that make a person more female or more male you had said that height really didn't make a difference, that that was really more genetic. Do genetics have something more to do with being a girl or a boy?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: I wouldn't know.

BY ATTORNEY CAPEHART:

Q. Also, is there anything that definitively makes a person a girl or a female versus a boy or a male?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Could you repeat the question?

BY ATTORNEY CAPEHART:

Q. Sure. And I will preface it with kind of what we were kind of talking about before. You were describing how there were a lot of things that are typically --- and I don't think you used that word but I'm going to use it, more typically associated with males like tuxedos or suits, short hair, being buff, working out, that sort of thing, and other things that were more typically associated with being female, wearing dresses, longer hair, not preferring to have that maybe over muscled physique, wearing makeup, that sort of thing, and that there were even some other things you said are maybe more associated with males, but that doesn't mean that females don't do it or vice versa. I think that's what you said.

So I'm wondering is there anything in your mind that if you see a person doing that or wearing that or

whatever that thing might be, is there something that you, if you see it associated with a person, you think only boys do that or only girls do that?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: No, because if I see someone like that and I don't --- I don't immediately go, oh, that's a guy, oh, that's a girl. I ask them, oh, what are your pronouns, what is your gender identity. And that's --- that's the better way to figure out what they --- what they are and if they're male or female or what --- if they're nonbinary or whatever they are.

BY ATTORNEY CAPEHART:

Q. You mentioned a term nonbinary. Can you explain what nonbinary means?

A. It is a person that doesn't identify as a male or female and they go by they/them pronouns.

Q. Do you know anyone that is nonbinary?

A. One of my lawyers is.

Q. Do you know anybody at your school or your hometown that is nonbinary?

A. I don't think so.

Q. Okay.

ATTORNEY HARTNETT: Heather, do you want

a minute for a break?

MS. JACKSON: Just to get a sip of water.

ATTORNEY HARTNETT: Can you give her a mute to, the court reporter, just to let her work through that? It's happened to all of us. No worries.

MS. JACKSON: It went down the wrong pipe.

ATTORNEY CAPEHART: And again, if you need to take another break, that's fine, too. All okay on your end?

MS. JACKSON: We're good.

ATTORNEY CAPEHART: Okay.

BY ATTORNEY CAPEHART:

Q. I don't want to upset you, but I need to ask a couple of questions about some comments that, according to what we learned, your father had made in the past.

ATTORNEY HARTNETT: Objection to form.

ATTORNEY CAPEHART: That wasn't a question, but okay.

BY ATTORNEY CAPEHART:

Q. We understand that ---.

ATTORNEY HARTNETT: Sorry. Just to make clear my objection was that you were stating that certain statements had been made, and I'm objecting to

the foundation.

ATTORNEY CAPEHART: Okay.

ATTORNEY HARTNETT: Go ahead.

BY ATTORNEY CAPEHART:

Q. I've looked at some records and there are some notations and [redacted] When we were talking with your mother she had said she did not know what had happened there. Can you tell me what had happened when that occurred?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Could you repeat the question?

BY ATTORNEY CAPEHART:

Q. Sure. We've seen in some records a notation [redacted] Your mother did not know what had happened on that occasion. She recalled that when this happened, but she didn't know what had actually occurred [redacted]

Do you remember that?

ATTORNEY HARTNETT: Objection to form. Go ahead.

THE WITNESS: I can't remember, but I'm

pretty sure it was --- I was scared of something that was --- honestly I shouldn't have been scared of. It was nowhere near me. It was probably a spider or something. But just the phrase [redacted] it is like don't be scared of that, there's no reason to. It's just another use of don't be scared of that.

BY ATTORNEY CAPEHART:

Q. Okay.

We were --- we were just wondering what had happened there because, as I recall, when this was being discussed yesterday, that your mother indicated you were very upset when you had [redacted] Does that help you remember anything more?

ATTORNEY HARTNETT: Objection, form.

THE WITNESS: Not really.

BY ATTORNEY CAPEHART:

Q. Also, we seen a note in one of the medical records that was, again, discussed yesterday and your mother said we would need to ask you about it. [redacted]

[redacted]

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Could you restate the question?

BY ATTORNEY CAPEHART:

Q. Sure. We were looking at some records and there was some notation [redacted] Your mother wasn't familiar with that and said we should ask you about it. So I'm asking you if you recall ever discussing that with one of your treaters?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: I don't remember discussing that with anyone besides my mom really. But it was a long time ago, so I --- I can't remember if I did or not.

BY ATTORNEY CAPEHART:

Q. Okay.

Do you know what that would relate to, that reference [redacted]

A. He probably got mad at me, like really mad in the situation, and he was probably threatening [redacted]

Q. Has that happened sometimes?

A. A long time ago. It doesn't happen anymore now.
Q. Did it happen on multiple occasions or just once?
A. It was --- well, it was a couple of times maybe in like the same three days or something like that, but after those three days it stopped.
Q. Did you talk with your mom about it when that happened?
A. Yes.
Q. Okay.
Did she tell you that she was going to talk to your father for you?

ATTORNEY HARTNETT: Objection. Go ahead.

THE WITNESS: She --- I think she did. She talked to him, and that's why he stopped doing it.

BY ATTORNEY CAPEHART:

Q. [redacted]?
A. Could you restate it?
Q. Sure. Do you have appointments from time to time to [redacted]?

[redacted]

ATTORNEY CAPEHART: We've got a fire drill going on. Hold on, everybody.

THE WITNESS: What happened?

MS. JACKSON: They have a fire alarm going off.

THE WITNESS: Oh.

VIDEOGRAPHER: Do you want to go off the record?

ATTORNEY HARTNETT: We're fine with that.

VIDEOGRAPHER: Going off the record. The current time reads 11:25 a.m.

OFF VIDEOTAPE

(WHEREUPON, A SHORT BREAK WAS TAKEN.)

ON VIDEOTAPE

VIDEOGRAPHER: Back back on the record. The current time reads 11:41 a.m.

ATTORNEY GREEN: All right. Thank you and I will just hop in for a minute. This is Roberta Green on behalf of WVSSAC. And I just wanted to note for the record the appearance of my co-counsel, Shannon Rogers, who's with me on behalf of WVSSAC. I just wanted to note that for the record and I'll hop off.

Thanks.

ATTORNEY CAPEHART: Okay.

Now that we are through our building emergency, if I could ask the court reporter to go back to the last line of actual testimony. I don't recall what point during that event we broke off the record, but if you could go back and tell us where we were whenever loud noises started happening.

COURT REPORTER: The question, sure. Do you have any appointments from time to [redacted] Answer, yes. Question, okay. Who do you meet with? And then that's when the fire drill happened.

ATTORNEY CAPEHART: Thank you.

BY ATTORNEY CAPEHART:

Q. B[redacted], let's just pick up there. Who do you meet with?

A. I meet with [redacted] His name is [redacted]

Q. Okay.

Do you know what office or group [redacted] is with?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Could you repeat the

question?

BY ATTORNEY CAPEHART:

Q. Sure. Is [redacted] or is [redacted] part of a [redacted]?

A. I don't know.

Q. Do you know the name --- I'm sorry. I cut you off. Go ahead.

A. I just go to him for [redacted]. That's ---.

Q. Okay.

How often do you meet with [redacted]?

A. It just depends because sometimes maybe it's once a month, but it can be anytime. If we call him and we need to go, he usually has a spot open.

Q. Okay.

And just generally speaking, what kind of things do you discuss with [redacted]?

A. [redacted]

Q. Okay.

Whenever you meet with [redacted], do you go in alone or does your mother go in with you?

A. It depends. It usually starts with me and my mom in there, then she waits out in the lobby and we talk. And sometimes I go out and my mother talks to him

and then we get back --- we both go in the room at the end and then we say bye and then we leave.

Q. Okay.

And how do you like that process, going to talk to [redacted]?

A. I love it because I can talk about [redacted].

Q. Does that help you to feel better?

A. Uh-huh (yes).

Q. Do you know --- excuse me, do you know whether you have had any [redacted]?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Could you rephrase that?

BY ATTORNEY CAPEHART:

Q. Yes. And let me back up and ask another question I had forgotten to ask earlier. Do you know what [redacted] profession is?

A. I don't know.

Q. Okay.

A. All I know is that he is a [redacted]. That's what I know.

Q. Okay.

And do you know whether [redacted] is a [redacted] of some sort or just a [redacted]

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: I do not know.

BY ATTORNEY CAPEHART:

Q. Okay. Okay.

Now, if you could look at Exhibit 34. Do you have the document marked as Exhibit 34 in front of you? It says West Virginia Legislature at the top and then in the middle of the page there's a line that says House Bill 3293.

A. Yes, we have that.

Q. Okay. Great.

Have you ever seen this before?

A. I don't think so.

Q. Okay.

So if you --- this is just of kind of a cover page for what was House Bill 3293 that passed the legislature and was signed the Governor last year. This is the --- this is the bill, the law that your lawsuit is challenging.

Now, if you look --- start looking at page two you'll see there is a lot of text here. Have you seen any of this before? You don't have to read it all, just kind of glance over it. And if you think you may have seen parts before, you can say so, but ---.

A. I don't think I've seen this before.
Q. Okay. Okay. All right.
Well, I'm not going to ask you to read the whole thing right now. I'm just going to ask you about a couple of parts of it.
Okay?
A. Uh-huh (yes).
Q. Because there's a lot to read here.
ATTORNEY HARTNETT: I'll just refer to our standing objection. Thank you.
ATTORNEY CAPEHART: Sure. Sure.
BY ATTORNEY CAPEHART:
Q. On what's marked at the bottom of the page as page two you'll see that there are kind of a column of numbers that run down the left-hand side of the page there. The top number on page two should be a ten?
A. Uh-huh (yes).
Q. Okay.
And I'll just refer to those lines to direct you to a couple of spots. Okay. And just so you know, that's a standard part of what a bill looks like so that whenever they're looking at legislation people can refer to a procedure or line. That way they can follow it more easy.

So the lines I'm going to direct you to are 25 and 26. This is a definition that is set forth in this bill and it is down in West Virginia Code. So just read that and let me know when you've read that definition in this bill.

A. I've read it.

Q. Okay.

Do you think that's a proper definition of biological sex?

ATTORNEY HARTNETT: Objection to terminology. Make that a standing objection.

THE WITNESS: I would not know that if I --- if that would be ---.

BY ATTORNEY CAPEHART:

Q. Okay.

Have you ever heard people use language like biological sex or biological female?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Yes, I've heard people use that.

BY ATTORNEY CAPEHART:

Q. Okay.

Has anyone ever explained what they mean when they have used that terminology around you?

A. I don't think so or I just can't remember.
Q. Okay.
This definition, at lines 25 and 26, does this, based on the way that you have heard people use the term in the past, is this about what you think they meant?
ATTORNEY HARTNETT: Objection to form.
THE WITNESS: Yes.
BY ATTORNEY CAPEHART:
Q. Okay.
So now that you've read that in this bill that's what that term means, look up at lines 21 and 22 and let me know when you've read those two lines.
A. Okay.
Q. Do you agree with that statement at lines 21 and 22?
ATTORNEY HARTNETT: Objection to form.
THE WITNESS: I don't because I think if someone wants to play on the girls team, like me, they should be able to even though they are --- they're not following that requirement.
BY ATTORNEY CAPEHART:
Q. Okay.
Before I move on to ask some questions about cheerleading and track, I just want to talk about a

couple of other words that we were just touching on. But I just want to make sure that we understand each other or at least you understand me. You have heard people use the term biological female or the term biological male before.

Is that correct?

A. Yes.

Q. Okay.

And just so we're clear, if I use the term biological female or biological girl, I'm describing people who were determined to be female at the time of birth. Okay? I'm not looking at the statute. I'm just saying like if I use that term, that's what I'm talking about. Just so that if I use a word and you're not sure what I mean, I'm trying to explain in advance so there's no confusion. Does that make sense?

A. Yes.

Q. Okay.

And also, if I say biological male or biological boy I mean someone who was determined to be male at the time of birth.

A. Yes.

Q. So if I use that --- if I use that kind of terminology that is what I'm talking about, people who

were determined to be that at the time of birth. Okay?

When did you first get interested in sports?

A. I've always liked running. And I think running's a sport, so since I could walk and run.

Q. What kind of sports, in addition to running, have you been interested in?

A. Cheering was one. I was a little bit interested in volleyball, but not anymore.

Q. Why not?

A. I just never --- I just didn't --- I just lost liking of it.

Q. Whenever I say interested in --- let me rephrase. Whenever you say that you are interested in running, you were interested in cheer and been part of a team and for a short time you are interested in volleyball but aren't really interested anymore, do you mean interested in participating and playing those sports?

A. Yes.

Q. Okay.

Are there other sports that you have been interested in from the perspective of being a viewer but maybe not a participant?

A. Could you repeat the question?

Q. Sure. Besides the three that you just talked about, running, cheer, volleyball, are there other sports that you have an interest in as a viewer, as a person that's in the stand watching it, or watching it on television, but you don't have an interest in playing or taking part?

A. I like watching football.

Q. Okay.

Anything else?

A. That's about it.

Q. Does your mom watch football?

A. Yeah. We like the same team.

Q. What team?

A. The Cleveland Browns.

Q. Do you like any other football teams?

A. Not really, no.

Q. Do you just watch professional football or do you watch college, too?

A. Just professional.

Q. Now, have your parents encouraged you to be involved in sports?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: I'd say so that they encouraged me.

BY ATTORNEY CAPEHART:

Q. Okay.

Now that you've been on a couple of different kind of teams, girls cross-country and also cheer when you were younger, do you enjoy getting to compete as part of a team?

A. Yes, I do.

Q. If you were in a sport where you weren't on a team, that you were just an individual on a team, would you enjoy that also?

A. No, because that's not --- that's not on --- you're not on a team, you're not doing teamwork, that's just by yourself.

Q. So is the bigger appeal to you in sports being part of a team, being part of a group, working towards a common goal?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Could you repeat the question?

BY ATTORNEY CAPEHART:

Q. Sure. You said you wouldn't really like being in an individual sport, maybe something like, I don't know, figure skating maybe, because you wouldn't be part of a team, you would be --- that you like being part of

a team?

A. Yes.

Q. So is that what draws you to some of the sports that you are interested in, the team aspect?

A. Yeah, the team aspect and I can make new friends.

Q. Do you consider yourself competitive whenever you're playing sports or when you're playing games with your friends?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: I want to call myself competitive. I'm just a person that likes playing games. I'm not like, oh, I got to win. I just like playing them, doing sports.

BY ATTORNEY CAPEHART:

Q. Okay.

Do you have some friends that are like that?

A. Yeah, I have a couple of friends.

Q. I think we all have a couple of friends that are like that.

So in those sports that you're interested in, including football, do you think rules are really important in sports?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Yes, I think rules are important because you wouldn't want someone having an unfair advantage, like cheating.

BY ATTORNEY CAPEHART:

Q. Right.

A. And like ---.

Q. Sorry. Go ahead.

A. Like in baseball, I don't know what it's called, but getting a better grip on the ball, that's cheating. That's not fair.

Q. So do you think rules are a big part of or an important part of making sure that sports are fair?

A. Yes.

ATTORNEY HARTNETT: Objection to form. Sorry, B[redacted]. Just make sure you give me a chance to object, but you should then give your answer. So let's try that one again.

ATTORNEY CAPEHART: Court Reporter, can you repeat the last question?

THE WITNESS: Could you repeat the last question?

COURT REPORTER: Question, so do you think rules are a big part of or an important part of making sure that sports are fair?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: I think they are a big part of making sports fair.

BY ATTORNEY CAPEHART:

Q. What does it mean for sports, for competition to be fair?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Well, sometimes it can mean losing --- maybe winning unfair and winning things because if people are cheating then they could get --- I don't know if there's a cash prize. So if they cheat, they're going to get that. That's not fair because they get something out of cheating.

BY ATTORNEY CAPEHART:

Q. So it sounds like that you're saying that if somebody breaks a rule like the one that you were talking about in baseball, and by breaking that rule that helps them to win or beat someone else, that that wouldn't be fair. Is that what you're ---?

ATTORNEY HARTNETT: Objection.

THE WITNESS: Yes.

BY ATTORNEY CAPEHART:

Q. I'm sorry. I think I lost part of your answer there.

A. Yes, that's what I'm saying.

Q. Who do you think should make up the rules for sports?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: I don't know.

BY ATTORNEY CAPEHART:

Q. I'm going to ask you a couple of questions about your time on cheerleading. How many years were you on the cheer team?

A. I was on the cheer team for two years.

Q. Okay.

And if I recall from what your mother had told us, it was part of the Bridgeport Youth --- is it Bridgeport Youth Football League? Is that what it was?

MS. JACKSON: Yes.

COURT REPORTER: I'm sorry. Ms. Jackson, did you say yes or was it the witness. I'm sorry.

MS. JACKSON: I said yes.

BY ATTORNEY CAPEHART:

Q. My understanding is that that's not affiliated with the schools in any way, that's an independent, what a lot of people would maybe call midget football league and that that league has cheerleading teams also.

Is that right?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Yes. Sorry.

BY ATTORNEY CAPEHART:

Q. Okay.

I just want to make sure I understood that. That's how things were when my daughter did midget cheer --- midget league cheer, also.

What team were you on like B, C D? Do you recall?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: I was on Bridgeport Pee Wee Red.

BY ATTORNEY CAPEHART:

Q. Okay.

And were the members of that team all within --- all the same age or within a year of each other?

A. They were within a year of each other.

Q. So was that third and fourth or fourth and fifth?

A. I think it was fourth and fifth.

Q. Did you enjoy being on the cheerleading team?

A. Yeah, it was really fun.

Q. Did you like cheering at sidelines at games more than competition cheer?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: I did like cheering on sidelines better because I had stage fright and I feel whenever I was cheering on the sidelines most of the people were paying attention to the game, so I didn't have as much stage fright. But at competition, that was the main thing that everyone was focusing on.

BY ATTORNEY CAPEHART:

Q. When you would be part of the team and working on your competition cheer, you all did stunts.

Is that correct?

A. Yes, that is correct.

Q. Did you get to be a flyer or were you a base?

A. I was a base.

Q. Did you enjoy that more than going up in the air?

A. Definitely, because I have a fear of heights.

Q. Understandable. So now that you're in Middle School you were on the cross-country track team this fall and you're also interested in running track.

Is that correct?

A. Yes.

Q. Okay.

I know I've seen in some reports and maybe in

your Declaration, too, you mentioned that there were other people in your family that had run. Is that the basis for your interest in being on cross-country and also doing track this spring?

A. Yes.

Q. Bridgeport Middle doesn't have coed teams, does it?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Could you repeat the question?

BY ATTORNEY CAPEHART:

Q. Sure. Do you know what a coed team is? Have you heard that term before?

A. No.

Q. Okay.

I realize I'm probably dating myself a little bit there. That term is not really used all that frequently maybe nowadays, but that just essentially means that coed would be, you know, boys and girls all on the same team together. And I guess you don't. You just have a boys team and a girl teams.

Right?

A. Yes.

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Sorry.

BY ATTORNEY CAPEHART:

Q. Now, in this --- for spring track you're going to try out for the girls team.

Correct?

A. Yes.

Q. Now, that tryout and also the one for cross-country track, are those competitive tryouts where everybody has to run and be timed?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Kind of because when we did cross-country, all of us made it. But I was told that the year before, when I was in 5th grade, that they had to cut people because there was too many. So I think that they only cut people if there's not --- if there is too many.

BY ATTORNEY CAPEHART:

Q. Do you know how many there were on cross-country this fall?

A. I don't know.

Q. Okay.

If there is some upper limit, though, your team didn't reach that limit in terms of participants?

A. I think it may have been exactly the limit or

less, but I don't know.

Q. You don't remember anyone that tried out not making the team, though?

A. Nope. Everyone made it if they didn't quit.

Q. Okay.

Do you remember how many meets or events you went to this past fall?

A. I don't know for a fact, but it was around seven to eight.

Q. And were all of those competitive team events where they were tracking everyone's times with a team placing at the end?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Yes, there was.

BY ATTORNEY CAPEHART:

Q. Okay.

How did you all do this fall?

A. We did very good.

Q. Great. Did you place at most of the events that the team went to?

ATTORNEY HARTNETT: Objection to form.

BY ATTORNEY CAPEHART:

Q. And by team I mean did the team place at the event that your team participated in?

A. Most of the time, yes. Some of them weren't, but we always got close.

Q. Did your team get first place at any of the events?

A. Yes.

Q. How did that feel to be part of a team that got first place at one of these events?

A. It felt awesome. It felt great.

Q. Okay.

So just because I don't know a tremendous amount about cross-country or track and field, for cross-country do you understand how the scoring works or how the timing ends up with a team being first place or second place or last place?

A. I do not know.

Q. But you would like to win, right? You would like your team to win.

Right?

A. Yes.

Q. What track sports do you want to run in this spring, track events I should say?

A. I'm thinking about doing long distance.

Q. And by long distance what does that mean in terms of the actual distance?

A. There is a mile, two miles, and I think there may be a three-mile one.

Q. So are you training to build up your stamina to those right now?

A. Not currently just because it is really cold out.

Q. That's fair. Just like I was asking you to help me understand a little bit about how cross-country does its scoring and placing, I think I know a little bit more about track and field. In events like the distance runs, the one, two or even --- one mile, two mile or even longer distances, there are individual places in each of those events.

Correct?

A. Uh-huh (yes).

Q. So do the first, second, third place finishers get metals in those?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: I'm not sure because this would be my first year doing track.

BY ATTORNEY CAPEHART:

Q. And do you know whether the outcome of those individual races are then factored into some overall team standing?

A. I do not know.
Q. Okay.
Now, at all of these events that you have participated in this past fall with the girls track team and then the ones that you would like to be part of this spring for track and field, those are just girls teams against girls teams.
Is that correct?
ATTORNEY HARTNETT: Objection to form.
THE WITNESS: I do not know because, again, this is my first year.
BY ATTORNEY CAPEHART:
Q. Okay.
Now, at the cross-country events you went to this past fall, when your team got first place, that was just competing against a girls team.
Correct?
A. Yes.
Q. Okay.
At those same events or meets are there also boys teams present?
A. Yes.
Q. Okay.
But your team only competed against the girls

teams.

Correct?

A. Yes.

Q. Would you have liked for your teams to have competed against boys teams and girls teams?

A. At a couple of meets they did. But when they do, they only tallied the girls points and the guys teams differently and then they did the teams' totals.

Q. Okay.

Did anyone explain to you why they did that that way?

A. I don't know.

Q. Okay.

Do you think that they may have done those tallies differently because someone thought that boys could run faster than girls?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: I don't know. I don't know that.

BY ATTORNEY CAPEHART:

Q. Okay.

A. But whenever we started the --- a different --- like the guys would go five minutes before and then five minutes later the girls would go, so it was easier to

tally up all the points.

Q. Okay.

Do you think that the boys can run faster than the girls?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: I do not believe so because I also think that is a genetic thing, if you are fast or not.

BY ATTORNEY CAPEHART:

Q. Okay.

From what I remember reading somewhere you're pretty good with math.

Is that fair to say?

A. Yes.

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Sorry.

ATTORNEY HARTNETT: That is okay.

BY ATTORNEY CAPEHART:

Q. Do you know what statistics are?

A. I am familiar with the word, but I don't know what it means.

Q. Okay.

Would you and your teammates sometimes compare times after meets?

A. Sometimes.

Q. Okay.

And at the cross-country events, was the course that you would run a different length every time?

A. It was always around 2 miles to 2.3, so --- so not really.

Q. Okay.

I was just curious because I have a number of friends that are athletes and they really seem to enjoy talking about statistics, you know, how fast they run or in baseball a batting average or in football a quarterback's completion percentage or something, that those are, it seems for folks in and around sports, ways that you can try to evaluate or to get a sense of something about a person or group of people. Have you heard and seen statistics talked about when you watch those football broadcasts with your mom?

ATTORNEY HARTNETT: Objection to the narrative and to the question form.

THE WITNESS: Could you repeat the question?

ATTORNEY CAPEHART: Sure.

BY ATTORNEY CAPEHART:

Q. Have you seen or heard statistics talked about

on those football broadcasts that you watch with your mom?

A. Sometimes, but I don't really pay attention to those because I mainly like watching the game.

Q. That's fair.

MS. JACKSON: Excuse me. She needs to use the restroom.

ATTORNEY CAPEHART: Absolutely. Take a break.

MS. JACKSON: Can you get through?

VIDEOGRAPHER: Going off the record. The current time reads 12:18 p.m.

OFF VIDEOTAPE

(WHEREUPON, A SHORT BREAK WAS TAKEN.)

ON VIDEOTAPE

VIDEOGRAPHER: We are back on the record. The current time reads 12:25 p.m.

BY ATTORNEY CAPEHART:

Q. All right.

Well, let's see. When we left off I was just asking you about things about statistics. Have you ever looked up any statistical data about cross-country for

people your age?

A. No, I have not looked up the statistics for people my age.

Q. And I think I framed that question as for cross-country. Have you ever done that with track and field, for example, the one mile or the two mile?

A. No, I have not.

Q. If you were to see statistics that show that, on average, 11-year-old biological boys were 20 percent faster than 11-year-old biological females in the mile run, would that surprise you?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Yes, because I think biological --- it's all about genetics, if you're fast or not.

BY ATTORNEY CAPEHART:

Q. So if you're fast or not is about genetics?

A. I think it is, but it could be not.

Q. Okay.

If that were true, that there is a statistic somewhere that shows that 11-year-old biological boys are 20 percent faster than biological girls of the same age, would it be fair to have the biological boys running in the mile race with biological girls?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Can you say the question again?

BY ATTORNEY CAPEHART:

Q. Sure. If there were statistics that did show that difference of 20 percent between biological boys at a certain age and biological girls at that same age, would it be fair to allow biological boys to run that same race as the biological girls?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: If they identify as a female, then I think, yes. But if not, then I don't think that it should.

BY ATTORNEY CAPEHART:

Q. Okay.

So you said if they identify as a female, then they should be able to run with the biological girls?

A. Yes.

Q. Did I hear you right?

A. Yes.

Q. Okay.

So then could any biological boy be on the girls team so long as they identify as female?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: I think so. Sorry.

ATTORNEY HARTNETT: Sorry.

BY ATTORNEY CAPEHART:

Q. And when you say they identify as female, just explain that to me so I make sure I understand it.

A. When people are transgender from male to female, like me, that's what I think is identifying as a female.

Q. Okay.

Is it enough for someone in your mind to identify as female for them to just say that they believe they're female or do they need to do something more than that?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: I think they need to have an appearance and there has to be a reason. Like --- well, not a reason, but they have to --- they have to not just say, oh, I identify as female, I should run. They should have already been transitioned. It can't just be out of nowhere. Like, oh, all of the sudden, now that I started, I just realize that I can do this, oh, I'm transgender. That's --- I don't think that --- I think maybe --- I don't know, a year into the transition that you should be able to.

BY ATTORNEY CAPEHART:

Q. Okay.

So when you say a year into their transition do, you mean like just their social transition, the way they are presenting themselves?

A. Yes.

Q. Okay.

For that kind of hypothetical person that you were describing there, if they had gone a year into their transition, as I think you've described it, then in your mind that's what they need to do so that they could be on the girls team?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Yes.

BY ATTORNEY CAPEHART:

Q. Okay.

Do they --- do they need to be doing something else like taking puberty blockers or something of that nature?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: I think they should be on puberty blockers to do it because if they have hit puberty, then that's a different story because they hit puberty and that's not changeable.

BY ATTORNEY CAPEHART:

Q. Okay.

When they hit puberty and that's not changeable, explain that to me a little if you can.

ATTORNEY HARTNETT: Objection to form. Go ahead.

THE WITNESS: If they've hit puberty, then they are maturing and they are going to get a deeper voice. A girl would get a bigger Adam's apple and then that's really it. And I think that gives them more of an unfair advantage. I could be wrong, but I think after they hit puberty, I don't know, I think something happens, but I'm not sure.

BY ATTORNEY CAPEHART:

Q. Do you think there is something else that happens besides the depth of voice and the Adam's apple?

A. I think they may get faster because their testosterone levels will rise.

Q. Okay.

And do you think that's not an issue for someone that hasn't gone through puberty yet?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Sorry. Yes, because their testosterone levels, if they are on puberty blockers, won't be as high and they won't be --- it won't be high

and it won't give them any advantage.

BY ATTORNEY CAPEHART:

Q. If there was someone in that situation that wasn't on puberty blockers, do you think that would be unfair for that person to be on a girls team?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: As long as they haven't hit puberty, then I think it's fine. But if they have hit puberty, then I think they should maybe go on hormone blockers and then maybe then, because I --- I could be wrong, but I think their testosterone levels will drop if they go on hormone blockers after puberty.

BY ATTORNEY CAPEHART:

Q. Okay.

Do you think that they also need to be getting treated for gender dysphoria?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: I don't think that matters because if they don't have gender dysphoria, why should they be getting treated for it.

BY ATTORNEY CAPEHART:

Q. So if there was a person that went through that, a biological boy who had done all the things that you say needed to be done and they could be on the girls

team, but at some point in the future that person decided they wanted to, I don't know, revert back to being on the boys team for sports, should that be allowed?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: If they want to, then yes, go ahead, because they will --- if they are --- if they still have the requirements to be on the girls team, then they will be on puberty blockers and then the testosterone levels will still be low. So --- but if they get off, then they'll just raise back, and they could still run on the boys team, but they can't run on the girls.

BY ATTORNEY CAPEHART:

Q. Okay.

You've been talking about puberty blockers like a person that knows about them, which I think you do. What do you know about puberty blockers?

ATTORNEY HARTNETT: Objection to the preamble and to the form.

THE WITNESS: Okay.

Could you repeat the question?

BY ATTORNEY CAPEHART:

Q. Sure. What do you know about puberty blockers?

A. They stop hormone levels from rising and they have --- they have a chance for --- they have side effects, but if you are transgender they can help --- they can help with the process of a transition because it will stop you from hitting puberty and you won't grow an Adam's apple, you won't grow facial hair and your voice won't get deeper.

Q. Okay.

You're receiving puberty blocking medications now.

Is that correct?

A. Yes, that's correct.

Q. Okay.

Did you want to start that medication to delay or prevent puberty?

A. Yes, that is correct.

Q. Okay.

We had talked some about your doctors' appointments before. You had some appointments before receiving the puberty blockers.

Correct?

A. Yes, that is correct.

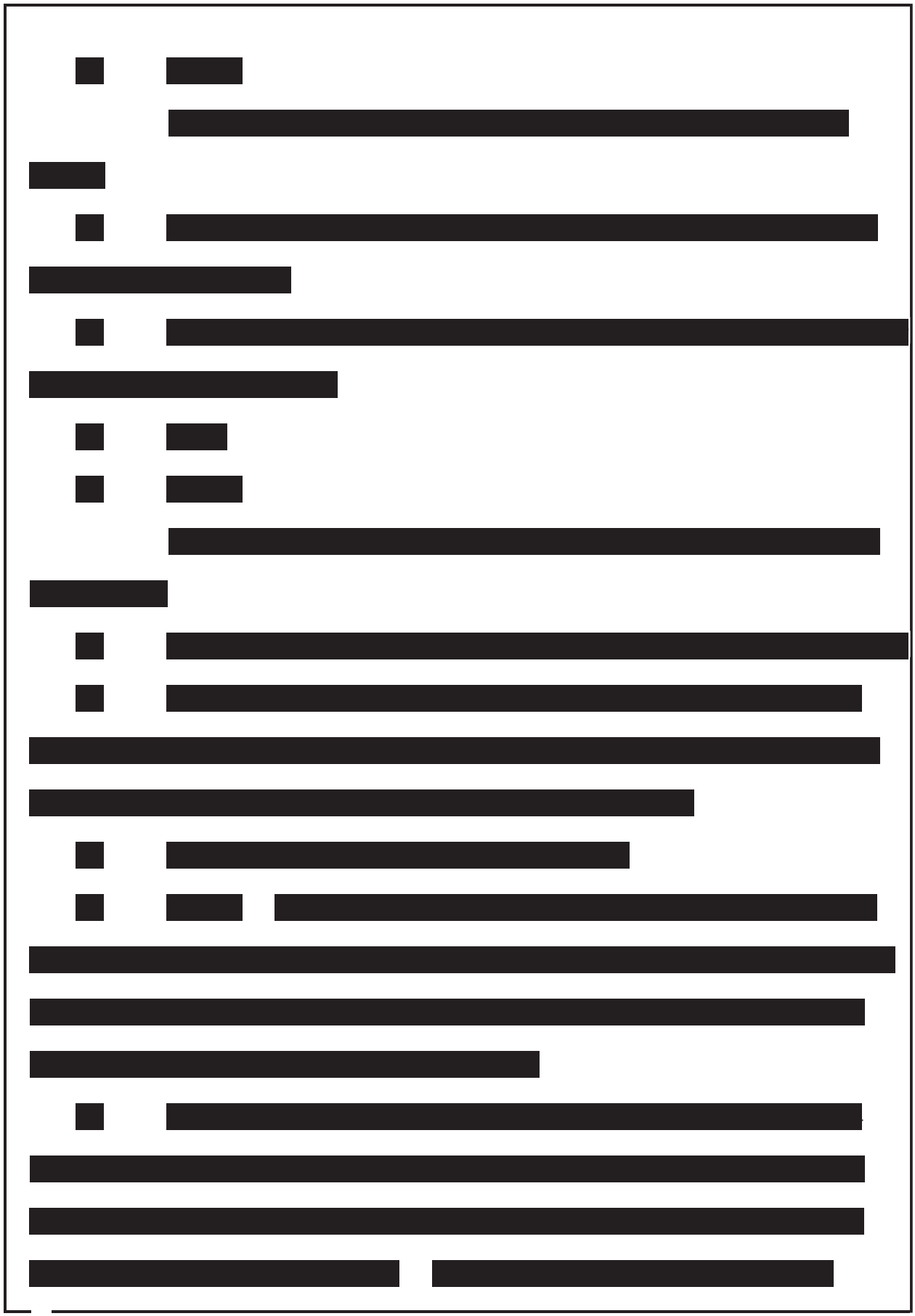
Q. Okay.

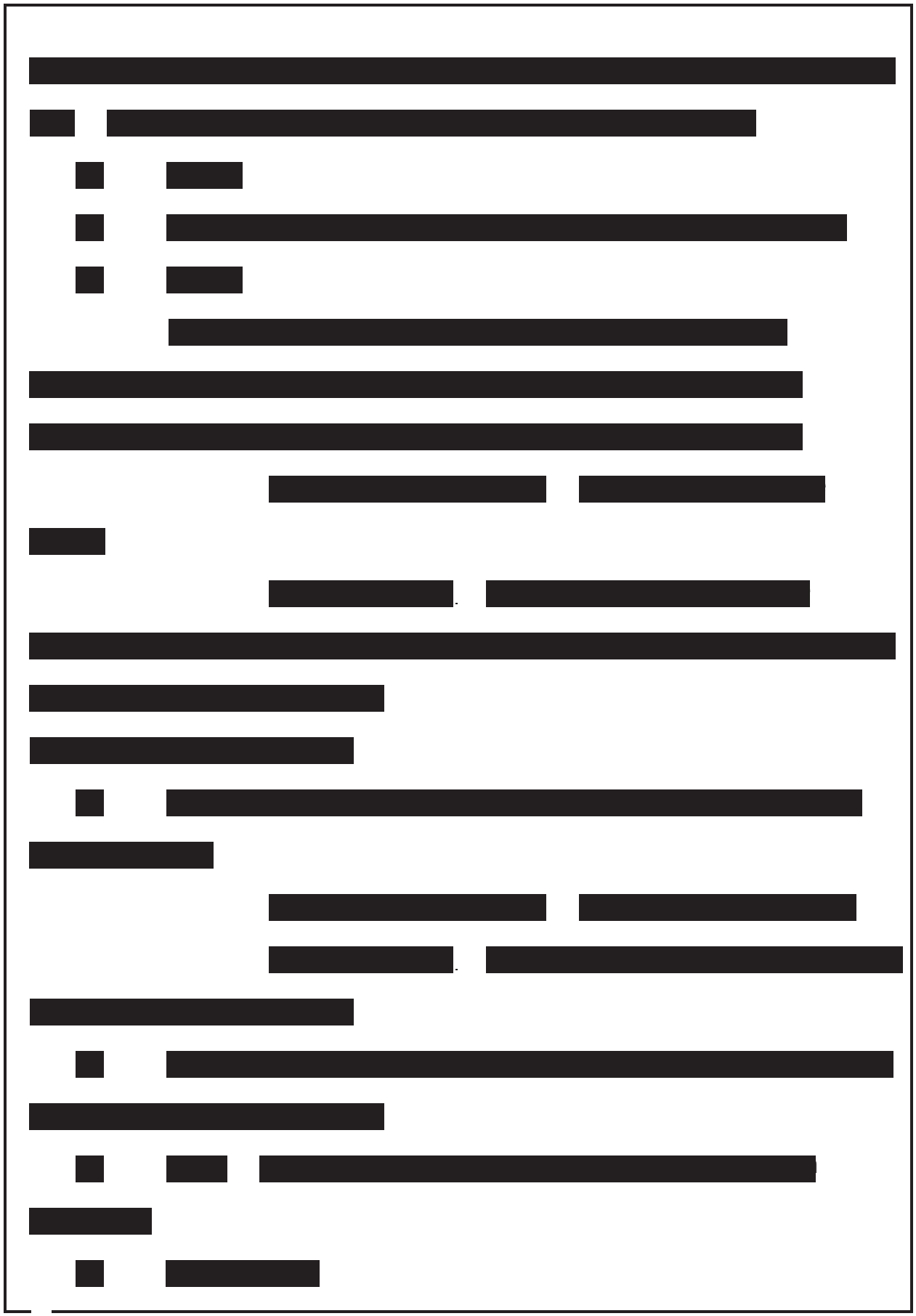
Do you remember an appointment where you talked

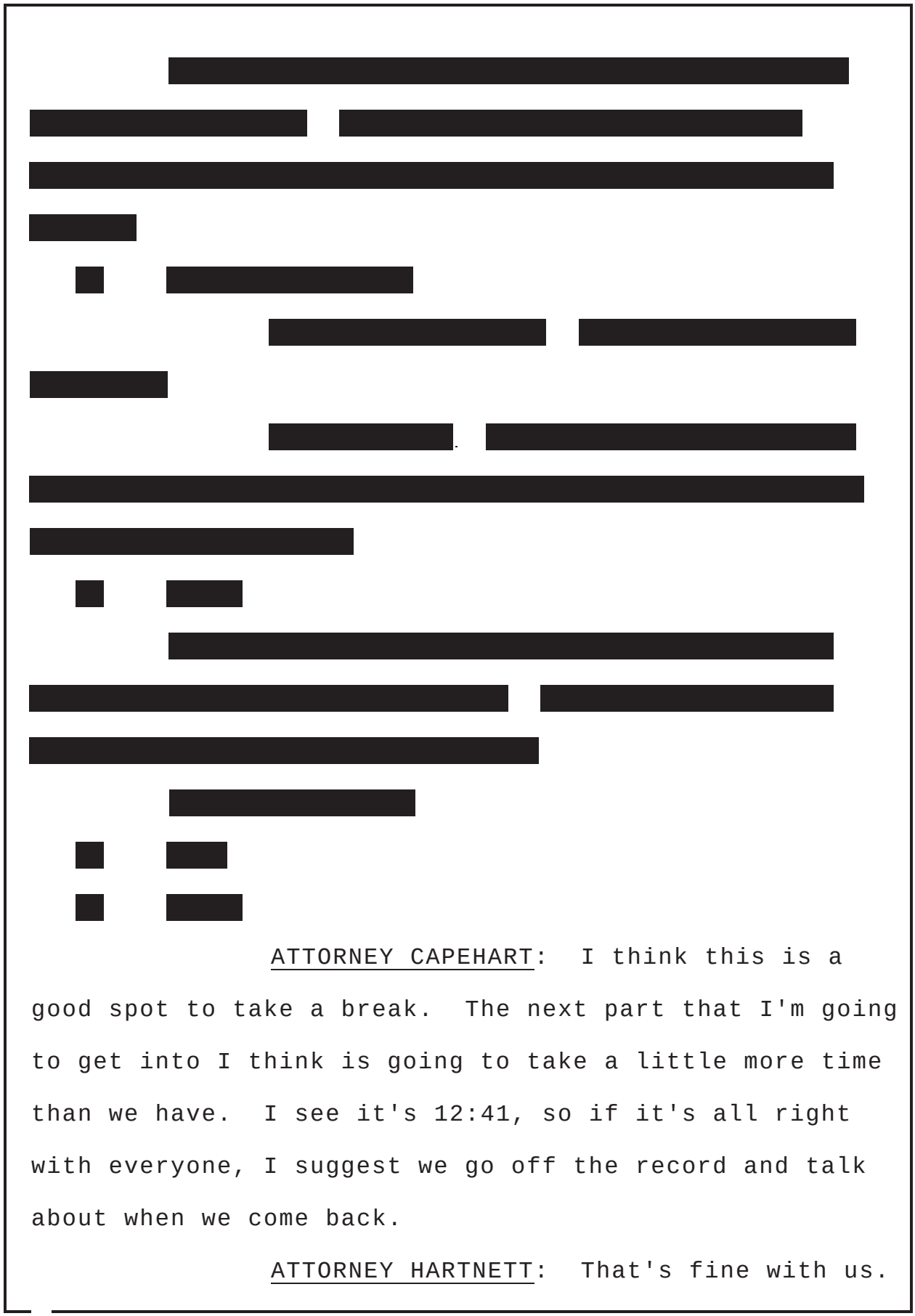
with a doctor about getting puberty blocking meds?

A. Yes.









ATTORNEY CAPEHART: I think this is a good spot to take a break. The next part that I'm going to get into I think is going to take a little more time than we have. I see it's 12:41, so if it's all right with everyone, I suggest we go off the record and talk about when we come back.

ATTORNEY HARTNETT: That's fine with us.

VIDEOGRAPHER: Going off the record. The current time reads 12:41 p.m.

OFF VIDEOTAPE

(WHEREUPON, A SHORT BREAK WAS TAKEN.)

ON VIDEOTAPE

VIDEOGRAPHER: We are back on the record. The current time reads 1:19 p.m.

BY ATTORNEY CAPEHART:

Q. Okay.

Well, before I move onto something else, I just wanted to follow up on something that you had mentioned before the break, B[redacted]. And I hope you had a good break. You had mentioned testosterone before. Where had you learned about what testosterone is?

A. The doctors.

Q. Okay.

Like Dr. Montano, those people?

A. Yes.

[redacted]

[redacted]

BY ATTORNEY CAPEHART:

Q. Okay.

You had mentioned before in relation to a biological boy running on a girls team and that they would need to, I think you had said --- I'm not trying to put words in your mouth, but I think you had said something along the lines that they would need to be taking some kind of medication relative to the testosterone if they were either going through puberty or had gone through puberty.

ATTORNEY HARTNETT: Objection to form.

BY ATTORNEY CAPEHART:

Q. Do you remember that when we were talking earlier?

A. Yes.

Q. Okay.

Why did you mention testosterone relative to how a biological boy might be performing in running?

A. Because I think that --- that after --- whenever you half an increase of testosterone, that --- I think that increases your athletic ability, but I could be wrong there.

Q. Okay. Fair enough.

Do you know that because of what the doctors had talked to you about?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: I am pretty sure, yeah.

BY ATTORNEY CAPEHART:

Q. Okay.

Have you had done any independent research yourself to learn more about testosterone?

A. I don't recall. I may have, but I don't remember.

Q. Okay.

Do you recall reading the Complaint in this lawsuit?

A. I do not.

Q. Okay.

If you could look at Exhibit 32 for just a

minute. Okay. It says Exhibit WV-32 at the bottom right corner and has a lot of other words, but in boldface in the upper right center are the words First Amended Complaint. Okay. This is as it says is the First Amended Complaint, means there was an original Complaint that had been amended once in its first Amended Complaint. Do you recall ever having seen this before now that you are getting a chance to look at it?

A. Yes, I think so.

Q. Okay.

Do you remember reading over it yourself?

A. I don't think so.

Q. Okay.

Do you remember anyone discussing with you what was in the Complaint?

A. I think I discussed it with my mom.

Q. But you don't know everything that's in here because you haven't read it yourself.

Is that correct?

A. I don't.

ATTORNEY HARTNETT: Objection.

THE WITNESS: I don't remember if I have or haven't.

BY ATTORNEY CAPEHART:

Q. Okay.

You don't remember if you have or have not. Okay.

Now, I think we had talked before about the fact that your lawsuit is challenging the HB 3293. You may have remembered we had looked at that very briefly and I had directed you to a couple of parts of it and you had said you hadn't read the whole thing. And I will also represent to you that it also had some other definitions in there for biological male and female. Do you believe there is a difference between biological males and biological females?

ATTORNEY HARTNETT: Objection to form and the preamble.

THE WITNESS: I don't know.

BY ATTORNEY CAPEHART:

Q. Okay.

You don't know if there is any difference between a biological boy and a biological girl?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: I don't know. I don't know if there is a difference.

BY ATTORNEY CAPEHART:

Q. Okay.

Do you think there are physical differences between a biological boy and a biological girl?

ATTORNEY HARTNETT: Objection.

THE WITNESS: Could you repeat the question?

BY ATTORNEY CAPEHART:

Q. Sure. Do you think there are physical differences between a biological boy and a biological girl?

A. Yes.

Q. Okay.

ATTORNEY HARTNETT: And I just have a standing objection in terminology, but I will not continue to make that objection.

ATTORNEY CAPEHART: Noted. Thank you.

BY ATTORNEY CAPEHART:

Q. What do you understand the physical differences are between a biological boy and a biological girl?

A. A biological boy has a penis and a biological girl has a vagina.

Q. Okay.

Do you believe there are any other physical differences between a biological boy and a biological girl?

A. There --- yes, but that part could be with either one, because long hair could also be with a guy or like that's --- like if a girl, a biological girl, would probably have long hair, but a guy could also have long hair. And then a guy could have --- a guy could have short hair and a girl could also have that. And a biological guy would probably want to look muscular, but a biological girl would probably --- could probably want to look like that.

Q. So apart from a superficial difference like hair length or how much someone works out and also the difference in genitalia, are you aware of any other differences?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Not that I can think of right now.

BY ATTORNEY CAPEHART:

Q. Okay. Okay.

Can you all look at Exhibit 26? Do you have Exhibit 26?

A. Yes.

Q. This looks like it is an article from the Gazette Mail. If you flip to the second page of the exhibit, the fourth block of text up from the bottom it

reads, quote, I just want to run, I come from a family of runners, close quoted, P[redacted] said in a news release. Quote, I know how hurtful a law like this is to all kids like me who just want to play sports with their classmates, and I'm doing this for them. Trans kids deserve better, closed quote. B[redacted], do you remember talking to a reporter before this article got written?

A. Yes.

Q. Okay.

And the quoted language that I was just reading there that's also in the exhibit, do you remember saying that?

A. Yes.

Q. Okay.

So those are your words, no one was paraphrasing something you were trying to tell them then?

A. No.

Q. Okay.

Is a trans kid an appropriate term to use?

ATTORNEY HARTNETT: Objection, form.

THE WITNESS: Could you repeat the question?

BY ATTORNEY CAPEHART:

Q. Sure. In the quote it says trans kids deserve better. I'm just curious, is trans kids a normal term that is used and is acceptable to use?

ATTORNEY HARTNETT: Objection, form.

THE WITNESS: Could you repeat the question one more time?

BY ATTORNEY CAPEHART:

Q. Sure. And I'm not trying to trick you. I'm just trying to understand because you used the term trans kids, and I think I've seen it in maybe another article, too, and I just thought I encountered it another experience. So I'm asking the question is that an acceptable term to use to refer to transgender boys or transgender girls?

ATTORNEY HARTNETT: Same objection.

THE WITNESS: Yes.

BY ATTORNEY CAPEHART:

Q. Is it okay to call you a trans kid?

A. If you don't know that I don't know my name and you know I'm trans, then yes, that's acceptable. But if you know my name and you're purposely calling me that, then not really, but it's still fine.

Q. Yeah. And I don't intend to. I was just

curious ---

A. Yes.

Q. --- from the nuances and the acceptable use of the term. So thank you. Excuse me. If you can look at Exhibit 27.

ATTORNEY HARTNETT: And just for the record and the witness's knowledge, B[redacted], you should feel free to review the full exhibit before you answer questions if you want to.

THE WITNESS: Okay.

MS. JACKSON: So that's the first page.

ATTORNEY CAPEHART: You all just let me know whenever you're ready to proceed.

Okay?

ATTORNEY HARTNETT: I'm sorry. I think B[redacted] is ready.

THE WITNESS: Yeah.

ATTORNEY CAPEHART: Okay. Thank you.

BY ATTORNEY CAPEHART:

Q. I'm going to try to make sure I direct you to the proper page. It looks like it's the last page of the text, which looks like it's about the fourth to the last page of the exhibit. At the top of the page the test begins with the word when Justice. Right there.

Have you all found that on your hard copy?

A. Yes.

Q. Okay. All right.

So let's see, this first block here that reads when Justice signed the Bill banning transgender girls from sports teams, B[redacted] was devastated she said. Then another quote, I felt horrible because I knew then I couldn't run with the other girls. Do you remember talking to the author of this piece before it came out?

A. Yes.

Q. Okay.

And does that quote seem right? Do you remember saying that?

A. Yes.

Q. Okay.

Now, I recall earlier you mentioned that you hadn't read the bill, the new law yourself, but here you said you couldn't run with the other girls after the Governor signed it. How did you know that since you hadn't read through the bill?

A. I was told by my mom.

Q. Okay.

Do you remember when you and your mother had that discussion?

A. I don't remember.
Q. All right.
Were you aware of this bill before your mom told you that it was now a law?
A. I was aware of it, but I didn't know that it was going to get signed.
Q. Okay.
What did you know about it before your mom told you it was signed and was now a law?
A. That I wouldn't be able to run with the girls once it got signed.
Q. Okay. All right.
If you move down to and look at the fourth block of text there on the page it says as hard as it is to be a trans kid and a mother of a trans kid, suddenly thrust into the public eye in a conservative state, B[redacted] and Jackson agree that the potential payoff makes it all worth it. You don't have a problem with the author using trans kid there, do you?
A. No.
Q. Okay.
How hard has it been in Bridgeport and Lost Creek to be a trans kid, as the author says?
ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Could you --- could you repeat the question?

BY ATTORNEY CAPEHART:

Q. Sure. This little bit of language here is talking about it being hard to be a trans kid and the mother of a trans kid, so my question is how hard has that been on you in Bridgeport and Lost Creek?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Well, a lot of the people don't support it and don't agree with it, so that's what makes it hard.

BY ATTORNEY CAPEHART:

Q. Okay.

You had said that school had gone really well with your transition.

Correct?

A. Uh-huh (yes).

Q. Okay.

So are these people you're describing now, are these all people outside of school?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Yes.

BY ATTORNEY CAPEHART:

Q. Okay.

What kind of people are these?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Usually adults.

BY ATTORNEY CAPEHART:

Q. Okay.

Are these people you know or strangers?

A. Strangers.

Q. Well, what have they done?

A. Just not --- just be mean in general.

Q. Well, how are they being mean?

A. They don't support it. Sometimes people call me names, just be mean.

Q. Okay.

Does this happen often?

A. Not as much now, but it used to happen a lot.

Q. When you say used to happen a lot, do you mean back at the time that you transitioned or before that or after that?

A. Well ---.

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Well, at the time and a little bit after because I was so --- I was new to it and I didn't know how to handle people like being meaning about it.

BY ATTORNEY CAPEHART:

Q. Okay.

Would people be mean to you when your parents were around?

A. They wouldn't do it like directly to my face usually. They would say it to my mom or my dad and then my parents would tell me. So it wasn't usually directly to me.

Q. So when they would say these things, you weren't in the presence of these people when they were saying them?

A. Most of the time, yes.

Q. Oh, okay.

But then your mom and your dad would have people say things to them and then your mom and dad would tell you about what other people had said?

ATTORNEY HARTNETT: Objection to form.

BY ATTORNEY CAPEHART:

Q. Is that correct?

A. Yes, but sometimes they wouldn't tell me just I'm assuming to try not to make me sad.

Q. Have any other kids ever said the kind of things to you that your parents said adults had told them?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: No.

BY ATTORNEY CAPEHART:

Q. No? Do you and your family attend a church?

A. Not anymore.

Q. Okay.

Did you before?

A. For a short period of time, yes.

Q. Okay.

Did you ever have any issues or problems there?

A. No.

Q. So there weren't any adults at that church that were mean to you or that said mean things to your parents that you know of?

A. At that time I was not transitioned yet, so there was no comments like that.

Q. Okay.

Do you remember when you had said your mom had explained to you because the bill was now signed you wouldn't be able to run, did she explain what part of the new law would stop you from running?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: No, she just told me that because of this I couldn't run.

BY ATTORNEY CAPEHART:

Q. Okay.

And because you haven't read the bill yourself, you don't have any knowledge of what part of the bill prevents you from running.

Is that correct?

A. Yes.

ATTORNEY HARTNETT: Objection to form.

BY ATTORNEY CAPEHART:

Q. Thank you. All right. Let's see Exhibit 28. I just was going to interject that you are free to read the entirety if you would like to, the 20 pages. It's a lot, but I have no problem telling you the only thing I'm going to ask you about is the portion on the last page, the part under the subtitle B[redacted]'s trials.

MS. JACKSON: Thank you.

ATTORNEY CAPEHART: You're welcome.

THE WITNESS: I'm ready.

BY ATTORNEY CAPEHART:

Q. Okay. Great.

Do you remember talking to this author from ESPN?

A. I can't remember.

Q. It sounds like your tryouts were pretty challenging.

Is that true?

A. Yes.

Q. Okay.

Do you recall expressing anything to this reporter that's quoted here or otherwise described?

ATTORNEY HARTNETT: Objection to the form.

THE WITNESS: Could you repeat the question?

BY ATTORNEY CAPEHART:

Q. Sure. Do you recall saying this part that's quoted here about your friends or discussing any of the rest of it with the reporter?

A. I don't remember, but I think I remember saying maybe some of this, but I can't remember. I can't remember.

Q. Okay. Okay.

And it seems like you were understandably excited to have made the team.

Is that right?

A. Yes.

Q. Okay.

How many girls were on the team this past fall?

ATTORNEY HARTNETT: Objection. I'm

sorry.

THE WITNESS: I don't know.

BY ATTORNEY CAPEHART:

Q. Okay.

And you were the only transgender girl on the team.

Is that correct?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: As I knew of, there may have been people that haven't come yet, but of what I knew I was the only one.

BY ATTORNEY CAPEHART:

Q. So far as you know, you're the only transgender girl on the team.

Is that correct?

A. Yes.

Q. Okay. Okay.

Exhibit 29, which is much shorter. Okay. Take a look at that, however much you would like to, and then let me know whenever you'd like to proceed.

A. I'm done reading.

Q. Okay.

Let's see. Just below kind of the mid point of the page, about the third block of real text it starts

off with a quote there and it says, quote, I just want to run and the State wants to stop me from running as part of a team at my school, end quote, said B[redacted], an 11-year0old Middle School student. Quote, I love running and being part of the team and the State of West Virginia should explain in court why they won't let me, end quote. Do you remember saying or writing that?

A. I remember saying that.

Q. Okay.

Who did you say that to?

A. I can't remember.

Q. Okay.

But those are all your words.

Correct?

A. Uh-huh (yes).

Q. Okay.

A. Yes.

Q. In what ways --- strike that.

When you say that the State of West Virginia should explain in court why they won't let you be part of the team, are you referring to HB-3293?

A. Yes.

Q. But as you said earlier, you're not sure what part of that prevents you from running, you just know

that it does because you have been told that.

Correct?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Yes.

BY ATTORNEY CAPEHART:

Q. Okay.

Sorry for that. B[redacted], are you aware of or have you read anything that the State has filed with the Court in this case?

A. I think I've skimmed through a couple of things, but not really read them.

Q. Okay.

Those couple of things that you think you have skimmed through, do you recall what those were?

A. One of them was the one thing we just read --- the thing that we went through just a little bit, I skimmed through that. And there was another one, but I don't remember which one it was.

Q. Okay.

The thing that we went just went through, I apologize, we have gone through a few things.

A. Just now, the one just now I skimmed through, couple of paragraphs. I'm pretty sure at least.

Q. Do you mean Exhibit 29?

MS. JACKSON: This?

THE WITNESS: Yes.

BY ATTORNEY CAPEHART:

Q. Exhibit 29 is not anything that the State has written. I'm just explaining what this is. And my understanding is that this is a news release from Lambda Legal. So you think there may have been something else, though, that you looked at, you're just not really sure?

A. Yeah.

Q. Okay. Okay.

Give me just a second to check a couple of things. Okay. There's a couple of things to just run through real quick and then I think I might be done. One, just following back up on the thought of why the State won't let you run, why do you think, to use your words from this press release, that the State won't let you run?

A. Could you repeat the question?

Q. Sure. In the release here there is, as you said, your language saying that you want the State to explain in court why they won't let you, referring back to being part of a team and running. Why do you --- why do you think that is?

ATTORNEY HARTNETT: Objection. Form.

THE WITNESS: Because I don't think there is a good enough reason for me to not be able to run.

BY ATTORNEY CAPEHART:

Q. Okay.

When you say there's not a good enough reason, has someone spoken to you or explained some reason why they think that the State wouldn't let you run?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Could you repeat the question?

ATTORNEY CAPEHART: Court Reporter, can read that question back for us?

COURT REPORTER: When you say there is not a good enough reason, has someone --- has someone --- I'm sorry. When you say there's not a good enough reason, has someone spoken to you or explained some reason why they think that the State wouldn't let you run?

ATTORNEY HARTNETT: Objection.

THE WITNESS: No one has explained the reason, but that's why I think there's not a good enough reason for me to not run.

BY ATTORNEY CAPEHART:

Q. So you have not had any conversations with

anyone who could explain what reasons the State may have presented as to why they passed this bill?

ATTORNEY HARTNETT: I would just object to the extent this would entail any conversations with your lawyers, B[redacted], and you should not testify about those conversations. If there are conversations other than ones with your lawyer, you can testify about that.

THE WITNESS: What was --- can you repeat the question?

BY ATTORNEY CAPEHART:

Q. Sure. And to pick up on Kathleen's comment, I'm not trying to get you to divulge any confidential communications that you had with your lawyers, but I'm just trying to understand your comment where you said that there is not a good enough reason and that no one has explained a reason why the State passed this bill. So I'm asking you what kind of conversations have you had, if any, with anyone other than your lawyers about the reason why this bill may have been passed?

A. I haven't had any conversations with any of my lawyers.

Q. Okay.

Have you talked with your mom about why this law may have been passed?

A. I don't think I have, no.

Q. And you already said you have not looked at any of the State's filings or documents that it has put in before the Court in this case?

ATTORNEY HARTNETT: Objection, MT.

THE WITNESS: I don't think so.

BY ATTORNEY CAPEHART:

Q. Okay.

You don't recall whether you have seen those, but you don't believe so, is that what you said previously?

ATTORNEY HARTNETT: Objection, MT.

THE WITNESS: Yes.

BY ATTORNEY CAPEHART:

Q. Okay.

Real briefly, look back at Exhibit 31, which is the Declaration that you looked at when we started. Just let me know when you have it.

A. We have the Declaration.

Q. Okay.

Look at page three, if you would. Got it?

A. Uh-huh (yes), yes.

Q. Okay.

There at paragraph number 13 it says, I do not

want to run with the boys and I should not have to run with the boys. What's wrong with running with the boys?

A. I'm not a boy. I'm a girl. I should be able to run with the girls.

Q. Okay.

Are there any competitive concerns if you did run with the boys?

ATTORNEY HARTNETT: Objection. Form.

THE WITNESS: No. I just think I'm a girl and I shouldn't have to run with the boys. I should be able to run with the girls because I am a girl.

BY ATTORNEY CAPEHART:

Q. Okay.

One other --- one other quick question for you. Do you know that under the law you could run with the boys if you wanted to.

Right?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: That I could if I wanted to, but that's not --- I'm not running with the boys because I am a girl.

BY ATTORNEY CAPEHART:

Q. Okay.

I just wanted to make sure that someone had apprised you that the law does not prevent that, that new law. Fair enough. And I believe that's everything I have for you right now. Thank you very much for your patience.

ATTORNEY CAPEHART: And whoever the next person in line wants to take over the questioning, go right ahead.

ATTORNEY HARNETT: And I know we haven't gone for an hour yet, but I just wanted to check to see, B[redacted], do you need a bathroom break before we do more questions?

THE WITNESS: I'm good.

ATTORNEY ROGERS: I think I'm next if I'm understanding the order that was established earlier this week.

Is that right?

ATTORNEY HARTNETT: I believe Roberta went next.

ATTORNEY ROGERS: All right.

EXAMINATION

BY ATTORNEY ROGERS:

Q. Hi, B[redacted]. My name is Shannon Rogers. I am one of the attorneys that represents the West Virginia Secondary School Activities Commission, which is sometimes referred to as the WVSSAC. And so when I'm saying WVSSAC that's what I'm referring to.

Does that make sense?

A. Yes.

Q. Okay.

Had you ever had heard of the WVSSAC before?

A. I don't think so.

Q. Okay.

Do you know if you have ever spoken to anybody who is with the WVSSAC?

A. I don't know.

Q. You don't know? Okay.

Do you know if anybody --- well, strike that.

So you don't think you've ever communicated or you just don't remember?

A. I don't think I've ever communicated.

ATTORNEY ROGERS: Okay.

I don't have any other questions. Thank you, B[redacted].

EXAMINATION

BY ATTORNEY DENIKER:

Q. Hi, B[redacted]. My name is Susan Deniker. I'm an attorney who works at a law firm called Steptoe and Johnson, and I represent the Harrison Board of Education and the Superintendant Dora Stutler. Thank you for your time today. I know it has been a long day and I know it's hard to sit in front of a computer screen, so thank you. You've done a really great job.

I'm going to ask you a few questions about your experience in school and in cross-country. If I ask you anything that doesn't make sense or that you don't understand, please let me know. You've done a really great job with that today, but will you let me know if I ask you something that you don't understand?

A. Yes.

Q. Very good.

And then also, if you need to take a break at any time, just let me know and we'll be glad to take a break.

Okay?

A. Okay.

Q. So yesterday I got to ask some questions of your mom and she told me that you went to elementary school

at Norwood Elementary.

Is that correct?

A. Yes.

Q. And did you go to Norwood Elementary School from kindergarten through the fifth grade?

A. Yes.

Q. How did you like Norwood?

A. It was a nice school. I really enjoyed it.

Q. Did you have a good experience there?

A. Yeah.

Q. Was Mrs. Stutler your principal for a period of the time that you were at Norwood Elementary School?

A. Yes.

Q. Did you know her then?

A. Like know her --- could you repeat the question?

Q. Sure. No. It probably wasn't a very good question. Did you sometimes have interactions with Mrs. Stutler when she was your principal?

A. Yes.

Q. And how was that? Was she nice with you when you dealt with her?

A. Yes.

Q. Did you think she was a good principal?

A. Yes.

Q. Who was the principal after Mrs. Stutler?
A. Mrs. Shields.
Q. And did you like Mrs. Shields?
A. Yeah.
Q. Was she nice to you when you were at school?
A. Yes.
Q. Now, I know you said earlier that you came out in the fourth grade.

Is that right?

A. I came out in the summer of third grade, but in school it was in the fourth grade.
Q. Okay.

And something else I should have said to you at the beginning is that I want to use terms that you're comfortable with. And so if I don't use the right terms, you correct me.

Okay?

A. Okay.
Q. So when you started school in the fourth grade it is my understanding then you came to school presenting as a girl, as a female.

Is that correct?

A. Yes.
Q. And did you have any discussions with your

teachers or the principal or anyone else at Norwood about making that change?

A. Yes.

Q. Tell me about those communications that you would have had.

A. I think it was the day before school started we went to the school to establish where --- everything about what the teacher should be calling me, where my bathroom would be and everything like that.

Q. Were you part of that meeting, B[redacted]?

A. Yes.

Q. Do you recall who else was in that meeting?

A. There was Mrs. Louder, it was the principal. I don't know if it at the time it was Mrs. Stutler or Mrs. Shields and someone else. I can't remember their name.

Q. Was the school counselor maybe part of that meeting?

A. I think so.

Q. Was Mrs. Louder your teacher that year?

A. Yes.

Q. And was your mom also in that meeting?

A. Yes.

Q. Anyone else that you remember?

A. Not really, no.

Q. Were you happy with what came out of that meeting?

A. Yes.

Q. You were comfortable with the agreements that was reached with regard to the name that would be used and the bathroom facilities and any other accommodations that would be made for you?

ATTORNEY HARTNETT: Objection.

THE WITNESS: Yes.

BY ATTORNEY DENIKER:

Q. And then how did fourth grade go? Was it a good --- was it a good year for you?

A. Yeah.

Q. Did you feel that the teachers and the principal and the other employees of the school were supportive of you?

A. Yes, very.

Q. Good. And did you feel that they treated you kindly and fairly?

A. Yes.

Q. And it sounds like from your earlier testimony that you also had a good experience with the students in the school.

Is that correct?

A. Yes.
Q. Tell me about your fifth grade year at Norwood Elementary School. Did you have a good experience that year?
A. Yes. There was brand new teachers and my teacher was Ms. Watson. She was a very nice teacher.
Q. And do you feel that everyone at the school was supportive of you?
A. Yes.
Q. Did you feel that everybody treated you in a fair and kind manner?
A. Yes.
Q. And so you had a good school year in fifth grade as well?
A. Yes.
Q. Do you recall having any other meetings in fourth or fifth grade to discuss your transitioning to being --- to presenting as a girl at school?
A. Not that I can remember. Beginning of fourth grade was the only one I think.
Q. And then it's my understanding that this year you started at Bridgeport Middle School.
Is that right?
A. Yes.

Q. And are you in the sixth grade this year, B[redacted]?
A. Yes.
Q. Do you remember when you were in Norwood Elementary School having a meeting and filling out a document that was called a Gender Support Plan?
A. Yes, I remember that.
Q. And did you participate in the meeting where that plan was discussed?
A. Yes.
Q. And did you think that that was a good meeting?
A. Yes.
Q. Were you happy with the outcome of what was agreed upon at that meeting?
A. Yes.
Q. And then you had another one of those meetings with school officials before you started at the Middle School.

Is that right?

A. Yes.
Q. And I think that that meeting happened in May of 2021, which would have been the end of your fifth grade year.

Is that --- does that sound right?

A. Yes.

Q. And were you a part of that meeting?
A. Yes.
Q. Do you remember who else was a part of that meeting?
A. We had my new principal, Mr. Mazza, the counselor there, Mrs. Shields and my mom.
Q. And were you comfortable with what was discussed and agreed upon at that meeting?
A. Yes.
Q. And how has sixth grade been so far?
A. It's been good.
Q. Do you like Mr. Mazza?
A. Yes.
Q. He is your principal this year.
Is that right?
A. Yes.
Q. Do you feel like Mr. Mazza is supportive of you?
A. Yes, very.
Q. Good. And do you think that he treats you in a kind and fair manner?
A. Yes.
Q. How are your classes this year? Do you like them?
A. Yeah, I like my classes. I have really nice

teachers.

Q. I think I saw that you are a straight A student. Maybe I saw that in something that your mom wrote.

Is that right?

A. Yes.

Q. Congratulations. Good for you. Do you feel that your teachers are fair and supportive of you?

A. Yes.

Q. And are you comfortable with the arrangements that the school has made for you this year in terms of addressing how you want to present at school as being a girl?

A. Yes.

Q. I know that we have discussed today sports and your participation in sports, and I heard you say that you love running.

Is that right?

A. Yes.

Q. And I understand that you tried out for the girls cross-country team.

Is that correct?

A. Yes.

Q. So I want to talk to you a little bit about that process. The cross-country team, did they do some

training and conditioning over the summer before the year started?

A. Yes. There was a week of conditioning before the season started.

Q. And did that happen over the summer?

A. Yes.

Q. Did you participate in that conditioning?

A. Yes.

Q. And how was that experience? Was that a positive experience for you?

A. Yes.

Q. And then tryouts I think were in August for cross-country.

Is that right?

A. Yes.

Q. And were you permitted to try out for the girls cross-country team?

A. Could you ---?

Q. Let me rephrase that. Were you allowed to try out for the girls cross-country team?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Yes.

BY ATTORNEY DENIKER:

Q. And was that the team you wanted to try out for?

A. Yes.
Q. And did you make the team?
A. Yes.
Q. And I think you said this year they didn't have any cuts.
Is that right?
A. Yes.
Q. Who were your coaches for cross-country this year?
A. I had Ms. Schoonmaker, Ms. --- Coach Flesher and Coach McBrayer.
Q. And did they coach both the girls and the boys cross-country teams?
A. Yes.
Q. How was your season?
A. It was good.
Q. Did you like cross-country?
A. Yes.
Q. Did you believe that your coaches treated your fairly and kindly this season?
A. Yes.
Q. Did you feel that they were supportive of you?
A. Yes.
Q. So you think it's fun to run up hills and

through water and mud, B[redacted]?

A. Yes.

Q. Because that's what cross-country is about, isn't it?

A. Yes.

Q. It's a hard sport I think. Do you think it's hard?

A. It depends if you've done it before and how much you run normally.

Q. Do you think you would like to do it again?

A. Yes.

Q. And I heard you talk a little bit about track. Are there other --- is track something that you're interested in doing?

A. Yes.

Q. And I heard you said you might want to be --- do the distance running in track.

Is that right?

A. Yes.

Q. You're a tough girl. Cross-country and distance running and track, those are the hard once, aren't they?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: It just depends if you've ran before or whatever you've done.

BY ATTORNEY DENIKER:

Q. I think that you're right. I think it depends how good of shape you're in. Are you planning to condition in the off season?

A. If it's not freezing, then yes.

Q. I understand. We were talking about what a cold day it is here in West Virginia, isn't it?

A. Yes.

Q. B[redacted], has anybody in the school system ever told you that Harrison County Schools wouldn't let you participate on a girls sports team for any reason?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: After a bill was passed, not --- I don't think there was because when the bill was passed, I already went trying out and then we --- then the whatever it was called where I could do --- where I could play in the sports team from the Judge came out.

BY ATTORNEY DENIKER:

Q. And I just want to make clear, did any of your coaches ever tell you that you couldn't run on the girls team?

A. No.

Q. Did Mr. Mazza ever tell you that you couldn't

run on the girls team?

A. No.

Q. Did any of your teachers tell you that you couldn't run on the girls team?

A. No.

Q. And did Mrs. Stutler ever tell you that you couldn't run on the girls team?

A. There was not a cross-country back then, so I couldn't run whenever she was my principal, so ---.

Q. And that was when you were in elementary school. Is that right?

A. Yes.

Q. And that's a good point that you brought up, B[redacted]. There aren't any school sports in elementary school in Harrison County, are there?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: No, you're very limited to them and most of them aren't even in the school. You have to do them outside of school.

BY ATTORNEY DENIKER:

Q. Did you have any school-sponsored sports at Norwood Elementary School?

A. I don't know. I don't --- yeah, I don't know.

Q. Okay.

Did you try out or participate in any sports that were run by the school while you were at Norwood?

A. I --- no.

Q. And so let me go back and ask you about Mrs. Stutler. So it's kind of funny. You had Mrs. Stutler as your principal at Norwood for a little bit.

Is that right?

A. Yes.

Q. And do you know where she went after she left Norwood?

A. The Board of Education.

Q. She did. She went to the Central Board Office. And did you know that she's now the Superintendant of Schools?

A. I did not know that. I just knew she went to the Board of Education.

Q. Well, she's actually your school superintendant now. And have you had any communications with her since she became superintendant?

A. No.

Q. Well, now you know who your superintendant is. So if you see her at school you can call her Superintendant Stutler now.

B[redacted], let me check my notes and see if I have

any other questions. I think I'm just about done.

B[redacted], did you have any conversations with anybody that works for the Harrison County Board of Education, teachers, principals, anybody like that, coaches, regarding this House Bill 3293?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Could you repeat the question?

BY ATTORNEY DENIKER:

Q. Sure. Did you talk with anybody who works for the Harrison County Board of Education or is somehow connected with the Board of Education about House Bill 3293?

A. I think I did. I think I may have. I'm not sure. I can't remember her name. It started with an S, I know that.

Q. Do you know what that --- what the woman you're referring to, do you know what her job was?

A. I do not know.

Q. Was it a teacher or a principal?

A. I don't know that. I just --- she was at one of our meetings, and I think we may have talked a little bit about that.

Q. And was that one of your Gender Support Plan

meetings?

A. Yes.

Q. Okay.

And was that the one before you were going into Middle School?

A. I think. I can't remember. I just --- I can't remember, but I think she either talked about that or the Gender Support Plan.

Q. Okay.

Do you remember what she said about House Bill 3293?

A. I do not. Because she may have not talked about it. She --- because she was there at one of our meetings, so she could have not, but I think she did.

Q. But you don't remember what was said?

A. I don't.

Q. Okay.

Do you remember any conversations with anybody at school or anybody affiliated with the school about House Bill 3293?

ATTORNEY HARTNETT: Objection, form.

THE WITNESS: Not that I can think of off the top of my head.

BY ATTORNEY DENIKER:

Q. And B[redacted], I should have clarified. Do you know what I'm talking about when I say House Bill 3293?

A. Yeah, HB-3293. Yes.

Q. Okay.

I just wanted to make sure that you knew what I was talking about. I thought that you did.

B[redacted], if you had any concerns about how you were being treated at school, would you feel comfortable going to talk to Mr. Mazza about that?

A. Yes. If I was being treated bad, then I would talk to Mr. Mazza.

Q. Would you also feel comfortable going to some of your teachers about that?

A. Yes.

Q. But do you feel that overall all of the teachers and administrators, including your principals at Bridgeport Middle School, have been supportive of your status as a transgender student?

A. Could you repeat the question?

Q. Sure. And I apologize, it was a long one. Do you believe that the teachers and administrators, and that would include the principals and the other employees at Bridgeport Middle School, have been supportive of your transgender status?

A. Yes, I think they have been supportive.

Q. When you were on the cross-country team did you believe your teammates were supportive of you?

A. Yes.

Q. And how about in school, have you had any issues with other students or problems with students related to your transgender status?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: No. No.

ATTORNEY DENIKER: B[redacted], those are all the questions I have for you now. Thanks so much for your time today.

ATTORNEY HARTNETT: We can take a break. I think this might be a good time to take a break and then we can come back for questions.

VIDEOGRAPHER: Okay. Going off the record. The current time reads 2:28 p.m.

OFF VIDEOTAPE

(WHEREUPON, A SHORT BREAK WAS TAKEN.)

ON VIDEOTAPE

VIDEOGRAPHER: We are back on the record. The current time reads 2:42 p.m.

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EXAMINATION

BY ATTORNEY HAMMOND:

Q. Hi, B[redacted]. My name is Kristen Hammond. And I'm an attorney with the law firm of Bailey and Wyant. And I represent the West Virginia State Board of Education and the State Superintendant Clayton Burch. And I just have I think a few questions for you today. Do you know what the State Board of Education is?

A. I don't know.

Q. Okay.

And do you know or have you ever heard of the West Virginia State Superintendant Clayton Burch?

A. No.

Q. Okay.

So I guess since you do not know them, do you have any memory or any recall of maybe talking to anybody at the State level or at the Board of Education level regarding this lawsuit or regarding the House Bill or your sports? How about we limit it to that?

A. I don't remember if I have or not.

Q. Okay.

So you just don't recall. Could you possibly

have talked to somebody?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Could you repeat the question?

BY ATTORNEY HAMMOND:

Q. Yes. I just want to see --- you say you don't recall talking to anybody. Do you think that it's a possibility that you did talk to somebody or you don't believe that you've talked to anybody?

A. I don't believe I've talked to anybody.

ATTORNEY HAMMOND: Okay. Thank you for your time. I just had a couple of questions, and that's all I have for you today. Thank you.

EXAMINATION

BY ATTORNEY DUCAR:

Q. Good afternoon, B[redacted]. I'm Timothy Ducar. I represent the Intervenor in this case. I wanted to ask you a question about Exhibit 29. Do you have that available?

MS. JACKSON: Give me a second to find it.

ATTORNEY DUCAR: Yes, that's it. Can you

scroll down just four paragraphs? Thank you.

BY ATTORNEY DUCAR:

Q. B[redacted], you had testified earlier that paragraph that starts with I just want to run, that you had --- that's a quote from you.

Correct?

A. Yes.

Q. I just wanted to know, is that a quote that you wrote on paper and provided to somebody or wrote on a computer and provided to somebody or did you actually say that with your --- verbally?

A. I said that.

Q. Verbally?

A. Yeah, I said that verbally.

Q. Thank you. When did you decide you liked running?

A. I've always liked running. It's from when I could walk, I liked running.

ATTORNEY DUCAR: We're done with this exhibit, Mr. Court Reporter. Thank you.

BY ATTORNEY DUCAR:

Q. When did you decide you wanted to try out for the girls cross-country team?

A. I've always wanted to do cross-country, so when

I had the chance I decided I wanted to.

Q. And did you know about it because your brothers ran?

A. Yes.

Q. Did your mom encourage you to try out for the girls team?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Yes. Yes, she encouraged me.

BY ATTORNEY DUCAR:

Q. And these try-outs were last summer.

Correct?

A. Yes.

Q. Going into sixth grade?

A. Yes.

Q. Did your dad encourage you to try out for the girls team?

A. Yes.

Q. Earlier you testified that you did well in cross-country. Did you have any rankings?

ATTORNEY HARTNETT: Object to the form.

THE WITNESS: I --- could you rephrase the question?

BY ATTORNEY DUCAR:

Q. Do you have any idea how well you did on your team as an individual?

A. I don't know.

Q. Do they keep track of individual times and ---?

A. I think they put it on a website.

Q. Is that something you have ever seen?

A. My mom looks at it, but I don't.

Q. Do you have any indication whether or not you were one of the better runners or not one of the better runners on the team?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: I don't know. I think I was good.

BY ATTORNEY DUCAR:

Q. Do you want to run cross-country again next year?

A. Yes.

Q. Track tryouts are coming up in the spring. Correct?

A. Yes.

Q. And you intend to try out for track?

A. Yes.

Q. Do you want to compete in any other sports besides track and cross-country?

A. Not really.
Q. Why not?
A. I don't find any other sport really interesting besides running.
Q. You said trusting?
A. Interesting.
Q. What does that mean?
A. What is interesting?
Q. Oh, interesting. I misheard you. Thank you. And I think I misheard you on something else, so I'm going to re-ask the question. Do you like to compete?

ATTORNEY HARTNETT: Objection to the form.

THE WITNESS: I'm not a really competitive person. I just play a sport because I think it's fun.

BY ATTORNEY DUCAR:
Q. Do you consider yourself a good athlete?
A. Yes.
Q. What makes you a good athlete?
A. I'm good at running, good at the sports I do.
Q. Do you try hard to win?
A. Yes. Well --- yes.
Q. Have you talked to anybody else about playing

other sports other than cross-country and track?

A. I've talked to my mom about playing other sports.

Q. What sports have you talked to her about?

A. Volleyball and maybe basketball.

Q. And describe for me what you guys talked about as far as volleyball and basketball?

A. We talked about trying new sports.

Q. When did you two talk about those subjects?

A. I can't remember.

Q. Was it in the last six months or ---?

A. I don't --- I can't remember.

Q. Did you bring up the idea of playing volleyball to her?

A. Yes.

Q. And what did she say?

A. That's a good idea.

Q. Did she say that about basketball as well?

A. I think she may have brought up basketball, but I can't remember. It may have been me or her.

Q. Did you feel like she was encouraging you to play volleyball?

A. She liked the idea. So I wouldn't say encouraged, but she thought it was a good idea.

Q. Did she think playing basketball was a good idea?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: I think so, yes.

BY ATTORNEY DUCAR:

Q. And as you sit here right now, you don't have any plans to go out for a volleyball or a basketball team.

Correct?

A. No, not right now. No.

Q. Do you foresee yourself running on the cross-country team or on the track team later in high school?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Yes, yes.

BY ATTORNEY DUCAR:

Q. Do you see yourself running on the cross-country team or track team if you ever go to college on a college team?

ATTORNEY HARTNETT: Same objection. Objection to form.

THE WITNESS: Maybe, but I haven't thought that far ahead.

BY ATTORNEY DUCAR:

Q. Sure. When was the first time you remember thinking that you wanted to be a girl?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: I can't remember.

BY ATTORNEY DUCAR:

Q. Do you remember the first time you talked to somebody about the fact that you wanted to become a girl?

ATTORNEY HARTNETT: Objection.

THE WITNESS: I also can't --- I don't remember.

BY ATTORNEY DUCAR:

Q. There's a statement in the record that indicates you feel like a girl. What does feeling like a girl mean?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: I just know that I want to be a girl and I feel like a girl inside.

BY ATTORNEY DUCAR:

Q. You picked out the name B[redacted] for yourself. Correct?

A. Yes.

Q. When did you do that?

A. Whenever I transitioned.

Q. Going into fourth grade?
A. Yes.
Q. How did you pick that name?
A. I've always liked it.
Q. Me, too. I have a daughter named B[redacted].
Did anyone else help you pick that name?
A. I think my friends liked that name, too.
Q. When did you start wearing girl's clothing at home?
A. I mean, I've always wanted my mom's clothes, so I really started dressing like that maybe at home, third grade, the year of third grade.
Q. Did you ask your parents if you could do it or did you just do it?
A. I just did it.
Q. What was their reaction?
A. Positive.
Q. When did you first ask your parents to refer to you as she or her?
A. When I transitioned.
Q. Going into fourth grade?
A. Yes.
Q. When did you start presenting as a girl in other ways at home? I guess that would be makeup, other ways

besides clothing.

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: Could you restate the question, please?

BY ATTORNEY DUCAR:

Q. Yeah. I'll withdraw that question.

When did you start presenting as a girl at home?

A. It started when I was really young.

ATTORNEY HARTNETT: Objection.

THE WITNESS: But I fully started wearing clothes on my own, not wearing my mother's, around the third-grade year.

BY ATTORNEY DUCAR:

Q. Do you wear jewelry?

A. Not a lot. I used to wear earrings but not anymore.

Q. Do you wear makeup?

A. No.

Q. Are there other ways you presented at home as a girl besides dressing as a girl?

A. Well, I always wanted girly --- a girly room and girly items.

Q. And you started wearing girls clothing in fourth

grade.

Correct?

A. Yes.

Q. Do you recall the first time you saw a doctor or a therapist about your desire to be a girl?

A. I can't remember.

Q. How did you first learn about puberty blocking treatment?

A. Could you repeat the question, please?

Q. How did you first learn about puberty blocking treatment?

A. My mom. My mom told me about it whenever I transitioned.

Q. And is that something that you wanted to do?

A. Yes.

Q. At some point you wanted to start hormone therapy?

A. Yes.

Q. Do you know what that means?

A. Getting female hormones.

Q. B[redacted], do you ever feel anxious?

ATTORNEY HARTNETT: Objection to form.

ATTORNEY DUCAR: Let me restate that. That's fair.

BY ATTORNEY DUCAR:

Q. Does the fact that you are transitioning make you feel anxious?

A. No.

Q. Does the fact that you're part of this lawsuit make you feel anxious?

ATTORNEY HARTNETT: Objection to form.

THE WITNESS: No.

BY ATTORNEY DUCAR:

Q. Do you know what the word anxious means?

A. Nervous.

Q. Do you know what gender dysphoria is?

A. Yes.

[redacted]

ATTORNEY DUCAR: Thank you, B[redacted]. I have no further questions for you today.

ATTORNEY CAPEHART: We have no further questions at this time. We're just going to note as we have in the last two depositions the possibility of having to revisit something. If for some reason some

medical records would could to light, although I understand that's unlikely, we're still noting that, but you would object to that?

ATTORNEY HARTNETT: Yes, we object, but we appreciate you making the record you want to make.

ATTORNEY CAPEHART: Thank you.

ATTORNEY HARTNETT: I'm sorry. Just on that point, though, I mean, is there any specific item that you lack today that you need to make a record?

ATTORNEY CAPEHART: I think our concern has been the possibility of new records that might be produced following the depositions.

ATTORNEY HARTNETT: Okay. Thank you.

ATTORNEY CAPEHART: Thank you.

ATTORNEY HARTNETT: I mean, is anyone else going to have any further questioning? Sorry. Just for the witness's awareness, we're confirming whether or not there will be additional questioning from any Defendant.

ATTORNEY ROGERS: I don't have any further questions.

ATTORNEY DENIKER: I have no further questions. Thank you again for your time today, B[redacted].

ATTORNEY HAMMOND: I have no further

questions. Thank you.

ATTORNEY DUCAR: I have nothing further. Thank you.

ATTORNEY HARTNETT: And we also have no questions for the witness today.

VIDEOGRAPHER: Okay. If there are no further questions, that concludes today's deposition. And the current time reads 3:01 p.m.

COURT REPORTER: Is it reading and signing for your client?

ATTORNEY HARTNETT: Yes. I'm sorry. I meant to say that on the record.

* * * * * * *

VIDEOTAPED VIDEOCONFERENCE DEPOSITION

CONCLUDED AT 3:01 P.M.

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STATE OF WEST VIRGINIA)

CERTIFICATE

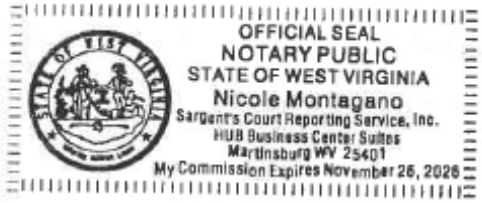
I, Nicole Montagano, a Notary Public in and for the State of West Virginia, do hereby certify:

That the witness whose testimony appears in the foregoing deposition, was duly sworn by me on said date, and that the transcribed deposition of said witness is a true record of the testimony given by said witness;

That the proceeding is herein recorded fully and accurately;

That I am neither attorney nor counsel for, nor related to any of the parties to the action in which these depositions were taken, and further that I am not a relative of any attorney or counsel employed by the parties hereto, or financially interested in this action.

I certify that the attached transcript meets the requirements set forth within article twenty-seven, chapter forty-seven of the West Virginia.



Nicole Montagano,

Court Reporter

CONFIDENTIAL

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA
CHARLESTON DIVISION

B.P.J. by her next friend and mother, HEATHER JACKSON,

Plaintiff,

v.

WEST VIRGINIA STATE BOARD OF EDUCATION, HARRISON COUNTY BOARD OF EDUCATION, WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION, W. CLAYTON BURCH in his official capacity as State Superintendent, DORA STUTLER in her official capacity as Harrison County Superintendent, and THE STATE OF WEST VIRGINIA,

Defendants,

and

LAINEY ARMISTEAD,

Defendant-Intervenor.

Civil Action No. 2:21-cv-00316

Hon. Joseph R. Goodwin

PLAINTIFF'S RESPONSES AND OBJECTIONS TO DEFENDANT-INTERVENOR LAINEY ARMISTEAD'S FIRST SET OF REQUESTS FOR ADMISSION

Pursuant to Federal Rules of Civil Procedure 33 and 36 and the applicable Local Rules of the Southern District of West Virginia and this Court, Plaintiff B.P.J. by her next friend and mother, Heather Jackson, responds as follows to Defendant-Intervenor Lainey Armistead's ("Defendant-Intervenor") First Set of Requests for Admission ("Requests"):

GENERAL RESPONSES

1. B.P.J.'s response to the Requests is made to the best of B.P.J.'s present knowledge, information, and belief. This response is at all times subject to such additional or different information that discovery or further investigation may disclose and, while based on the present state of B.P.J.'s recollection, is subject to such refreshing of recollection, and such

additional knowledge of facts, as may result from B.P.J.'s further discovery or investigation.

2. B.P.J. reserves the right to make any use of, or to introduce at any hearing and at trial, information and/or documents responsive to the Requests but discovered subsequent to the date of this response, including, but not limited to, any information or documents obtained in discovery herein.
3. B.P.J. reserves all objections or other questions as to the competency, relevance, materiality, privilege, or admissibility as evidence in any subsequent proceeding in or trial of this or any other action for any purpose whatsoever of this response and any document or thing identified or provided in response to the Requests.
4. B.P.J. reserves the right to object on any ground at any time to such other or supplemental Requests as Defendant-Intervenor may at any time propound involving or relating to the subject matter of these Requests.
5. B.P.J. is willing to meet and confer with Defendant-Intervenor regarding any response or objection to the Requests.

GENERAL OBJECTIONS

B.P.J. makes the following general objections, whether or not separately set forth in response to each Request, to each and every Definition, Instruction, and Request made in Defendant-Intervenor's First Set of Requests for Admission:

1. B.P.J. objects generally to all Definitions, Instructions, and Requests inclusive, insofar as each such Request seeks information protected by the attorney-client privilege, the work product doctrine, or any other applicable privilege. Such information shall not be produced in response to the Requests, and any inadvertent production thereof shall not be deemed a

waiver of any privilege or right with respect to such information or of any work product doctrine that may attach thereto.

2. B.P.J. objects to all Definitions, Instructions, and Requests inclusive, to the extent they purport to enlarge, expand, or alter in any way the plain meaning and scope of any specific request on the ground that such enlargement, expansion, or alteration renders said Request vague, ambiguous, unintelligible, unduly broad, and uncertain.
3. B.P.J. objects to all Definitions, Instructions, and Requests inclusive, to the extent they seek information or materials not currently in B.P.J.'s possession, custody, or control, or refer to persons, entities, or events not known to B.P.J., on the grounds that such Instructions, Definitions, or Requests seek to require more of B.P.J. than any obligation imposed by law, would subject B.P.J. to unreasonable and undue burden and expense, and would seek to impose upon B.P.J. an obligation to investigate or discover information or materials from third parties or services who are equally accessible to Defendant-Intervenor.
4. B.P.J.'s failure to object to the Requests on a particular ground shall not be construed as a waiver of her right to object on that ground or any additional ground at any time.
5. B.P.J. objects to the number of Requests as burdensome, cumulative, and not proportional to the needs of the case.
6. B.P.J. objects to Requests Nos. 13 through 61 because they do not seek "admissions for the record of facts already known," *Wigler v. Elec. Data Sys. Corp.*, 108 F.R.D. 204, 206 (D. Md. 1985), but instead seek admissions to hypothetical questions regarding the treatment of various endocrine conditions not at issue in this case and/or that have not yet been the subject of expert testimony. B.P.J. has attempted to respond to the Requests to

the best of her ability, but reserves the right to supplement, amend, or withdraw responses in light of additional facts learned during expert discovery.

SPECIFIC OBJECTIONS AND RESPONSES TO DOCUMENT REQUESTS

Without waiving or limiting in any manner any of the foregoing General Objections, but rather incorporating them into each of the following responses to the extent applicable, B.P.J. responds to the specific requests of Defendant-Intervenor's First Set of Requests for Admission as follows:

Request for Admission No. 1:

1. Admit that B.P.J. has chromosomes characteristic of the male sex (i.e. XY chromosomes).

B.P.J.'s Response to Request for Admission No. 1:

B.P.J. objects to the phrase "chromosomes characteristic of the male sex" as vague, and interprets the phrase to mean "has XY chromosomes."

Subject to these general and specific objections, and without waiver thereof, B.P.J. admits that B.P.J. has XY chromosomes.

Request for Admission No. 2:

2. Admit that, but for the [redacted]-pharmaceutical intervention B.P.J. has received, B.P.J. would have hormones—including testosterone levels—characteristic of the male sex.

B.P.J.'s Response to Request for Admission No. 2:

B.P.J. objects to the phrase "characteristic of" as vague and construes the phrase to mean "typical of."

Subject to these general and specific objections, and without waiver thereof, B.P.J. cannot admit or deny this request for admission because B.P.J. has not gone through puberty and cannot

determine what her hormones level would have been if she had not received puberty blocking medication.

Request for Admission No. 3:

3. Admit that B.P.J.'s internal and external reproductive organs are characteristic of the male sex.

B.P.J.'s Response to Request for Admission No. 3:

B.P.J. objects to the phrase "characteristic of" as vague and construes the phrase to mean "typical of."

Subject to these general and specific objections, and without waiver thereof, B.P.J. admits that B.P.J.'s internal and external reproductive organs are typical of the male sex.

Request for Admission No. 4:

4. Admit that B.P.J. is a biological male.

B.P.J.'s Response to Request for Admission No. 4:

B.P.J. objects to the phrase "is a biological male" as vague and scientifically inaccurate, and construes the phrase to mean "had a male sex assigned at birth."

Subject to these general and specific objections, and without waiver thereof, B.P.J. admits that B.P.J. had a male sex assigned at birth.

Request for Admission No. 5:

5. Admit there are "benefits associated with sex-separated school athletics." (First Am. Compl. ¶ 39).

B.P.J.'s Response to Request for Admission No. 5:

B.P.J. admits there are benefits associated with school athletics, including when such athletics are provided in a sex-separated manner.

Request for Admission No. 6:

6. Admit that one of the "benefits associated with sex-separated school athletics" (First Am. Compl. ¶ 39) is separation based on sex-related "physiological characteristics associated with athletic performance" (*Id.* ¶ 40).

B.P.J.'s Response to Request for Admission No. 6:

Deny.

Request for Admission No. 7:

7. Admit there are post-pubescent, high-school-aged male-identifying biological males who cannot run a 5,000 meter track race as quickly as some post-pubescent, high-school aged female-identifying biological females.

B.P.J.'s Response to Request for Admission No. 7:

B.P.J. objects to the phrase "male-identifying biological males" as vague and scientifically inaccurate and interprets the phrase to mean "cisgender boys." B.P.J. objects to the phrase "female-identifying biological females" as vague and scientifically inaccurate and interprets the phrase to mean "cisgender girls."

Subject to these general and specific objections, and without waiver thereof, B.P.J. admits that there are post-pubescent, high-school-aged cisgender boys who cannot run a 5,000 meter track race as quickly as some post-pubescent, high-school aged cisgender girls.

Request for Admission No. 8:

8. You have alleged that "[g]irls who are transgender and who *do* go through some or all of their endogenous puberty can receive gender-affirming hormone therapy that reduces their circulating testosterone levels and mitigates and often eliminates any athletic benefit from having gone through endogenous puberty." First Am. Compl. ¶ 42. Admit that such

"gender affirming hormone therapy that reduces circulating testosterone levels" to the levels typical of cisgender females does not necessarily completely "eliminate[] any athletic benefit from having gone through endogenous [male] puberty."

B.P.J.'s Response to Request for Admission No. 8:

Deny.

Request for Admission No. 9:

9. You have alleged that "[g]irls who are transgender and who *do* go through some or all of their endogenous puberty can receive gender-affirming hormone therapy that reduces their circulating testosterone levels and mitigates and often eliminates any athletic benefit from having gone through endogenous puberty." First Am. Compl. ¶ 42. Admit that female identifying biological males who go through endogenous puberty and do not receive pharmaceutical or surgical intervention have, at the "population level" (as this term is used in First Am. Compl. ¶ 40), athletic performance advantages over female-identifying biological females of the same age who have received no pharmaceutical or surgical intervention.

B.P.J.'s Response to Request for Admission No. 9:

B.P.J. objects to the phrase "female-identifying biological males" as vague and scientifically inaccurate and interprets the phrase to mean "girls who are transgender." B.P.J. objects to the phrase "female-identifying biological females" as vague and scientifically inaccurate and interprets the phrase to mean "cisgender girls."

Subject to these general and specific objections, and without waiver thereof, B.P.J. cannot admit or deny this request for admission because there have not been sufficient studies to determine whether there are average differences in performance between girls who are transgender and have

gone through endogenous puberty and not received pharmaceutical or surgical intervention as a group compared to cisgender girls as a group including in light of other possible factors.

Request for Admission No. 10:

10. You have alleged that "[g]irls who are transgender and who *do* go through some or all of their endogenous puberty can receive gender-affirming hormone therapy that reduces their circulating testosterone levels and mitigates and often eliminates any athletic benefit from having gone through endogenous puberty." First Am. Compl. ¶ 42. Admit that female identifying biological males who go through endogenous puberty and do not receive pharmaceutical or surgical intervention have, at the "population level" (as this term is used in First Am. Compl. ¶ 40), athletic advantages relevant to performance in track and cross-country events over female-identifying biological females of the same age who have received no pharmaceutical or surgical intervention.

B.P.J.'s Response to Request for Admission No. 10:

B.P.J. objects to the phrase "female-identifying biological males" as vague and scientifically inaccurate and interprets the phrase to mean "girls who are transgender." B.P.J. objects to the phrase "female-identifying biological females" as vague and scientifically inaccurate and interprets the phrase to mean "cisgender girls."

Subject to these general and specific objections, and without waiver thereof, B.P.J. cannot admit or deny this request for admission because there have not been sufficient studies to determine whether there are average differences in performance between girls who are transgender and have gone through endogenous puberty and not received pharmaceutical or surgical intervention as a group compared to cisgender girls as a group including in light of other possible factors.

Request for Admission No. 11:

11. You have alleged that "[g]irls who are transgender and who *do* go through some or all of their endogenous puberty can receive gender-affirming hormone therapy that reduces their circulating testosterone levels and mitigates and often eliminates any athletic benefit from having gone through endogenous puberty." First Am. Compl. ¶ 42. Admit that female identifying biological males who go through endogenous puberty and do not receive pharmaceutical or surgical intervention more often than not have athletic performance advantages over female-identifying biological females of the same age who have received no pharmaceutical or surgical intervention.

B.P.J.'s Response to Request for Admission No. 11:

B.P.J. objects to the phrase "female-identifying biological males" as vague and scientifically inaccurate and interprets the phrase to mean "girls who are transgender." B.P.J. objects to the phrase "female-identifying biological females" as vague and scientifically inaccurate and interprets the phrase to mean "cisgender girls."

Subject to these general and specific objections, and without waiver thereof, B.P.J. cannot admit or deny this request for admission because there have not been sufficient studies to determine whether there are average differences in performance between girls who are transgender and have gone through endogenous puberty and not received pharmaceutical or surgical intervention as a group compared to cisgender girls as a group including in light of other possible factors.

Request for Admission No. 12:

12. You have alleged that "[g]irls who are transgender and who *do* go through some or all of their endogenous puberty can receive gender-affirming hormone therapy that reduces their circulating testosterone levels and mitigates and often eliminates any athletic benefit from having gone through endogenous puberty." First Am. Compl. ¶ 42. Admit that female

identifying biological males who go through endogenous puberty and do not receive pharmaceutical or surgical intervention more often than not have athletic advantages relevant to performance in track and cross-country events over female-identifying biological females of the same age who have received no pharmaceutical or surgical intervention.

B.P.J.'s Response to Request for Admission No. 12:

B.P.J. objects to the phrase "female-identifying biological males" as vague and scientifically inaccurate and interprets the phrase to mean "girls who are transgender." B.P.J. objects to the phrase "female-identifying biological females" as vague and scientifically inaccurate and interprets the phrase to mean "cisgender girls."

Subject to these general and specific objections, and without waiver thereof, B.P.J. cannot admit or deny this request for admission because there have not been sufficient studies to determine whether there are average differences in performance between girls who are transgender and have gone through endogenous puberty and not received pharmaceutical or surgical intervention as a group compared to cisgender girls as a group including in light of other possible factors.

Request for Admission No. 13:

13. Admit there are biological males who experience central precocious puberty.

B.P.J.'s Response to Request for Admission No. 13:

B.P.J. objects to the phrase "biological males" as vague and scientifically inaccurate, and interprets the phrase to mean "people with a male sex assigned at birth."

Subject to these general and specific objections, and without waiver thereof, B.P.J. admits there are people with a male sex assigned at birth who experience central precocious puberty.

Request for Admission No. 14:

14. Admit that Histrelin is a medically accepted treatment for central precocious puberty.

B.P.J.'s Response to Request for Admission No. 14:

Admit.

Request for Admission No. 15:

15. Admit that Histrelin is used to treat biological males with idiopathic short stature.

B.P.J.'s Response to Request for Admission No. 15:

B.P.J. objects to the phrase "biological males" as vague and scientifically inaccurate, and interprets the phrase to mean "people with a male sex assigned at birth." B.P.J. objects to the phrase "is used to treat" and interprets the phrase to mean "is a medically accepted treatment for."

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies that Histrelin is a medically accepted treatment for people with a male sex assigned at birth with idiopathic short stature.

Request for Admission No. 16:

16. Admit that Histrelin is used to treat biological males with growth hormone deficiency.

B.P.J.'s Response to Request for Admission No. 16:

B.P.J. objects to the phrase "biological males" as vague and scientifically inaccurate, and interprets the phrase to mean "people with a male sex assigned at birth." B.P.J. objects to the phrase "is used to treat" and interprets the phrase to mean "is a medically accepted treatment for."

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies that Histrelin is a medically accepted treatment for people with a male sex assigned at birth with growth hormone deficiency.

Request for Admission No. 17:

17. Admit there are biological males who experience delayed puberty.

B.P.J.'s Response to Request for Admission No. 17:

B.P.J. objects to the phrase "biological males" as vague and scientifically inaccurate, and interprets the phrase to mean "people with a male sex assigned at birth."

Subject to these general and specific objections, and without waiver thereof, B.P.J. admits there are people with a male sex assigned at birth who experience delayed puberty.

Request for Admission No. 18:

18. Admit there are biological males who experience hypogonadism.

B.P.J.'s Response to Request for Admission No. 18:

B.P.J. objects to the phrase "biological males" as vague and scientifically inaccurate, and interprets the phrase to mean "people with a male sex assigned at birth."

Subject to these general and specific objections, and without waiver thereof, B.P.J. admits there are people with a male sex assigned at birth who experience hypogonadism.

Request for Admission No. 19:

19. Admit there are biological males with medical conditions that inhibit testosterone production.

B.P.J.'s Response to Request for Admission No. 19:

B.P.J. objects to the phrase "biological males" as vague and scientifically inaccurate, and interprets the phrase to mean "people with a male sex assigned at birth."

Subject to these general and specific objections, and without waiver thereof, B.P.J. admits there are people with a male sex assigned at birth with medical conditions that inhibit testosterone production.

Request for Admission No. 20:

20. Admit there are middle-school-aged biological males who, because of delayed puberty, have circulating testosterone comparable to that of biological females of their same age.

B.P.J.'s Response to Request for Admission No. 20:

B.P.J. objects to the phrase "biological males" as vague and scientifically inaccurate, and interprets the phrase to mean "people with a male sex assigned at birth." B.P.J. objects to the phrase "biological females" as vague and scientifically inaccurate, and interprets the phrase to mean "people with a female sex assigned at birth." B.P.J. objects to the term "comparable" as vague. B.P.J. objects to this request as vague with respect to whether the phrase "comparable to that of biological females of their same age" refers to typical circulating testosterone levels for people who had a female sex assigned at birth as a group or to the circulating testosterone levels of at least one person with a female sex assigned at birth. B.P.J. also objects to this request as vague because it does not specify whether the people with a female sex assigned at birth at issue have gone through puberty even though cisgender girls on average typically begin puberty at a younger age than cisgender boys on average.

Subject to these general and specific objections, and without waiver thereof, B.P.J. admits that it is possible at least one middle-school-aged person who was assigned a male sex at birth and who had delayed puberty likely has the same levels of circulating testosterone as at least one person of the same age who was assigned a female sex at birth.

Request for Admission No. 21:

21. Admit there are high-school-aged biological males who, because of delayed puberty, have circulating testosterone comparable to that of biological females of their same age.

B.P.J.'s Response to Request for Admission No. 21:

B.P.J. objects to the phrase "biological males" as vague and scientifically inaccurate, and interprets the phrase to mean "people with a male sex assigned at birth." B.P.J. objects to the phrase "biological females" as vague and scientifically inaccurate, and interprets the phrase to mean "people with a female sex assigned at birth." B.P.J. objects to the term "comparable" as vague. B.P.J. also objects to this request as vague with respect to whether the phrase "comparable to that of biological females of their same age" refers to typical circulating testosterone levels for people with a female sex assigned at birth as a group or to the circulating testosterone levels of at least one person who was assigned a female sex at birth.

Subject to these general and specific objections, and without waiver thereof, B.P.J. admits that it is possible at least one high-school-aged person who was assigned a male sex at birth and who had delayed puberty likely has the same levels of circulating testosterone as at least one person of the same age who was assigned a female sex at birth.

Request for Admission No. 22:

22. Admit there are middle-school-aged biological males who, because of hypogonadism, have circulating testosterone comparable to that of biological females of their same age.

B.P.J.'s Response to Request for Admission No. 22:

B.P.J. objects to the phrase "biological males" as vague and scientifically inaccurate, and interprets the phrase to mean "people with a male sex assigned at birth." B.P.J. objects to the phrase "biological females" as vague and scientifically inaccurate, and interprets the phrase to mean "people with a female sex assigned at birth." B.P.J. objects to the term "comparable" as vague. B.P.J. also objects to this request as vague with respect to whether the phrase "comparable to that of biological females of their same age" refers to typical circulating testosterone levels for people who are assigned a female sex at birth as a group or to the circulating testosterone levels of

at least one person who was assigned a female sex at birth. B.P.J. also objects to this request as vague because it does not specify whether the people assigned a female sex at births at issue have gone through puberty even though girls on average typically begin puberty at a younger age than boys on average.

Subject to these general and specific objections, and without waiver thereof, B.P.J. admits that it is possible at least one middle-school-aged person who was assigned a male sex at birth and who has hypogonadism likely has the same levels of circulating testosterone as at least one person of the same age who was assigned a female sex at birth.

Request for Admission No. 23:

23. Admit there are high-school-aged biological males who, because of hypogonadism, have circulating testosterone comparable to that of biological females of their same age.

B.P.J.'s Response to Request for Admission No. 23:

B.P.J. objects to the phrase "biological males" as vague and scientifically inaccurate, and interprets the phrase to mean "people with a male sex assigned at birth." B.P.J. objects to the phrase "biological females" as vague and scientifically inaccurate, and interprets the phrase to mean "people with a female sex assigned at birth." B.P.J. objects to the term "comparable" as vague. B.P.J. also objects to this request as vague with respect to whether the phrase "comparable to that of biological females of their same age" refers to typical circulating testosterone levels for cisgender girls as a group or to the circulating testosterone levels of at least one person with a female sex assigned at birth.

Subject to these general and specific objections, and without waiver thereof, B.P.J. admits that it is possible at least one high-school-aged person who was assigned a male sex at birth and

who had delayed puberty likely has the same levels of circulating testosterone as at least one person of the same age who was assigned a female sex at birth.

Request for Admission No. 24:

24. You have alleged that "[g]irls who are transgender are similarly situated to cisgender girls (as opposed to cisgender boys) for purposes of participating on sex-separated school athletic teams." First Am. Compl. ¶ 39. Admit that for purposes of participating on sex separated school athletic teams, B.P.J. is similarly situated to male-identifying biological males of the same age who have received the same puberty blocking treatment as B.P.J

B.P.J.'s Response to Request for Admission No. 24:

B.P.J. objects to the phrase "male-identifying biological males" as vague and scientifically inaccurate, and interprets the phrase to mean "cisgender boys." B.P.J. objects to the phrase "similarly situated" as vague. B.P.J. objects to this request to the extent it requires B.P.J. to make the counterfactual assumption that there are cisgender boys of the same age as B.P.J. who have received the same puberty blocking treatment as B.P.J.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this request for admission.

Request for Admission No. 25:

25. You have alleged that "[g]irls who are transgender are . . . not similarly situated to cisgender boys with respect to physiological characteristics associated with athletic performance." First Am. Compl. ¶ 40. Admit that with respect to any sex-related "physiological characteristics associated with athletic performance" relevant to running track or cross-country, B.P.J. is similarly situated to male-identifying biological males of the same age who have received the same puberty blocking treatment as B.P.J.

B.P.J.'s Response to Request for Admission No. 25:

B.P.J. objects to the phrase "male-identifying biological males" as vague and scientifically inaccurate, and interprets the phrase to mean "cisgender boys." B.P.J. objects to the phrase "similarly situated" as vague. B.P.J. objects to this request to the extent it requires B.P.J. to make the counterfactual assumption that there are cisgender boys of the same age as B.P.J. who have received the same puberty blocking treatment as B.P.J.

Subject to these general and specific objections, and without waiver thereof, B.P.J. admits that B.P.J. likely has the same level of circulating testosterone as cisgender boys who have not yet begun puberty but denies that they are similarly situated for purposes of Title IX or the Equal Protection Clause.

Request for Admission No. 26:

26. You have alleged that "[g]irls who are transgender are similarly situated to cisgender girls (as opposed to cisgender boys) for purposes of participating on sex-separated school athletic teams." First Am. Compl. ¶ 39. Admit that for purposes of participating on sex separated school athletic teams, B.P.J. is similarly situated to biological male students of the same age who have received the same puberty blocking treatment as B.P.J., regardless of the students' gender identity.

B.P.J.'s Response to Request for Admission No. 26:

B.P.J. objects to the phrase "biological male students" as vague and scientifically inaccurate, and interprets the phrase to mean "students with a male sex assigned at birth." B.P.J. objects to the phrase "similarly situated" as vague. B.P.J. objects to this request to the extent it requires B.P.J. to make the counterfactual assumption that there are cisgender boys of the same age as B.P.J. who have received the same puberty blocking treatment as B.P.J.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this request for admission.

Request for Admission No. 27:

27. You have alleged that "[g]irls who are transgender are . . . not similarly situated to cisgender boys with respect to physiological characteristics associated with athletic performance." First Am. Compl. ¶ 40. Admit that with respect to any sex-related "physiological characteristics associated with athletic performance" relevant to running track or cross-country, B.P.J. is similarly situated to biological male students of the same age who have received the same puberty blocking treatment as B.P.J., regardless of the students' gender identity.

B.P.J.'s Response to Request for Admission No. 27:

B.P.J. objects to the phrase "biological males" as vague and scientifically inaccurate, and interprets the phrase to mean "people who were assigned a male sex at birth." B.P.J. objects to the phrase "similarly situated" as vague. B.P.J. objects to this request to the extent it requires B.P.J. to make the counterfactual assumption that there are cisgender boys of the same age as B.P.J. who have received the same puberty blocking treatment as B.P.J.

Subject to these general and specific objections, and without waiver thereof, B.P.J. admits that B.P.J. likely has the same level of circulating testosterone as other people who were assigned a male sex at birth who have not begun puberty but denies that they are similarly situated regardless of gender identity for purposes of Title IX or the Equal Protection Clause.

Request for Admission No. 28:

28. You have alleged that "[g]irls who are transgender are similarly situated to cisgender girls (as opposed to cisgender boys) for purposes of participating on sex-separated school

athletic teams." First Am. Compl. ¶ 39. Admit that for purposes of participating on sex separated school athletic teams, middle school male-identifying biological male students who received puberty blocking treatment that effectively delayed male puberty are similarly situated to middle school female-identifying biological females of the same age who received no puberty blocking treatment.

B.P.J.'s Response to Request for Admission No. 28:

B.P.J. objects to the phrase "male-identifying biological male students" as vague and scientifically inaccurate, and interprets the phrase to mean "cisgender boys." B.P.J. objects to the phrase "female-identifying biological females" as vague and scientifically inaccurate, and interprets the phrase to mean "cisgender girls." B.P.J. objects to the phrase "similarly situated" as vague. B.P.J. also objects to this request as vague because it does not specify whether the cisgender girls at issue have gone through puberty even though girls on average typically begin puberty at a younger age than boys on average.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this request for admission.

Request for Admission No. 29:

29. You have alleged that "[g]irls who are transgender are . . . not similarly situated to cisgender boys with respect to physiological characteristics associated with athletic performance." First Am. Compl. ¶ 40. Admit that with respect to any sex-related "physiological characteristics associated with athletic performance" relevant to running track or cross-country, middle school male-identifying male students who received puberty blocking treatment that effectively delayed male puberty are similarly situated to middle

school female-identifying females of the same age who received no puberty blocking treatment.

B.P.J.'s Response to Request for Admission No. 29:

B.P.J. objects to the phrase "male-identifying biological male students" as vague and scientifically inaccurate, and interprets the phrase to mean "cisgender boys." B.P.J. objects to the phrase "female-identifying biological females" as vague and scientifically inaccurate, and interprets the phrase to mean "cisgender girls." B.P.J. objects to the phrase "similarly situated" as vague. B.P.J. also objects to this request as vague because it does not specify whether the cisgender girls at issue have gone through puberty even though girls on average typically begin puberty at a younger age than boys on average.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this request for admission.

Request for Admission No. 30:

30. You have alleged that "[g]irls who are transgender are similarly situated to cisgender girls (as opposed to cisgender boys) for purposes of participating on sex-separated school athletic teams." First Am. Compl. ¶ 39. Admit that for purposes of participating on sex separated school athletic teams, biological male middle school students, regardless of gender identity, who received puberty blocking treatment that effectively delayed male puberty are similarly situated to middle school female-identifying females of the same age who received no puberty blocking treatment.

B.P.J.'s Response to Request for Admission No. 30:

B.P.J. objects to the phrase "biological male middle school students" as vague and scientifically inaccurate, and interprets the phrase to mean "students with a male sex assigned at

birth." B.P.J. objects to the phrase "female-identifying biological females" as vague and scientifically inaccurate, and interprets the phrase to mean "cisgender girls." B.P.J. objects to the phrase "similarly situated" as vague.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this request for admission.

Request for Admission No. 31:

31. You have alleged that "[g]irls who are transgender are . . . not similarly situated to cisgender boys with respect to physiological characteristics associated with athletic performance." First Am. Compl. ¶ 40. Admit that with respect to any sex-related "physiological characteristics associated with athletic performance" relevant to running track or cross-country, biological male middle school students, regardless of gender identity, who received puberty blocking treatment that effectively delayed male puberty are similarly situated to female-identifying females of the same age who received no puberty blocking treatment.

B.P.J.'s Response to Request for Admission No. 31:

B.P.J. objects to the phrase "biological male middle school students" as vague and scientifically inaccurate, and interprets the phrase to mean "students with a male sex assigned at birth." B.P.J. objects to the phrase "female-identifying biological females" as vague and scientifically inaccurate, and interprets the phrase to mean "cisgender girls." B.P.J. objects to the phrase "similarly situated" as vague. B.P.J. also objects to this request as vague because it does not specify whether the cisgender girls at issue have gone through puberty even though girls on average typically begin puberty at a younger age than boys on average.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this request for admission.

Request for Admission No. 32:

32. You have alleged that "[g]irls who are transgender are similarly situated to cisgender girls (as opposed to cisgender boys) for purposes of participating on sex-separated school athletic teams." First Am. Compl. ¶ 39. Admit that for purposes of participating on sex-separated school athletic teams, high school male-identifying male students who received puberty blocking treatment that effectively delayed male puberty are similarly situated to high school female-identifying females of the same age who received no puberty blocking or other hormone therapy.

B.P.J.'s Response to Request for Admission No. 32:

B.P.J. objects to the phrase "male-identifying male students" as vague and scientifically inaccurate, and interprets the phrase to mean "cisgender boys." B.P.J. objects to the phrase "female-identifying biological females" as vague and scientifically inaccurate, and interprets the phrase to mean "cisgender girls." B.P.J. objects to the phrase "similarly situated" as vague. B.P.J. objects to this request to the extent it requires B.P.J. to make the counterfactual assumption that there are cisgender boys in high school who receive puberty blocking treatment.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this request for admission.

Request for Admission No. 33:

33. You have alleged that "[g]irls who are transgender are . . . not similarly situated to cisgender boys with respect to physiological characteristics associated with athletic performance." First Am. Compl. ¶ 40. Admit that with respect to any sex-related

"physiological characteristics associated with athletic performance" relevant to running track or cross-country, high school male-identifying male students who received puberty blocking treatment that effectively delayed male puberty are similarly situated to high school female-identifying females of the same age who received no puberty blocking or other hormone therapy.

B.P.J.'s Response to Request for Admission No. 33:

B.P.J. objects to the phrase "male-identifying male students" as vague and scientifically inaccurate, and interprets the phrase to mean "cisgender boys." B.P.J. objects to the phrase "female-identifying biological females" as vague and scientifically inaccurate, and interprets the phrase to mean "cisgender girls." B.P.J. objects to the phrase "similarly situated" as vague. B.P.J. objects to this request to the extent it requires B.P.J. to make the counterfactual assumption that there are cisgender boys in high school who receive puberty blocking treatment.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this request for admission.

Request for Admission No. 34:

34. You have alleged that "[g]irls who are transgender are similarly situated to cisgender girls (as opposed to cisgender boys) for purposes of participating on sex-separated school athletic teams." First Am. Compl. ¶ 39. Admit that for purposes of participating on sex separated school athletic teams, biological male high school students, regardless of gender identity, who received puberty blocking treatment that effectively delayed male puberty are similarly situated to high school female-identifying females of the same age who received no puberty blocking or other hormone therapy.

B.P.J.'s Response to Request for Admission No. 34:

B.P.J. objects to the phrase "biological male high school students" as vague and scientifically inaccurate, and interprets the phrase to mean "high school students who had a male sex assigned at birth." B.P.J. objects to the phrase "female-identifying biological females" as vague and scientifically inaccurate, and interprets the phrase to mean "cisgender girls." B.P.J. objects to the phrase "similarly situated" as vague. B.P.J. objects to this request to the extent it requires B.P.J. to make the counterfactual assumption that there are cisgender boys in high school who receive puberty blocking treatment.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this request for admission.

Request for Admission No. 35:

35. You have alleged that "[g]irls who are transgender are . . . not similarly situated to cisgender boys with respect to physiological characteristics associated with athletic performance." First Am. Compl. ¶ 40. Admit that with respect to any sex-related "physiological characteristics associated with athletic performance" relevant to running track or cross-country, biological male high school students, regardless of gender identity, who received puberty blocking treatment that effectively delayed male puberty are similarly situated to high school female-identifying females of the same age who received no puberty blocking or other hormone therapy.

B.P.J.'s Response to Request for Admission No. 35:

B.P.J. objects to the phrase "biological male high school students" as vague and scientifically inaccurate, and interprets the phrase to mean "high school students who had a male sex assigned at birth." B.P.J. objects to the phrase "female-identifying biological females" as vague and scientifically inaccurate, and interprets the phrase to mean "cisgender girls." B.P.J.

objects to the phrase "similarly situated" as vague. B.P.J. objects to this request to the extent it requires B.P.J. to make the counterfactual assumption that there are cisgender boys in high school who receive puberty blocking treatment.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this request for admission.

Request for Admission No. 36:

36. You have alleged that "[g]irls who are transgender are similarly situated to cisgender girls (as opposed to cisgender boys) for purposes of participating on sex-separated school athletic teams." First Am. Compl. ¶ 39. Admit that for purposes of participating on sex-separated school athletic teams, B.P.J. is not similarly situated to female-identifying biological male students of the same age who have not received any form of puberty blocking or other hormone therapy

B.P.J.'s Response to Request for Admission No. 36:

B.P.J. objects to the phrase "female-identifying biological male students" as vague and scientifically inaccurate, and interprets the phrase to mean "girls who are transgender." B.P.J. objects to the phrase "similarly situated" as vague.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this request for admission.

Request for Admission No. 37:

37. You have alleged that "[g]irls who are transgender are . . . not similarly situated to cisgender boys with respect to physiological characteristics associated with athletic performance." First Am. Compl. ¶ 40. Admit that with respect to any sex-related "physiological characteristics associated with athletic performance" relevant to running

track or cross-country, B.P.J. is not similarly situated to female-identifying biological males of the same age who have not received any form of puberty blocking or other hormone therapy.

B.P.J.'s Response to Request for Admission No. 37:

B.P.J. objects to the phrase "female-identifying biological male students" as vague and scientifically inaccurate, and interprets the phrase to mean "girls who are transgender." B.P.J. objects to the phrase "similarly situated" as vague. B.P.J. also objects to this request as vague because it does not specify whether the hypothetical 11-year-old girls who are transgender have begun endogenous puberty.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this request for admission.

Request for Admission No. 38:

38. You have alleged that "[g]irls who are transgender are similarly situated to cisgender girls (as opposed to cisgender boys) for purposes of participating on sex-separated school athletic teams." First Am. Compl. ¶ 39. Admit that for purposes of participating on sex-separated school athletic teams, B.P.J. is not similarly situated to biological male students of the same age who have not received any form of puberty blocking or other hormone therapy, regardless of the students' gender identity.

B.P.J.'s Response to Request for Admission No. 38:

B.P.J. objects to the phrase "biological male students" as vague and scientifically inaccurate, and interprets the phrase to mean "students who were assigned a male sex at birth." B.P.J. objects to the phrase "similarly situated" as vague.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies the request for admission.

Request for Admission No. 39:

39. You have alleged that "[g]irls who are transgender are . . . not similarly situated to cisgender boys with respect to physiological characteristics associated with athletic performance." First Am. Compl. ¶ 40. Admit that with respect to any "physiological characteristics associated with athletic performance" relevant to running track or cross-country, B.P.J. is not similarly situated to biological male students of the same age who have not received any form of puberty blocking or other hormone therapy, regardless of the students' gender identity.

B.P.J.'s Response to Request for Admission No. 39:

B.P.J. objects to the phrase "biological male students" as vague and scientifically inaccurate, and interprets the phrase to mean "students who were assigned a male sex at birth." B.P.J. objects to the phrase "similarly situated" as vague. B.P.J. objects to the phrase "similarly situated" as vague. B.P.J. also objects to this request as vague because it does not specify whether the hypothetical 11-year-olds with a male sex assigned at birth have begun endogenous puberty.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this request for admission.

Request for Admission No. 40:

40. You have alleged that "[g]irls who are transgender are similarly situated to cisgender girls (as opposed to cisgender boys) for purposes of participating on sex-separated school athletic teams." First Am. Compl. ¶ 39. Admit that for purposes of participating on sex separated school athletic teams, high school male-identifying biological males who

experienced endogenous male puberty but have since received hormone therapy sufficient to bring their circulating testosterone down into the range typical for biological females of their same age are similarly situated to female-identifying biological females of the same age who have received no puberty blocking or other hormone therapy.

B.P.J.'s Response to Request for Admission No. 40:

B.P.J. objects to the phrase "male-identifying biological males" as vague and scientifically inaccurate, and interprets the phrase to mean "cisgender boys." B.P.J. objects to the phrase "biological females" as vague and scientifically inaccurate, and interprets the phrase to mean "people who had a female sex assigned at birth." B.P.J. objects to the phrase "similarly situated" as vague. B.P.J. objects to this request to the extent it requires B.P.J. to make the counterfactual assumption that there are cisgender boys in high school who receive hormone therapy sufficient to bring their circulating testosterone down into the range typical for cisgender girls of the same age.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this request for admission.

Request for Admission No. 41:

41. You have alleged that "[g]irls who are transgender are . . . not similarly situated to cisgender boys with respect to physiological characteristics associated with athletic performance." First Am. Compl. ¶ 40. Admit that with respect to sex-related "physiological characteristics associated with athletic performance" relevant to running track or cross-country, high school male-identifying biological males who experienced endogenous male puberty but have since received hormone therapy sufficient to bring their circulating testosterone down into the range typical for biological females of their same age are

similarly situated to female-identifying biological females of the same age who have received no puberty blocking or other hormone therapy.

B.P.J.'s Response to Request for Admission No. 41:

B.P.J. objects to the phrase "male-identifying biological males" as vague and scientifically inaccurate, and interprets the phrase to mean "cisgender boys." B.P.J. objects to the phrase "biological females" as vague and scientifically inaccurate, and interprets the phrase to mean "people who had a female sex assigned at birth." B.P.J. objects to the phrase "female identifying biological females" as vague and scientifically inaccurate, and interprets the phrase to mean "cisgender girls." B.P.J. objects to the phrase "similarly situated" as vague. B.P.J. objects to this request to the extent it requires B.P.J. to make the counterfactual assumption that there are cisgender boys in high school who receive hormone therapy sufficient to bring their circulating testosterone down into the range typical for cisgender girls of the same age.

Subject to these general and specific objections, and without waiver thereof, B.P.J. admits that cisgender high school boys who lower their levels of circulating testosterone to the same levels that are typical for cisgender girls of the same age would, on average, have the same levels of circulating testosterone as cisgender girls, on average, but denies that the two groups are similarly situated for purposes of Title IX or the Equal Protection Clause.

Request for Admission No. 42:

42. You have alleged that "[g]irls who are transgender are similarly situated to cisgender girls (as opposed to cisgender boys) for purposes of participating on sex-separated school athletic teams." First Am. Compl. ¶ 39. Admit that for purposes of participating on sex-separated school athletic teams, biological male middle school students, regardless of gender identity, who experienced endogenous male puberty but have since received

hormone therapy sufficient to bring their circulating testosterone down into the range typical for biological females of their age are similarly situated to female-identifying biological females of the same age who have received no puberty blocking or other hormone therapy.

B.P.J.'s Response to Request for Admission No. 42:

B.P.J. objects to the phrase "biological male middle school students" as vague and scientifically inaccurate, and interprets the phrase to mean "middle school students who were assigned a male sex at birth." B.P.J. objects to the phrase "biological females" as vague and scientifically inaccurate, and interprets the phrase to mean "people who had a female sex assigned at birth." B.P.J. objects to the phrase "female identifying biological females" as vague and scientifically inaccurate, and interprets the phrase to mean "cisgender girls." B.P.J. objects to the phrase "similarly situated" as vague. B.P.J. objects to this request to the extent it requires B.P.J. to make the counterfactual assumption that there are cisgender boys in middle school who receive hormone therapy sufficient to bring their circulating testosterone down into the range typical for cisgender girls of the same age.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this request for admission.

Request for Admission No. 43:

43. You have alleged that "[g]irls who are transgender are . . . not similarly situated to cisgender boys with respect to physiological characteristics associated with athletic performance." First Am. Compl. ¶ 40. Admit that with respect to sex-related "physiological characteristics associated with athletic performance" relevant to running track and cross-country, biological male middle school students, regardless of gender identity, who

experienced endogenous male puberty but have since received hormone therapy sufficient to bring their circulating testosterone down into the range typical for biological females of their same age are similarly situated to female-identifying biological females of the same age who have received no puberty blocking or other hormone therapy.

B.P.J.'s Response to Request for Admission No. 43:

B.P.J. objects to the phrase "biological male middle school students" as vague and scientifically inaccurate, and interprets the phrase to mean "middle school students who were assigned a male sex at birth." B.P.J. objects to the phrase "biological females" as vague and scientifically inaccurate, and interprets the phrase to mean "people who had a female sex assigned at birth." B.P.J. objects to the phrase "female identifying biological females" as vague and scientifically inaccurate, and interprets the phrase to mean "cisgender girls." B.P.J. objects to the phrase "similarly situated" as vague. B.P.J. objects to this request to the extent it requires B.P.J. to make the counterfactual assumption that there are cisgender boys in middle school who receive hormone therapy sufficient to bring their circulating testosterone down into the range typical for cisgender girls of the same age.

Subject to these general and specific objections, and without waiver thereof, B.P.J. admits that the two hypothetical groups of people would have on average the same levels of circulating testosterone but denies that they would be similarly situated for purposes of Title IX and the Equal Protection Clause.

Request for Admission No. 44:

44. You have alleged that "[g]irls who are transgender are similarly situated to cisgender girls (as opposed to cisgender boys) for purposes of participating on sex-separated school athletic teams." First Am. Compl. ¶ 39. Admit that for purposes of participating on sex

separated school athletic teams, biological male high school students, regardless of gender identity, who experienced endogenous male puberty but have since received hormone therapy sufficient to bring their circulating testosterone down into the range typical for biological females of their same age, are similarly situated to female-identifying biological females of the same age who have received no puberty blocking or other hormone therapy.

B.P.J.'s Response to Request for Admission No. 44:

B.P.J. objects to the phrase "biological male high school students" as vague and scientifically inaccurate, and interprets the phrase to mean "high school students who were assigned a male sex at birth." B.P.J. objects to the phrase "biological females" as vague and scientifically inaccurate, and interprets the phrase to mean "people who had a female sex assigned at birth." B.P.J. objects to the phrase "female identifying biological females" as vague and scientifically inaccurate, and interprets the phrase to mean "cisgender girls." B.P.J. objects to the phrase "similarly situated" as vague. B.P.J. objects to this request to the extent it requires B.P.J. to make the counterfactual assumption that there are high school cisgender boys who experienced endogenous male puberty but have since received hormone therapy sufficient to bring their circulating testosterone down into the range typical for people who had a female sex assigned at birth of their age.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this request for admission.

Request for Admission No. 45:

45. You have alleged that "[g]irls who are transgender are . . . not similarly situated to cisgender boys with respect to physiological characteristics associated with athletic performance." First Am. Compl. ¶ 40. Admit that with respect to sex-related "physiological

characteristics associated with athletic performance" relevant to running track and cross-country, biological male high school students, regardless of gender identity, who experienced endogenous male puberty but have since received hormone therapy sufficient to bring their circulating testosterone down into the range typical for biological females of their same age are similarly situated to female-identifying biological females of the same age who have received no puberty blocking or other hormone therapy.

B.P.J.'s Response to Request for Admission No. 45:

B.P.J. objects to the phrase "biological male high school students" as vague and scientifically inaccurate, and interprets the phrase to mean "high school students who were assigned a male sex at birth." B.P.J. objects to the phrase "biological females" as vague and scientifically inaccurate, and interprets the phrase to mean "people who had a female sex assigned at birth." B.P.J. objects to the phrase "female identifying biological females" as vague and scientifically inaccurate, and interprets the phrase to mean "cisgender girls." B.P.J. objects to the phrase "similarly situated" as vague. B.P.J. objects to this request to the extent it requires B.P.J. to make the counterfactual assumption that there are high school cisgender boys who experienced endogenous male puberty but have since received hormone therapy sufficient to bring their circulating testosterone down into the range typical for people who had a female sex assigned at birth of their age.

Subject to these general and specific objections, and without waiver thereof, B.P.J. admits that the two hypothetical groups of people would have on average the same levels of circulating testosterone but denies that they would be similarly situated for purposes of Title IX and the Equal Protection Clause.

Request for Admission No. 46:

46. You have alleged that "[g]irls who are transgender are similarly situated to cisgender girls (as opposed to cisgender boys) for purposes of participating on sex-separated school athletic teams." First Am. Compl. ¶ 39. Admit that for purposes of participating on sex separated school athletic teams, B.P.J. is not similarly situated to female-identifying biological females of the same age who have received hormone therapy to delay female puberty or produce masculinizing effects.

B.P.J.'s Response to Request for Admission No. 46:

B.P.J. objects to the phrase "female identifying biological females" as vague and scientifically inaccurate, and interprets the phrase to mean "cisgender girls." B.P.J. objects to the phrase "similarly situated" as vague. B.P.J. objects to the request to the extent that it requires B.P.J. to make the counterfactual assumption that "puberty blocking treatment" can "produce masculinizing effects." B.P.J. objects to this request to the extent it requires B.P.J. to make the counterfactual assumption that there are 11-year-old cisgender girls who receive hormone therapy to delay female puberty or produce masculinizing effects.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this request for admission.

Request for Admission No. 47:

47. You have alleged that "[g]irls who are transgender are . . . not similarly situated to cisgender boys with respect to physiological characteristics associated with athletic performance." First Am. Compl. ¶ 40. Admit that with respect to sex-related "physiological characteristics associated with athletic performance" relevant to running track or cross-country, B.P.J. is not similarly situated to female-identifying biological females of the same

age who have received puberty blocking treatment to delay female puberty or produce masculinizing effects.

B.P.J.'s Response to Request for Admission No. 47:

B.P.J. objects to the phrase "female identifying biological females" as vague and scientifically inaccurate, and interprets the phrase to mean "cisgender girls." B.P.J. objects to the phrase "similarly situated" as vague and requires B.P.J. to make the counterfactual assumption that "puberty blocking treatment" can "produce masculinizing effects." B.P.J. objects to this request to the extent it requires B.P.J. to make the counterfactual assumption that there are 11-year-old cisgender girls who receive hormone therapy to delay female puberty or produce masculinizing effects.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this request for admission.

Request for Admission No. 48:

48. You have alleged that "[g]irls who are transgender are similarly situated to cisgender girls (as opposed to cisgender boys) for purposes of participating on sex-separated school athletic teams." First Am. Compl. ¶ 39. Admit that for purposes of participating on sex-separated school athletic teams, B.P.J. is not similarly situated to biological female students of the same age who have received puberty blocking treatment to delay female puberty or produce masculinizing effects, regardless of the students' gender identity.

B.P.J.'s Response to Request for Admission No. 48:

B.P.J. objects to the phrase "biological female students" as vague and scientifically inaccurate, and interprets the phrase to mean "students who were assigned a female sex at birth."

B.P.J. objects to the phrase "similarly situated" as vague. B.P.J. objects to the request to the extent that it requires B.P.J. to make the counterfactual assumption that "puberty blocking treatment" can "produce masculinizing effects." B.P.J. objects to this request to the extent it requires B.P.J. to make the counterfactual assumption that there are 11-year-old cisgender girls who receive hormone therapy to delay female puberty or produce masculinizing effects.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this request for admission.

Request for Admission No. 49:

49. You have alleged that "[g]irls who are transgender are . . . not similarly situated to cisgender boys with respect to physiological characteristics associated with athletic performance." First Am. Compl. ¶ 40. Admit that with respect to sex-related "physiological characteristics associated with athletic performance" relevant to running track or cross-country, B.P.J. is not similarly situated to biological female students of the same age who have received puberty blocking treatment to delay female puberty or produce masculinizing effects, regardless of the students' gender identity.

B.P.J.'s Response to Request for Admission No. 49:

B.P.J. objects to the phrase "female identifying biological females" as vague and scientifically inaccurate, and interprets the phrase to mean "cisgender girls." B.P.J. objects to the phrase "similarly situated" as vague. B.P.J. objects to the request to the extent that it requires B.P.J. to make the counterfactual assumption that "puberty blocking treatment" can "produce masculinizing effects." B.P.J. objects to this request to the extent it requires B.P.J. to make the counterfactual assumption that there are 11-year-old cisgender girls who receive puberty blocking treatment.

Subject to these general and specific objections, and without waiver thereof, B.P.J. admits B.P.J. likely has the same circulating levels of testosterone as people of the same age who have a female sex assigned at birth and who receive puberty blocking treatment but denies that B.P.J. is similarly situated to those individuals regardless of the students' gender identity for purposes of Title IX and the Equal Protection Clause.

Request for Admission No. 50:

50. You have alleged that "[g]irls who are transgender are similarly situated to cisgender girls (as opposed to cisgender boys) for purposes of participating on sex-separated school athletic teams." First Am. Compl. ¶ 39. Admit that for purposes of participating on sex-separated school athletic teams, B.P.J. is similarly situated to male-identifying biological females of the same age who have not received any form of puberty blocking or other hormone therapy.

B.P.J.'s Response to Request for Admission No. 50:

B.P.J. objects to the phrase "male identifying biological females" as vague and scientifically inaccurate, and interprets the phrase to mean "boys who are transgender." B.P.J. objects to the phrase "similarly situated" as vague.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this request for admission.

Request for Admission No. 51:

51. You have alleged that "[g]irls who are transgender are . . . not similarly situated to cisgender boys with respect to physiological characteristics associated with athletic performance." First Am. Compl. ¶ 40. Admit that with respect to any sex-related "physiological characteristics associated with athletic performance" relevant to running

track or cross country, B.P.J. is similarly situated to male-identifying biological females of the same age who have not received any form of puberty blocking or other hormone therapy.

B.P.J.'s Response to Request for Admission No. 51:

B.P.J. objects to the phrase "male identifying biological females" as vague and scientifically inaccurate, and interprets the phrase to mean "boys who are transgender." B.P.J. objects to the phrase "similarly situated" as vague. B.P.J. also objects to the request as vague because it does not specify whether the 11-year-old people who were assigned a female sex at birth at issue have gone through puberty even though girls on average typically begin puberty at a younger age than boys on average.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this request for admission.

Request for Admission No. 52:

52. You have alleged that "[g]irls who are transgender are similarly situated to cisgender girls (as opposed to cisgender boys) for purposes of participating on sex-separated school athletic teams." Am. Compl. ¶ 39. Admit that for purposes of participating on sex-separated school athletic teams, B.P.J. is similarly situated to biological female students of the same age who have not received any form of puberty blocking or other hormone therapy, regardless of the students' gender identity.

B.P.J.'s Response to Request for Admission No. 52:

B.P.J. objects to the phrase "biological female students" as vague and scientifically inaccurate, and interprets the phrase to mean "students who had a female-sex assigned at birth." B.P.J. objects to the phrase "similarly situated" as vague.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this request for admission.

Request for Admission No. 53:

53. You have alleged that "[g]irls who are transgender are . . . not similarly situated to cisgender boys with respect to physiological characteristics associated with athletic performance." First Am. Compl. ¶ 40. Admit that with respect to any sex-related "physiological characteristics associated with athletic performance" relevant to running track or cross-country, B.P.J. is similarly situated to biological female students of the same age who have not received any form of puberty blocking or other hormone therapy, regardless of the students' gender identity.

B.P.J.'s Response to Request for Admission No. 53:

B.P.J. objects to the phrase "biological female students" as vague and scientifically inaccurate, and interprets the phrase to mean "people who were assigned a female sex at birth." B.P.J. objects to the phrase "similarly situated" as vague. B.P.J. also objects to the request as vague because it does not specify whether the 11-year-old people who were assigned a female sex at birth at issue have gone through puberty even though girls on average typically begin puberty at a younger age than boys on average.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this request for admission.

Request for Admission No. 54:

54. You have alleged that "[g]irls who are transgender are similarly situated to cisgender girls (as opposed to cisgender boys) for purposes of participating on sex-separated school athletic teams." First Am. Compl. ¶ 39. Admit that for purposes of participating on sex-

separated school athletic teams, female-identifying biological male middle school students who have not received any form of puberty blocking or other hormone therapy are not similarly situated to female-identifying biological females of the same age who have received no puberty blocking or other hormone therapy.

B.P.J.'s Response to Request for Admission No. 54:

B.P.J. objects to the phrase "female-identifying biological male" as vague and scientifically inaccurate, and interprets the phrase to mean "girls who are transgender." B.P.J. objects to the phrase "similarly situated" as vague.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this request for admission.

Request for Admission No. 55:

55. You have alleged that "[g]irls who are transgender are . . . not similarly situated to cisgender boys with respect to physiological characteristics associated with athletic performance." First Am. Compl. ¶ 40. Admit that with respect to any sex-related "physiological characteristics associated with athletic performance" relevant to running track or cross-country, female-identifying biological male middle school students who have not received any form of puberty blocking or other hormone therapy are not similarly situated to female-identifying biological females of the same age who have received no puberty blocking or other hormone therapy.

B.P.J.'s Response to Request for Admission No. 55:

B.P.J. objects to the phrase "female-identifying biological male" as vague and scientifically inaccurate, and interprets the phrase to mean "girls who are transgender." B.P.J. objects to the phrase "female-identifying biological female" as vague and scientifically inaccurate, and interprets

the phrase to mean "cisgender girls." B.P.J. objects to the phrase "similarly situated" as vague. B.P.J. objects to the request as vague because it does not specify whether the cisgender girls at issue have gone through puberty even though girls on average typically begin puberty at a younger age than boys on average.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this request for admission.

Request for Admission No. 56:

56. You have alleged that "[g]irls who are transgender are similarly situated to cisgender girls (as opposed to cisgender boys) for purposes of participating on sex-separated school athletic teams." First Am. Compl. ¶ 39. Admit that for purposes of participating on sex-separated school athletic teams, female-identifying biological male high school students who have not received any form of puberty blocking or other hormone therapy are not similarly situated to female-identifying biological females of the same age who have received no puberty blocking or other hormone therapy.

B.P.J.'s Response to Request for Admission No. 56:

B.P.J. objects to the phrase "female-identifying biological male high school students" as vague and scientifically inaccurate, and interprets the phrase to mean "girls who are transgender who are high school students." B.P.J. objects to the phrase "female-identifying biological females" as vague and scientifically inaccurate, and interprets the phrase to mean "cisgender girls." B.P.J. objects to the phrase "similarly situated" as vague.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this request for admission.

Request for Admission No. 57:

57. You have alleged that "[g]irls who are transgender are . . . not similarly situated to cisgender boys with respect to physiological characteristics associated with athletic performance." First Am. Compl. ¶ 40. Admit that with respect to any sex-related "physiological characteristics associated with athletic performance" relevant to running track or cross-country, female-identifying biological male high school students who have not received any form of puberty blocking or other hormone therapy are not similarly situated to female-identifying biological females of the same age who have received no puberty blocking or other hormone therapy.

B.P.J.'s Response to Request for Admission No. 57:

B.P.J. objects to the phrase "female-identifying biological male high school students" as vague and scientifically inaccurate, and interprets the phrase to mean "girls who are transgender who are high school students." B.P.J. objects to the phrase "female-identifying biological females" as vague and scientifically inaccurate, and interprets the phrase to mean "cisgender girls." B.P.J. objects to the phrase "similarly situated" as vague.

Subject to these general and specific objections, and without waiver thereof, B.P.J. admits that girls who are transgender who are high school students and who have not received any form of puberty blocking or other hormone therapy will, on average, have higher levels of circulating testosterone than cisgender girls who have received no puberty blocking or other hormone therapy, on average, but deny that the two groups are not similarly situated for purposes of Title IX and the Equal Protection Clause.

Request for Admission No. 58:

58. You have alleged that "[g]irls who are transgender are similarly situated to cisgender girls (as opposed to cisgender boys) for purposes of participating on sex-separated school

athletic teams." First Am. Compl. ¶ 39. Admit that for purposes of participating on sex separated school athletic teams, biological male middle school students, regardless of gender identity, who have not received any form of puberty blocking or other hormone therapy are not similarly situated to female-identifying biological females of the same age who have received no puberty blocking or other hormone therapy.

B.P.J.'s Response to Request for Admission No. 58:

B.P.J. objects to the phrase "biological male middle school students" as vague and scientifically inaccurate, and interprets the phrase to mean "middle school students who had a male sex assigned at birth." B.P.J. objects to the phrase "female-identifying biological females" as vague and scientifically inaccurate, and interprets the phrase to mean "cisgender girls." B.P.J. objects to the phrase "similarly situated" as vague.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this request for admission.

Request for Admission No. 59:

59. You have alleged that "[g]irls who are transgender are . . . not similarly situated to cisgender boys with respect to physiological characteristics associated with athletic performance." First Am. Compl. ¶ 40. Admit that with respect to any sex-related "physiological characteristics associated with athletic performance" relevant to running track or cross-country, biological male middle school students, regardless of gender identity, who have not received any form of puberty blocking or other hormone therapy are not similarly situated to female identifying biological females of the same age who have received no puberty blocking or other hormone therapy.

B.P.J.'s Response to Request for Admission No. 59:

B.P.J. objects to the phrase "biological male middle school students" as vague and scientifically inaccurate, and interprets the phrase to mean "middle school students who had a male sex assigned at birth." B.P.J. objects to the phrase "female-identifying biological females" as vague and scientifically inaccurate, and interprets the phrase to mean "cisgender girls." B.P.J. objects to the phrase "similarly situated" as vague. B.P.J. also objects to this request as vague because it does not specify whether the cisgender girls at issue have gone through puberty even though girls on average typically begin puberty at a younger age than boys on average.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this request for admission.

Request for Admission No. 60:

60. You have alleged that "[g]irls who are transgender are similarly situated to cisgender girls (as opposed to cisgender boys) for purposes of participating on sex-separated school athletic teams." First Am. Compl. ¶ 39. Admit that for purposes of participating on sex separated school athletic teams, biological male high school students, regardless of gender identity, who have not received any form of puberty blocking or other hormone therapy are not similarly situated to female-identifying biological females of the same age who have received no puberty blocking or other hormone therapy.

B.P.J.'s Response to Request for Admission No. 60:

B.P.J. objects to the phrase "biological male high school students" as vague and scientifically inaccurate, and interprets the phrase to mean "high school students who had a male sex assigned at birth." B.P.J. objects to the phrase "female-identifying biological females" as

vague and scientifically inaccurate, and interprets the phrase to mean "cisgender girls." B.P.J. objects to the phrase "similarly situated" as vague.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this request for admission.

Request for Admission No. 61:

61. You have alleged that "[g]irls who are transgender are . . . not similarly situated to cisgender boys with respect to physiological characteristics associated with athletic performance." First Am. Compl. ¶ 40. Admit that with respect to any sex-related "physiological characteristics associated with athletic performance," Am. Compl. ¶ 40, relevant to running track or cross-country, biological male high school students, regardless of gender identity, who have not received any form of puberty blocking or other hormone therapy are not similarly situated to female-identifying biological females of the same age who have received no puberty blocking or other hormone therapy.

B.P.J.'s Response to Request for Admission No. 61:

B.P.J. objects to the phrase "biological male high school students" as vague and scientifically inaccurate, and interprets the phrase to mean "high school students who had a male sex assigned at birth." B.P.J. objects to the phrase "female-identifying biological females" as vague and scientifically inaccurate, and interprets the phrase to mean "cisgender girls." B.P.J. objects to the phrase "similarly situated" as vague.

Subject to these general and specific objections, and without waiver thereof, B.P.J. admits that high school students who had a male sex assigned at birth who have not received any form of puberty blocking or other hormone therapy will, on average, have higher levels of circulating testosterone than cisgender girls of the same age who have received no puberty blocking or other

hormone therapy, on average, but denies that they are not similarly situated regardless of gender identity for purposes of Title IX and the Equal Protection Clause.

Request for Admission No. 62:

62. Admit that a person's gender identity may be neither male nor female.

B.P.J.'s Response to Request for Admission No. 62:

Admit.

Request for Admission No. 63:

63. Admit that a person's gender identity may change over time.

B.P.J.'s Response to Request for Admission No. 63:

Deny.

Request for Admission No. 64:

64. Admit that under H.B. 3293, a male-identifying biological male athlete is precluded from participating on sex-separated female sports teams regardless of the quantity of circulating testosterone in this individual's body.

B.P.J.'s Response to Request for Admission No. 64:

B.P.J. objects to the phrase "male-identifying biological male" as vague and scientifically inaccurate, and interprets the phrase to mean "cisgender boy." B.P.J. further objects to the phrase "under H.B. 3293" as vague and interprets the phrase to mean the period of time after H.B. 3293 was enacted.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this request for admission because cisgender boys were already precluded from participating on sex-separated female sports before H.B. 3293 was enacted, but admits that H.B. 3293 continues this existing policy.

Request for Admission No. 65:

65. Admit that under H.B. 3293, a male-identifying biological male athlete is precluded from participating on sex-separated female sports teams regardless of the extent to which he has (or has not) experienced endogenous male puberty.

B.P.J.'s Response to Request for Admission No. 65:

B.P.J. objects to the phrase "male-identifying biological male" as vague and scientifically inaccurate, and interprets the phrase to mean "cisgender boy." B.P.J. further objects to the phrase "under H.B. 3293" as vague and interprets the phrase to mean the period of time after H.B. 3293 was enacted.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this request for admission because cisgender boys were already precluded from participating on sex-separated female sports before H.B. 3293 was enacted, but admits that H.B. 3293 continues this existing policy.

Request for Admission No. 66:

66. Admit that under H.B. 3293, a male-identifying biological male athlete is precluded from participating on sex-separated female sports teams regardless of athletic ability.

B.P.J.'s Response to Request for Admission No. 66:

B.P.J. objects to the phrase "male-identifying biological male" as vague and scientifically inaccurate, and interprets the phrase to mean "cisgender boy." B.P.J. further objects to the phrase "under H.B. 3293" as vague and interprets the phrase to mean the period of time after H.B. 3293 was enacted.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this request for admission because cisgender boys were already precluded from participating on

sex-separated female sports before H.B. 3293 was enacted, but admits that H.B. 3293 continues this existing policy.

Request for Admission No. 67:

67. Admit that in the absence of medical intervention, endogenous male puberty provides, at the "population level" (as this term is used in First Am. Compl. ¶ 40), benefits in athletic performance not obtained by people who do not experience male puberty.

B.P.J.'s Response to Request for Admission No. 67:

B.P.J. objects to the phrase "benefits in athletic performance" as vague because it does not specify the stage of puberty or the athletic competition at issue. B.P.J. also objects to the phrase "medical intervention" as vague.

Subject to these general and specific objections, and without waiver thereof, B.P.J. cannot admit or deny this request for admission because there have not been sufficient studies across all athletes of all ages in all sports at all levels to determine whether there are average differences in performance between individuals who have gone through endogenous male puberty and not received medical intervention compared to people who have not experienced male puberty including in light of other possible factors.

Request for Admission No. 68:

68. Admit that the State of West Virginia has a significant governmental interest in promoting equal athletic opportunities for people born with the physiological characteristics associated with the female sex.

B.P.J.'s Response to Request for Admission No. 68:

B.P.J. objects to the phrase "significant governmental interest" as vague. B.P.J. objects to the phrase "promoting equal athletic opportunities for people born with the physiological

characteristics associated with the female sex" as vague because it does not specify the comparator group.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this request for admission.

Request for Admission No. 69:

69. Admit that gender identity, divorced from all forms of hormone therapy or other pharmacological treatment, has no independent effect on athletic ability.

B.P.J.'s Response to Request for Admission No. 69:

B.P.J. objects to the phrases "independent effect" and "athletic ability" as vague.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this request for admission.

Dated: February 7, 2022

Respectfully submitted,
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IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA
CHARLESTON DIVISION

B.P.J. by her next friend and mother, HEATHER JACKSON,

Plaintiff,

v.

WEST VIRGINIA STATE BOARD OF EDUCATION, HARRISON COUNTY BOARD OF EDUCATION, WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION, W. CLAYTON BURCH in his official capacity as State Superintendent, DORA STUTLER in her official capacity as Harrison County Superintendent, and THE STATE OF WEST VIRGINIA,

Defendants,

and

LAINEY ARMISTEAD,

Defendant-Intervenor.

Civil Action No. 2:21-cv-00316

Hon. Joseph R. Goodwin

PLAINTIFF'S RESPONSES AND OBJECTIONS TO INTERVENOR LAINEY ARMISTEAD'S THIRD SET OF INTERROGATORIES AND SECOND AND THIRD SETS OF REQUESTS FOR ADMISSION

Pursuant to Federal Rules of Civil Procedure Rules 26, 33, and 34 Plaintiff B.P.J. by her next friend and mother, Heather Jackson ("B.P.J."), responds as follows to Intervenor Lainey Armistead's ("Intervenor") Third Set of Interrogatories ("Interrogatories") and Second and Third Sets of Requests for Admission ("Requests"):

GENERAL RESPONSES

1. B.P.J.'s response to the Interrogatories and Requests is made to the best of B.P.J.'s present knowledge, information, and belief. This response is at all times subject to such additional or different information that discovery or further investigation may disclose and, while based on the present state of B.P.J.'s recollection, is subject to such refreshing of

recollection, and such additional knowledge of facts, as may result from B.P.J.'s further discovery or investigation.

2. To the extent B.P.J. agrees to produce documents or information in response to any particular Interrogatory or Request, B.P.J. will produce only non-privileged, responsive documents in her possession, custody, or control, and in accordance with Exhibit A of the parties' Rule 26(f) report filed on September 7, 2021 (ECF No. 92-1) in this action.

3. B.P.J. has no duty to, and will not, produce or identify documents or information that are not in her possession, custody, or control. By stating in these responses that B.P.J. will search for or produce documents or information, B.P.J. does not represent that any such documents or information actually exist. Rather, B.P.J. represents that she will undertake a good-faith search and reasonable inquiry to ascertain whether the documents or information described in any such response do, in fact, exist, and, if so, will produce responsive, non-privileged documents or information within B.P.J.'s possession, custody, or control in accordance with Exhibit A of the parties' Rule 26(f) report filed on September 7, 2021 (ECF No. 92-1) in this action.

4. B.P.J. reserves the right to make any use of, or to introduce at any hearing and at trial, documents responsive to the Interrogatories or Requests but discovered subsequent to the date of B.P.J.'s initial production, including, but not limited to, any documents obtained in discovery herein.

5. B.P.J. reserves all objections or other questions as to the competency, relevance, materiality, privilege, or admissibility as evidence in any subsequent proceeding in or trial

of this or any other action for any purpose whatsoever of this response and any document or thing produced in response to the Interrogatories or Requests.

6. B.P.J. reserves the right to object on any ground at any time to such other or supplemental requests for production as Intervenor may at any time propound involving or relating to the subject matter of these Interrogatories or Requests.

7. B.P.J. is willing to meet and confer with Intervenor regarding any response or objection to the Interrogatories or Requests.

GENERAL OBJECTIONS

B.P.J. makes the following general objections, whether or not separately set forth in response to each Interrogatory or Request, to each and every Definition, Interrogatory, and Request made in Intervenor's Third Set of Interrogatories and Second and Third Sets of Requests for Admission:

1. B.P.J. objects generally to all Definitions, Interrogatories, and Requests inclusive, insofar as each such request seeks production of documents or information protected by the attorney-client privilege, the work product doctrine, or any other applicable privilege. Such documents or information shall not be produced in response to the Interrogatories or Requests, and any inadvertent production thereof shall not be deemed a waiver of any privilege or right with respect to such documents or information or of any work product doctrine that may attach thereto.

2. B.P.J. objects to all Definitions, Interrogatories, and Requests inclusive, to the extent they purport to enlarge, expand, or alter in any way the plain meaning and scope of any specific Request on the ground that such enlargement, expansion, or alteration renders said Request vague, ambiguous, unintelligible, unduly broad, and uncertain.

3. B.P.J. objects to all Definitions, Interrogatories, and Requests inclusive, to the extent they seek documents not currently in B.P.J.'s possession, custody, or control, or refer to persons, entities, or events not known to B.P.J., on the grounds that such Definitions, Interrogatories, or Requests seek to require more of B.P.J. than any obligation imposed by law, would subject B.P.J. to unreasonable and undue burden and expense, and would seek to impose upon B.P.J. an obligation to investigate or discover information or materials from third parties or services who are equally accessible to Intervenor.

4. B.P.J.'s failure to object to the Interrogatories or Requests on a particular ground shall not be construed as a waiver of her right to object on that ground or any additional ground at any time.

SPECIFIC OBJECTIONS AND RESPONSES TO INTERROGATORIES

Without waiving or limiting in any manner any of the foregoing General Objections, but rather incorporating them into each of the following responses to the extent applicable, B.P.J. responds to the specific Requests of Intervenor's Third Set of Interrogatories as follows:

Interrogatory No. 13:

13. Whether you admit or deny Intervenor's Requests for Admission No. 4, please explain the reasons supporting your contention, including all material facts supporting them.

B.P.J.'s Response To Interrogatory No. 13:

B.P.J. incorporates the general and specific objections contained in B.P.J.'s response to Intervenor's Request for Admission No. 4. B.P.J. further objects to Interrogatory 13 because it asks B.P.J. to provide "reasons" and "all material facts supporting" an opposing party's contention that B.P.J. has already admitted.

Interrogatory No. 14:

14. Whether you admit or deny Intervenor's Requests for Admission No. 25, please explain the reasons supporting your contention, including all material facts supporting them.

B.P.J.'s Response To Interrogatory No. 14:

B.P.J. incorporates the general and specific objections contained in B.P.J.'s response to Intervenor's Request for Admission No. 25. B.P.J. object to Intervenor's Interrogatory No. 14 to the extent it requires B.P.J to provide "reasons" and "all material facts supporting" a contention that B.P.J. has already admitted.

Subject to and without waiving these general and specific objections, B.P.J. states that she is not similarly situated to a hypothetical cisgender boy who has not yet begun puberty for purposes of Title IX or the Equal Protection Clause because B.P.J. is a girl.

Interrogatory No. 15:

15. Whether you admit or deny Intervenor's Requests for Admission No. 26, please explain the reasons supporting your contention, including all material facts supporting them.

B.P.J.'s Response To Interrogatory No. 15:

B.P.J. incorporates the general and specific objections contained in B.P.J.'s response to Intervenor's Request for Admission No. 26.

Subject to and without waiving these general and specific objections, B.P.J. states that she denies Request for Admission No. 26 because B.P.J. is a girl.

Interrogatory No. 16:

16. Whether you admit or deny Intervenor's Requests for Admission No. 34, please explain the reasons supporting your contention, including all material facts supporting them.

B.P.J.'s Response To Interrogatory No. 16:

B.P.J. incorporates the general and specific objections contained in B.P.J.'s response to Intervenor's Request for Admission No. 34.

Subject to and without waiving these general and specific objections, B.P.J. states that she denies Request for Admission No. 34 because, for purposes of participating on sex-separated school athletic teams, cisgender girls are similarly situated to girls who are transgender and not similarly situated to cisgender boys.

Interrogatory No. 17:

17. Whether you admit or deny Intervenor's Requests for Admission No. 36, please explain the reasons supporting your contention, including all material facts supporting them.

B.P.J.'s Response To Interrogatory No. 17:

B.P.J. incorporates the general and specific objections contained in B.P.J.'s response to Intervenor's Request for Admission No. 36.

Subject to and without waiving these general and specific objections, B.P.J. states that she denies Request for Admission No. 36 because, for purposes of participating on sex-separated school athletic teams, girls who are transgender are similarly situated to cisgender girls.

Interrogatory No. 18:

18. Whether you admit or deny Intervenor's Requests for Admission No. 46, please explain the reasons supporting your contention, including all material facts supporting them.

B.P.J.'s Response To Interrogatory No. 18:

B.P.J. incorporates the general and specific objections contained in B.P.J.'s response to Intervenor's Request for Admission No. 46.

Subject to and without waiving these general and specific objections, B.P.J. states that she denies Request for Admission No. 46 because B.P.J. and the hypothetical cisgender girl in the Request are both girls.

Interrogatory No. 19:

19. Whether you admit or deny Intervenor's Requests for Admission No. 62, please explain the reasons supporting your contention, including all material facts supporting them.

B.P.J.'s Response To Interrogatory No. 19:

B.P.J. incorporates the general and specific objections contained in B.P.J.'s response to Intervenor's Request for Admission No. 62.

Subject to and without waiving these general and specific objections, B.P.J. further objects to Interrogatory No. 19 because it asks B.P.J. to provide "reasons" and "all material facts supporting" an opposing party's contention that B.P.J. has already admitted.

Interrogatory No. 20:

20. Whether you admit or deny Intervenor's Requests for Admission No. 63, please explain the reasons supporting your contention, including all material facts supporting them.

B.P.J.'s Response To Interrogatory No. 20:

B.P.J. incorporates the general and specific objections contained in B.P.J.'s response to Intervenor's Request for Admission No. 63.

Subject to and without waiving these general and specific objections, B.P.J. states that she denies Request for Admission No. 63 because gender identity is distinct from gender expression.

Interrogatory No. 21:

21. Whether you admit or deny Intervenor's Requests for Admission No. 67, please explain the reasons supporting your contention, including all material facts supporting them.

B.P.J.'s Response To Interrogatory No. 21:

B.P.J. incorporates the general and specific objections contained in B.P.J.'s response to Intervenor's Request for Admission No. 63.

As stated in B.P.J.'s response, B.P.J. cannot admit or deny this Request because there have not been sufficient studies across all athletes of all ages in all sports at all levels to determine whether there are average differences in performance between individuals who have gone through endogenous male puberty and not received medical intervention as compared to people who have not experienced male puberty including in light of other possible factors.

Interrogatory No. 22:

22. Whether you admit or deny Intervenor's Requests for Admission No. 68, please explain the reasons supporting your contention, including all material facts supporting them.

B.P.J.'s Response To Interrogatory No. 22:

B.P.J. incorporates the general and specific objections contained in B.P.J.'s response to Intervenor's Request for Admission No. 68.

Subject to and without waiving these general and specific objections, B.P.J. states that she denies Request for Admission No. 68 because the State of West Virginia's significant governmental interest is in promoting equal athletic opportunities for all persons without discrimination on the basis of sex.

Interrogatory No. 23:

23. Whether you admit or deny Intervenor's Requests for Admission No. 70 please explain the reasons supporting your contention, including all material facts supporting them.

B.P.J.'s Response To Interrogatory No. 23:

B.P.J. incorporates the general and specific objections contained in B.P.J.'s response to Intervenor's Request for Admission No. 70.

Subject to and without waiving these general and specific objections, B.P.J. states that she denies Request for Admission No. 70 because cisgender boys and men were already prohibited from participating in sports designated for women or girls before H.B. 3293 was enacted.

Interrogatory No. 24:

24. You contend in response to Intervenor's Interrogatory #10 that "H.B. 3293 does not affect the ability of cisgender boys and men to play on sports teams designated for females, women, or girls because cisgender boys and men were already prohibited from doing so before H.B. 3293 was enacted." Identify all material West Virginia laws or policies in effect before H.B. 3293 was enacted that you contend prohibited cisgender boys and men from competing on sports teams designated for females, women, or girls.

B.P.J.'s Response To Interrogatory No. 24:

B.P.J. refers Intervenor to W. Va. Code R. § 127-2-3.8. B.P.J. also refers Intervenor to the 30(b)(6) deposition of the West Virginia Secondary School Activities Commission and the testimony given therein. B.P.J. also refers Intervenor to Section 18.2 of the National Collegiate Athletic Association Handbooks for Divisions I through III.

Interrogatory No. 25:

25. Identify all government interests that you contend advance H.B. 3293 when applied to exclude a biological male who identifies as a male from West Virginia sports teams designated for women or girls.

B.P.J.'s Response To Interrogatory No. 25:

B.P.J. objects to the phrase "a biological male who identifies as male" as vague and scientifically inaccurate and interprets the phrase to mean "a cisgender boy and man." B.P.J. objects to the phrase "government interests that you contend advance H.B. 3293" and interprets the phrase to mean "government interests that you contend are advanced by H.B. 3293."

Subject to and without waiving these general and specific objections, B.P.J. states that H.B. 3293 does not advance any government interests when applied to exclude a cisgender boy or man from sports teams designated for women or girls because cisgender boys and men were already prohibited from participating in sports designated for women or girls before H.B. 3293 was enacted.

SPECIFIC OBJECTIONS AND RESPONSES TO REQUESTS FOR ADMISSION

Without waiving or limiting in any manner any of the foregoing General Objections, but rather incorporating them into each of the following responses to the extent applicable, B.P.J. responds to the specific Requests of Intervenor's Second and Third Sets of Requests for Admission as follows:

Request for Admission No. 70:

70. Admit that H.B. 3293 furthers an important government interest by excluding males who identify as male from West Virginia sports designated for women or girls.

B.P.J.'s Response To Request for Admission No. 70:

B.P.J. objects to the phrase "males who identify as male" as vague and scientifically inaccurate and interprets the phrase to mean "cisgender boys." B.P.J. objects to the phrase "important governmental interest" as vague. Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this Request.

Request for Admission No. 71:

71. You have alleged that "[g]irls who are transgender are . . . not similarly situated to cisgender boys with respect to physiological characteristics associated with athletic performance." First Am. Compl. ¶ 40. Admit that with respect to any sex-related "physiological characteristics associated with athletic performance" relevant to running track or cross-country, B.P.J. is not similarly situated to female-identifying biological males of the same age who have not received any form of puberty blocking or other hormone therapy and have not begun endogenous male puberty.

B.P.J.'s Response To Request for Admission No. 71:

B.P.J. objects to the phrase "female-identifying biological male students" as vague and scientifically inaccurate and interprets the phrase to mean "students who are transgender girls." B.P.J. objects to the phrase "similarly situated" as vague.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this Request.

Request for Admission No. 72:

72. You have alleged that "[g]irls who are transgender are . . . not similarly situated to cisgender boys with respect to physiological characteristics associated with athletic performance." First Am. Compl. ¶ 40. Admit that with respect to any sex-related "physiological characteristics associated with athletic performance" relevant to running track or cross-country, B.P.J. is not similarly situated to female-identifying biological males of the same age who have not received any form of puberty blocking or other hormone therapy and have begun endogenous male puberty.

B.P.J.'s Response To Request for Admission No. 72:

B.P.J. objects to the phrase "female-identifying biological male students" as vague and scientifically inaccurate and interprets the phrase to mean "students who are transgender girls." B.P.J. objects to the phrase "similarly situated" as vague. B.P.J. objects to this Request to the extent it requires B.P.J. to make assumptions about the sex-related physiological characteristics associated with athletic performance of a hypothetical girl who is transgender.

Subject to these general and specific objections, and without waiver thereof, B.P.J. admits that girls who are transgender of the same age who have not received any form of puberty blocking or other hormone therapy and have begun endogenous male puberty may not have the same sex-related physiological characteristics associated with athletic performance relevant to running track or cross-country as B.P.J. B.P.J. denies that the two groups are not similarly situated for purposes of Title IX or the Equal Protection Clause.

Request for Admission No. 73:

73. You have alleged that "[g]irls who are transgender are . . . not similarly situated to cisgender boys with respect to physiological characteristics associated with athletic performance." First Am. Compl. ¶ 40. Admit that with respect to any sex-related "physiological characteristics associated with athletic performance" relevant to running track or cross-country, middle school male-identifying male students who received puberty blocking treatment that effectively delayed male puberty are similarly situated to middle school female-identifying females of the same age who have received no puberty blocking treatment and have not begun endogenous female puberty.

B.P.J.'s Response To Request for Admission No. 73:

B.P.J. objects to the phrase "male-identifying male students" as vague and scientifically inaccurate and interprets the phrase to mean "students who are cisgender boys." B.P.J. objects to the phrase "female-identifying female students" as vague and scientifically inaccurate and interprets the phrase to mean "students who are cisgender girls." B.P.J. objects to the phrase "similarly situated" as vague. B.P.J. objects to this Request to the extent that it requires B.P.J. to make the counterfactual assumption that there are cisgender boys in middle school who receive puberty blocking treatment that effectively delay male puberty.

Subject to these general and specific objections, and without waiver thereof, B.P.J. admits that cisgender boys who have not yet begun puberty would, on average, have similar levels of circulating testosterone as cisgender girls of the same age who have not begun puberty but denies that the two groups are similarly situated for purposes of Title IX or the Equal Protection Clause.

Request for Admission No. 74:

74. You have alleged that "[g]irls who are transgender are . . . not similarly situated to cisgender boys with respect to physiological characteristics associated with athletic performance." First Am. Compl. ¶ 40. Admit that with respect to any sex-related "physiological characteristics associated with athletic performance" relevant to running track or cross-country, middle school male-identifying male students who received puberty blocking treatment that effectively delayed male puberty are similarly situated to middle school female-identifying females of the same age who have received no puberty blocking treatment and have begun endogenous female puberty.

B.P.J.'s Response To Request for Admission No. 74:

B.P.J. objects to the phrase "male-identifying male students" as vague and scientifically inaccurate and interprets the phrase to mean "students who are cisgender boys." B.P.J. objects to the phrase "female-identifying female students" as vague and scientifically inaccurate and interprets the phrase to mean "students who are cisgender girls." B.P.J. objects to the phrase "similarly situated" as vague. B.P.J. objects to this Request to the extent that it requires B.P.J. to make the counterfactual assumption that there are cisgender boys in middle school who receive puberty blocking treatment that effectively delay male puberty.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this Request.

Request for Admission No. 75:

75. You have alleged that "[g]irls who are transgender are . . . not similarly situated to cisgender boys with respect to physiological characteristics associated with athletic performance." First Am. Compl. ¶ 40. Admit that with respect to any sex-related "physiological characteristics associated with athletic performance" relevant to running track or cross-country, biological male middle school students, regardless of gender identity, who received puberty blocking treatment that effectively delayed male puberty are similarly situated to female-identifying females of the same age who received no puberty blocking treatment and have not begun endogenous female puberty.

B.P.J.'s Response To Request for Admission No. 75:

B.P.J. objects to the phrase "biological male middle school students" as vague and scientifically inaccurate and interprets the phrase to mean "middle school students with a male sex

assigned at birth." B.P.J. objects to the phrase "female-identifying female" as vague and scientifically inaccurate and interprets the phrase to mean "cisgender girls." B.P.J. objects to the phrase "similarly situated" as vague. B.P.J. objects to this Request to the extent that it requires B.P.J. to make the counterfactual assumption that there are cisgender boys in middle school who receive puberty blocking treatment that effectively delay male puberty.

Subject to these general and specific objections, and without waiver thereof, B.P.J. admits that middle school students with a male sex assigned at birth who have not yet begun puberty would, on average, have similar levels of circulating testosterone as cisgender girls of the same age who have not begun puberty but denies that the two groups are similarly situated for purposes of Title IX or the Equal Protection Clause regardless of gender identity.

Request for Admission No. 76:

76. You have alleged that "[g]irls who are transgender are . . . not similarly situated to cisgender boys with respect to physiological characteristics associated with athletic performance." First Am. Compl. ¶ 40. Admit that with respect to any sex-related "physiological characteristics associated with athletic performance" relevant to running track or cross-country, biological male middle school students, regardless of gender identity, who received puberty blocking treatment that effectively delayed male puberty are similarly situated to female-identifying females of the same age who received no puberty blocking treatment and have begun endogenous female puberty.

B.P.J.'s Response To Request for Admission No. 76:

B.P.J. objects to the phrase "biological male middle school students" as vague and scientifically inaccurate and interprets the phrase to mean "middle school students with a male sex assigned at birth." B.P.J. objects to the phrase "female-identifying female" as vague and

scientifically inaccurate and interprets the phrase to mean "cisgender girls." B.P.J. objects to the phrase "similarly situated" as vague. B.P.J. objects to this Request to the extent that it requires B.P.J. to make the counterfactual assumption that there are cisgender boys in middle school who receive puberty blocking treatment that effectively delay male puberty.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this Request.

Request for Admission No. 77:

77. You have alleged that "[g]irls who are transgender are . . . not similarly situated to cisgender boys with respect to physiological characteristics associated with athletic performance." First Am. Compl. ¶ 40. Admit that with respect to any "physiological characteristics associated with athletic performance" relevant to running track or cross-country, B.P.J. is not similarly situated to biological male students of the same age who have not received any form of puberty blocking or other hormone therapy, regardless of the students' gender identity, and have not begun endogenous male puberty.

B.P.J.'s Response To Request for Admission No. 77:

B.P.J. objects to the phrase "biological male students" as vague and scientifically inaccurate and interprets the phrase to mean "students with a male sex assigned at birth." B.P.J. objects to the phrase "similarly situated" as vague.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this Request.

Request for Admission No. 78:

78. You have alleged that "[g]irls who are transgender are . . . not similarly situated to cisgender boys with respect to physiological characteristics associated with athletic

performance." First Am. Compl. ¶ 40. Admit that with respect to any "physiological characteristics associated with athletic performance" relevant to running track or cross-country, B.P.J. is not similarly situated to biological male students of the same age who have not received any form of puberty blocking or other hormone therapy, regardless of the students' gender identity, and have begun endogenous male puberty.

B.P.J.'s Response To Request for Admission No. 78:

B.P.J. objects to the phrase "biological male students" as vague and scientifically inaccurate and interprets the phrase to mean "students with a male sex assigned at birth." B.P.J. objects to the phrase "similarly situated" as vague.

Subject to these general and specific objections, and without waiver thereof, B.P.J. admits that students with a male sex assigned at birth who have begun endogenous male puberty would, on average, have high levels of circulating testosterone than B.P.J., but denies that the two groups are similarly situated for purposes of Title IX or the Equal Protection Clause regardless of gender identity.

Request for Admission No. 79:

79. You have alleged that "[g]irls who are transgender are . . . not similarly situated to cisgender boys with respect to physiological characteristics associated with athletic performance." First Am. Compl. ¶ 40. Admit that with respect to any sex-related "physiological characteristics associated with athletic performance" relevant to running track or cross country, B.P.J. is similarly situated to male-identifying biological females of the same age who have not received any form of puberty blocking or other hormone therapy and have not begun endogenous female puberty.

B.P.J.'s Response To Request for Admission No. 79:

B.P.J. objects to the phrase "male-identifying biological females" as vague and scientifically inaccurate and interprets the phrase to mean "students who are transgender boys." B.P.J. objects to the phrase "similarly situated" as vague.

Subject to these general and specific objections, and without waiver thereof, B.P.J. admits that students who are transgender boys and have not begun endogenous female puberty would, on average, have similar levels of circulating testosterone as B.P.J. but denies that the two groups are similarly situated for purposes of Title IX or the Equal Protection Clause.

Request for Admission No. 80:

80. You have alleged that "[g]irls who are transgender are . . . not similarly situated to cisgender boys with respect to physiological characteristics associated with athletic performance." First Am. Compl. ¶ 40. Admit that with respect to any sex-related "physiological characteristics associated with athletic performance" relevant to running track or cross country, B.P.J. is similarly situated to male-identifying biological females of the same age who have not received any form of puberty blocking or other hormone therapy and have begun endogenous female puberty.

B.P.J.'s Response To Request for Admission No. 80:

B.P.J. objects to the phrase "male-identifying biological females" as vague and scientifically inaccurate and interprets the phrase to mean "students who are transgender boys." B.P.J. objects to the phrase "similarly situated" as vague.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this Request.

Request for Admission No. 81:

81. You have alleged that "[g]irls who are transgender are . . . not similarly situated to cisgender boys with respect to physiological characteristics associated with athletic performance." First Am. Compl. ¶ 40. Admit that with respect to any sex-related "physiological characteristics associated with athletic performance" relevant to running track or cross-country, B.P.J. is similarly situated to biological female students of the same age who have not received any form of puberty blocking or other hormone therapy, regardless of the students' gender identity, and have not begun endogenous female puberty.

B.P.J.'s Response To Request for Admission No. 81:

B.P.J. objects to the phrase "male-identifying biological females" as vague and scientifically inaccurate and interprets the phrase to mean "students who are transgender boys." B.P.J. objects to the phrase "similarly situated" as vague.

Subject to these general and specific objections, and without waiver thereof, B.P.J. admits that students who are transgender boys and have not begun endogenous female puberty would, on average, have similar levels of circulating testosterone as B.P.J. but denies that the two groups are similarly situated for purposes of Title IX or the Equal Protection Clause regardless of gender identity.

Request for Admission No. 82:

82. You have alleged that "[g]irls who are transgender are . . . not similarly situated to cisgender boys with respect to physiological characteristics associated with athletic performance." First Am. Compl. ¶ 40. Admit that with respect to any sex-related "physiological characteristics associated with athletic performance" relevant to running

track or cross-country, B.P.J. is similarly situated to biological female students of the same age who have not received any form of puberty blocking or other hormone therapy, regardless of the students' gender identity, and have not begun endogenous female puberty.

B.P.J.'s Response To Request for Admission No. 82:

B.P.J. objects to the phrase "male-identifying biological females" as vague and scientifically inaccurate and interprets the phrase to mean "students who are transgender boys." B.P.J. objects to the phrase "similarly situated" as vague.

Subject to these general and specific objections, and without waiver thereof, B.P.J. denies this Request.

Dated: March 9, 2022

Respectfully Submitted,
/s/ Loree Stark

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Attorneys for Plaintiff

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA
CHARLESTON DIVISION

B.P.J. by her next friend and mother, HEATHER JACKSON,

Plaintiff,

v.

WEST VIRGINIA STATE BOARD OF EDUCATION, HARRISON COUNTY BOARD OF EDUCATION, WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION, W. CLAYTON BURCH in his official capacity as State Superintendent, DORA STUTLER in her official capacity as Harrison County Superintendent, and THE STATE OF WEST VIRGINIA,

Defendants,

and

LAINEY ARMISTEAD,

Defendant-Intervenor.

Civil Action No. 2:21-cv-00316

Hon. Joseph R. Goodwin

VERIFICATION

After being first duly sworn, I, Heather Jackson, depose and say that I have read the foregoing responses in Plaintiff's Responses and Objections to Intervenor Lainey Armistead's Third Set of Interrogatories and Second and Third Sets of Requests for Admission dated March 9, 2022 and know its contents. The foregoing is true to my knowledge, except to those matters stated to be alleged on information and belief, and as to those matters I believe them to be true.

Heather Jackson

Signed by: Heather Jackson
Date & Time: March 08, 2022 15:05:04 EST

Heather Jackson

STATE OF WEST VIRGINIA,

COUNTY OF Harrison **, to-wit:**

Taken, subscribed and sworn to before me, the undersigned Notary Public, this date, _____.

Signed by: Zaki Michaels
Date & Time: March 08, 2022 15:05:58 EST

My commission expires: 1/3/2027

OFFICIAL SEAL
ELECTRONIC NOTARY PUBLIC
STATE OF WEST VIRGINIA
Zaki Michaels
Notary Id: N220103003879
PO Box 3952
Charleston WV 25339
My Commission Expires 01/03/2027

This remote online notarization involved the use of audio/visual communication technology

Video Meeting

Video ID: aakePAipWO, Recording URL: https://ds4u.cc/aakePAipWO, Passcode: 5699

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA
CHARLESTON DIVISION

B.P.J., by her next friend and mother,
HEATHER JACKSON,

Plaintiff,

v. Civil Action No. 2:21-cv-00316
Hon. Joseph R. Goodwin, District Judge

WEST VIRGINIA STATE BOARD OF EDUCATION, HARRISON COUNTY BOARD OF EDUCATION, WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION, W. CLAYTON BURCH in his official capacity as State Superintendent, DORA STUTLER in her official capacity as Harrison County Superintendent, PATRICK MORRISEY in his official capacity as Attorney General, and THE STATE OF WEST VIRGINIA,

Defendants,

and

LAINEY ARMISTEAD,

Defendant-Intervenor.

DEFENDANT HARRISON COUNTY BOARD OF EDUCATION'S RESPONSES AND OBJECTIONS TO PLAINTIFF'S SECOND SET OF REQUESTS FOR ADMISSION

Pursuant to Rule 36 of the Federal Rules of Civil Procedure, Defendant Harrison County Board of Education ("County Board") hereby responds and objects to "Plaintiff's Second Set of Requests for Admission to Defendant Harrison County Board of Education" as follows:

GENERAL OBJECTION: The County Board objects to the definitions of "County Board" and "County Superintendent" as set forth in Plaintiff's requests for admission. Those definitions are overly broad and outside the permissible scope of discovery under the

Federal Rules of Civil Procedure as the definitions improperly broaden the identity of parties in this case. For instance, the definitions of the "County Board" and the "County Superintendent" also include their "officers, directors, employees, partners, corporate parent, subsidiaries, affiliates, attorneys, accountants, consultants, representatives and agents." The County Board objects to providing responses pursuant to the broadened definitions of "County Board" and "County Superintendent." The County Board further objects to the Definitions and Instructions set forth in Plaintiff's requests to the extent they are inconsistent with the Federal Rules of Civil Procedure or applicable law.

REQUEST NO. 5: Admit that Plaintiff B.P.J. has been diagnosed with gender dysphoria.

RESPONSE: The County Board admits that medical records produced in this case state that Plaintiff B.P.J. has been diagnosed with gender dysphoria.

REQUEST NO. 6: Admit that in 2021 Plaintiff B.P.J. was a member of Bridgeport Middle School's girls' cross-country team.

RESPONSE: Admitted.

REQUEST NO. 7: Admit that Plaintiff B.P.J. placed 51 out of 66 competitors in the girls' middle school cross country Mountain Hollar MS Invitational meet in 2021.

RESPONSE: Upon information and belief, and based on information provided on RunWV.com regarding the results of the race, the County Board admits this request.

REQUEST NO. 8: Admit that Plaintiff B.P.J. placed 123 out of 150 competitors in the girls' middle school cross country Doddridge Invitational meet in 2021.

RESPONSE: Upon information and belief, and based on information provided on RunWV.com regarding the results of the race, the County Board admits this request.

REQUEST NO. 9: Admit that you have not received any complaints associated with Plaintiff B.P.J.'s membership on Bridgeport Middle School's girls' cross country team.

RESPONSE: Admitted.

REQUEST NO. 10: Admit that no middle school girl was harmed as a result of B.P.J.'s participation on Bridgeport Middle School's girls' cross country team in 2021.

RESPONSE: **OBJECTION**. The County Board objects to this request because it is vague. The County Board does not know what Plaintiff means by the term "harmed." Subject to and without waiving the objection, the County Board admits that no student was cut from the Bridgeport Middle School's girls' cross country team in 2021. The County Board otherwise denies this request because it is unclear what Plaintiff is asking.

REQUEST NO. 11: Admit that no middle school girl was injured as a result of Plaintiff B.P.J.'s participation on Bridgeport Middle School's girls' cross country team in 2021.

RESPONSE: **OBJECTION**. The County Board objects to this request because it is vague. The County Board does not know what Plaintiff means by the term "injured." Subject to and without waiving the objection, the County Board admits that no student was cut from the Bridgeport Middle School's girls' cross country team in 2021. The County Board otherwise denies this request because it is unclear what Plaintiff is asking.

REQUEST NO. 12: Admit that no Bridgeport Middle School girl student was prohibited from joining Bridgeport Middle School's girls' cross-country team in 2021.

RESPONSE: Admitted.

REQUEST NO. 13: Admit that Bridgeport Middle School's girls' cross-country team did not turn anyone away from participating due to lack of space on the roster in 2021.

RESPONSE: Admitted.

REQUEST NO. 14: Admit that Plaintiff B.P.J. does not have an unfair athletic advantage over other girls participating on the Bridgeport Middle School girls' cross-country team.

RESPONSE: Even with a reasonable inquiry, the County Board cannot admit or deny this request because the information it knows or can readily obtain is insufficient to enable the County Board to admit or deny the request.

REQUEST NO. 15: Admit that Plaintiff B.P.J. does not have an unfair athletic advantage over girls competing against the Bridgeport Middle School girls' cross-country team.

RESPONSE: Even with a reasonable inquiry, the County Board cannot admit or deny this request because the information it knows or can readily obtain is insufficient to enable the County Board to admit or deny the request.

REQUEST NO. 16: Admit that cross country is a sport that requires "competitive skill" as that phrase is used in H.B. 3293 (codified at Code of West Virginia §18-2-25d(c)(2)).

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, the County Board cannot admit or deny this request because "competitive skill" is not defined in H.B. 3293.

REQUEST NO. 17: Admit that cross country is a sport that requires "competitive skill" as that phrase is used in 34 C.F.R.§106.41(b).

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, the County Board cannot admit or deny this request because "competitive skill" is not defined in 34 C.F.R.§106.41(b).

REQUEST NO. 18: Admit that cross country is not a "contact sport" as that phrase is used in H.B. 3293 (codified at Code of West Virginia §18-2-25d(c)(2)).

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, the County Board cannot admit or deny this request because "contact sport" is not defined in H.B. 3293.

REQUEST NO. 19: Admit that cross country is not a "contact sport" as that phrase is used in 34 C.F.R.§106.41(b).

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, the County Board admits that "cross country" is not specifically identified as a "contact sport" in 34 C.F.R.§106.41(b).

REQUEST NO. 20: Admit that, but for the injunction issued in this case (Dkt. 67), Plaintiff B.P.J. would not have been permitted to be a member of Bridgeport Middle

School's girls' cross-country team in 2021 because of H.B. 3293 (codified at Code of West Virginia §18-2-25d(c)(2)).

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, the County Board states as follows: Because, as it is currently drafted, H.B. Bill 3293 (codified at West Virginia Code § 18- 2-25d) applies to public secondary schools and states that "[a]thletic teams or sports designated for females, women, or girls shall not be open to students of the male sex where selection for such teams is based upon competitive skill or the activity involved is a contact sport[,]" because of the definitions set forth in H.B. 3293, and absent the injunction issues in this case, the County Board admits this request.

REQUEST NO. 21: Admit that, but for the injunction issued in this case (Dkt. 67), Plaintiff B.P.J. would not be permitted to be a member of any girls' athletic team offered at Bridgeport Middle School because of H.B. 3293 (codified at Code of West Virginia §18-2-25d(c)(2)).

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, the County Board states as follows: Because, as it is currently drafted, H.B. Bill 3293 (codified at West Virginia Code § 18- 2-25d) applies to public secondary schools and states that "[a]thletic teams or sports designated for females, women, or girls shall not be open to students of the male sex where selection for such teams is based upon competitive skill or the activity involved is a contact sport[,]" because of the definitions set forth in H.B. 3293, and absent the injunction issued in this case, the County Board admits this request.

REQUEST NO. 22: Admit that H.B. 3293 prohibits Plaintiff B.P.J. from participating on girls' athletic teams at all public secondary schools located in West Virginia.

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, the County Board states as follows: Because, as it is currently drafted, H.B. Bill 3293 (codified at West Virginia Code § 18- 2-25d) applies to public secondary schools and states that "[a]thletic teams or sports designated for females, women, or girls shall not be open to students of the male sex where selection for such teams is based upon competitive skill or the activity involved is a contact sport[,]" because of the definitions set forth in H.B. 3293, and absent the injunction issued in this case, the County Board admits this request.

REQUEST NO. 23: Admit that the State Board of Education and the State Superintendent must comply with H.B. 3293 unless enjoined from doing so by a court.

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, the County Board is not in a position to admit or deny this request because it concerns the State Board of Education and State Superintendent's obligations under H.B. 3293.

REQUEST NO. 24: Admit that H.B. 3293 prohibits the State Board of Education and the State Superintendent from adopting or enforcing a policy that would allow B.P.J. to participate on girls' athletic teams at Bridgeport Middle School.

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, the County Board is not in a position to admit or deny this request because it concerns the State Board of Education and State Superintendent's obligations under H.B. 3293.

REQUEST NO. 25: Admit that the Harrison County Board of Education and the Harrison County School Superintendent must comply with H.B. 3293 unless enjoined from doing so by a court.

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, the County Board states as follows: Because H.B. 3293 is a West Virginia State law that applies to County Boards of Education, including the County Board and its County Superintendent, because H.B. 3293 provides for private causes of action, and thus imposes liability against County Boards of Education, like the County Board, and while the County Board and its County Superintendent did not devise and have not adopted H.B. Bill 3293 as their own policy, the County Board admits this request because, absent an injunction by a court, the County Board would be compelled and required to enforce H.B. Bill 3293 because it is a mandatory State law that affords the County Board no discretion.

REQUEST NO. 26: Admit that H.B. 3293 prohibits the Harrison County Board of Education and the Harrison County Superintendent from adopting or enforcing a policy that would allow B.P.J. to participate on girls' athletic teams at Bridgeport Middle School.

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, the County Board states as follows: Because H.B. 3293 is a West Virginia State law that applies to County Boards of Education, including the County Board and its County Superintendent, because H.B. 3293 provides for private causes of action, and thus imposes liability against County Boards of Education, like the County Board, and while the County Board and its County Superintendent did not devise and have not adopted H.B. Bill 3293 as their own policy, the County Board admits this

request because, absent an injunction by a court, the County Board would be compelled and required to enforce H.B. Bill 3293 because it is a mandatory State law that affords the County Board no discretion.

REQUEST NO. 27: Admit that the West Virginia Secondary School Athletic Commission must comply with H.B. 3293 unless enjoined from doing so by a court.

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, the County Board is not in a position to admit or deny this request because it concerns the West Virginia Secondary School Athletic Commission's obligations under H.B. 3293.

REQUEST NO. 28: Admit that H.B. 3293 prohibits the West Virginia Secondary School Athletic Commission from adopting or enforcing a policy that would allow B.P.J. to participate on girls' athletic teams at Bridgeport Middle School

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, the County Board is not in a position to admit or deny this request because it concerns the West Virginia Secondary School Athletic Commission's obligations under H.B. 3293.

REQUEST NO. 29: Admit that there are no athletic teams designated as "coed or mixed," as that phrase is used in H.B. 3293 (codified at Code of West Virginia §18-2-25d(c)(1)(C)), offered at Bridgeport Middle School.

RESPONSE: Denied.

REQUEST NO. 30: Admit that there are no athletic teams designated as "coed or mixed," as that phrase is used in H.B. 3293 (codified at Code of West Virginia §18-2-

25d(c)(1)(C)), that compete interscholastically offered at any public secondary school located in West Virginia.

RESPONSE: Denied.

REQUEST NO. 31: Admit that there are no cross-country teams designated as "coed or mixed," as that phrase is used in H.B. 3293 (codified at Code of West Virginia §18-2-25d(c)(1)(C)), that compete interscholastically offered by any member school of the West Virginia Secondary School Activities Commission.

RESPONSE: **OBJECTION**. The County Board objects to the scope of this request. Subject to and without waiving the objection, the County Board can only answer on behalf of schools in Harrison County, and admits that there are no "co-ed or mixed" cross country teams in Harrison County.

REQUEST NO. 32: Admit that there are no athletic leagues designated as "coed or mixed," as that phrase is used in H.B. 3293 (codified at Code of West Virginia §18-2-25d(c)(1)(C)), that comprise teams from more than one school supervised by the West Virginia Secondary School Activities Commission.

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, and even with a reasonable inquiry, the County Board cannot admit or deny this request because the information it knows or can readily obtain is insufficient to enable the County Board to admit or deny the request.

REQUEST NO. 33: Admit that there are no athletic teams designated as "coed or mixed," as that phrase is used in H.B. 3293 (codified at Code of West Virginia §18-2-

25d(c)(1)(C)),” that compete interscholastically offered by any public secondary school under the supervision of the West Virginia State Board of Education.

RESPONSE: **OBJECTION**. The County Board objects to this request because it is vague. Subject to and without waiving the objection, the County Board denies the request because there are “co-ed” teams in Harrison County, but the County Board cannot admit or deny the rest of the request based on how it is phrased.

REQUEST NO. 34: Admit that H.B. 3293 does not prohibit a cisgender girl student at Bridgeport Middle School from joining a girls’ athletic team offered at Bridgeport Middle School.

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, and based on the language used in H.B. 3293, the County Board admits this request.

REQUEST NO. 35: Admit that H.B. 3293 does not prohibit a cisgender girl student at any public secondary school in West Virginia from joining a girls’ athletic team offered by her public secondary school.

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, and based on the language used in H.B. 3293, the County Board admits this request.

REQUEST NO. 36: Admit that H.B. 3293 prohibits a Bridgeport Middle School transgender girl student from joining a girls’ athletic team offered at Bridgeport Middle School.

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, the County

Board states as follows: Because, as it is currently drafted, H.B. Bill 3293 (codified at West Virginia Code § 18- 2-25d) applies to public secondary schools and states that "[a]thletic teams or sports designated for females, women, or girls shall not be open to students of the male sex where selection for such teams is based upon competitive skill or the activity involved is a contact sport[,]" because of the definitions set forth in H.B. 3293, and absent the injunction issued in this case, the County Board admits this request.

REQUEST NO. 37: Admit that H.B. 3293 prohibits any transgender girl secondary school student located in West Virginia from joining a girls' athletic team offered by her public secondary school.

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, the County Board states as follows: Because, as it is currently drafted, H.B. Bill 3293 (codified at West Virginia Code § 18- 2-25d) applies to public secondary schools and states that "[a]thletic teams or sports designated for females, women, or girls shall not be open to students of the male sex where selection for such teams is based upon competitive skill or the activity involved is a contact sport[,]" because of the definitions set forth in H.B. 3293, and absent the injunction issued in this case, the County Board admits this request.

REQUEST NO. 38: Admit that prior to the enactment of H.B. 3293, cisgender boy students at Bridgeport Middle School were prohibited from joining girls' athletic teams offered at Bridgeport Middle School.

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, the County

Board admits that there is a West Virginia Secondary School Activities Commission rule that may apply to this situation.

REQUEST NO. 39: Admit that prior to the enactment of H.B. 3293, a cisgender boy student at any public secondary school in West Virginia was prohibited from joining girls' athletic teams offered at his public secondary school.

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, the County Board admits that there is a West Virginia Secondary School Activities Commission rule that may apply to this situation.

REQUEST NO. 40: Admit that prior to the enactment of H.B. 3293, you are not aware of any transgender student athlete participating on an athletic team offered by Bridgeport Middle School.

RESPONSE: Admitted.

REQUEST NO. 41: Admit that prior to the enactment of H.B. 3293, you are not aware of any transgender student athlete participating on an athletic team offered by a public secondary school in West Virginia.

RESPONSE: Admitted.

REQUEST NO. 42: Admit that other than Plaintiff B.P.J., you are not aware of a transgender student athlete participating on an athletic team offered by Bridgeport Middle School.

RESPONSE: Admitted.

REQUEST NO. 43: Admit that other than Plaintiff B.P.J., you are not aware of a transgender student athlete participating on an athletic team offered by a public secondary school in West Virginia.

RESPONSE: Admitted.

REQUEST NO. 44: Admit that students derive social benefits from participation on athletic teams offered by public secondary schools in West Virginia.

RESPONSE: Admitted.

REQUEST NO. 45: Admit that students derive psychological benefits from participation on athletic teams offered by public secondary schools in West Virginia.

RESPONSE: Admitted.

REQUEST NO. 46: Admit that interscholastic athletic competition benefits middle school students.

RESPONSE: Admitted.

REQUEST NO. 47: Admit that middle school students who participate in interscholastic athletics receive benefits regardless whether they win or lose.

RESPONSE: Admitted.

REQUEST NO. 48: Admit that but for the injunction issued in this case, the Harrison County School Board and schools within the Harrison County School District would comply with H.B. 3293.

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, the County

Board states as follows: Because H.B. 3293 is a West Virginia State law that applies to County Boards of Education, including the County Board and its County Superintendent, because H.B. 3293 provides for private causes of action, and thus imposes liability against County Boards of Education, like the County Board, and while the County Board and its County Superintendent did not devise and have not adopted H.B. Bill 3293 as their own policy, the County Board admits this request because, absent an injunction by a court, the County Board would be compelled and required to enforce H.B. Bill 3293 because it is a mandatory State law that affords the County Board no discretion.

REQUEST NO. 49: Admit that but for the injunction in this case (Dkt. 67) the Harrison County School Board and schools within the Harrison County School District would not take any actions that violated H.B. 3293.

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, the County Board states as follows: Because H.B. 3293 is a West Virginia State law that applies to County Boards of Education, including the County Board and its County Superintendent, because H.B. 3293 provides for private causes of action, and thus imposes liability against County Boards of Education, like the County Board, and while the County Board and its County Superintendent did not devise and have not adopted H.B. Bill 3293 as their own policy, the County Board admits this request because, absent an injunction by a court, the County Board would be compelled and required to enforce H.B. Bill 3293 because it is a mandatory State law that affords the County Board no discretion.

REQUEST NO. 50: Admit that, but for the injunction in this case (Dkt. 67), the Harrison County School Board and Bridgeport Middle School would not have permitted Plaintiff

B.P.J. to try out for the Bridgeport Middle School's girls' cross-country team in 2021 because of H.B. 3293 (codified at Code of West Virginia §18-2-25d(c)(2)).

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, the County Board states as follows: Because H.B. 3293 is a West Virginia State law that applies to County Boards of Education, including the County Board and its County Superintendent, because H.B. 3293 provides for private causes of action, and thus imposes liability against County Boards of Education, like the County Board, and while the County Board and its County Superintendent did not devise and have not adopted H.B. Bill 3293 as their own policy, the County Board admits this request because, absent an injunction by a court, the County Board would be compelled and required to enforce H.B. Bill 3293 because it is a mandatory State law that affords the County Board no discretion.

REQUEST NO. 51: Admit that, but for the injunction in this case (Dkt. 67), the Harrison County School Board and Bridgeport Middle School would not have allowed Plaintiff B.P.J. to participate on the Bridgeport Middle School's girls' cross-country team in 2021 because of H.B. 3293 (codified at Code of West Virginia §18-2-25d(c)(2)).

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, the County Board states as follows: Because H.B. 3293 is a West Virginia State law that applies to County Boards of Education, including the County Board and its County Superintendent, because H.B. 3293 provides for private causes of action, and thus imposes liability against County Boards of Education, like the County Board, and while the County Board and its County Superintendent did not devise and have not adopted H.B. Bill 3293 as their own policy, the County Board admits this

request because, absent an injunction by a court, the County Board would be compelled and required to enforce H.B. Bill 3293 because it is a mandatory State law that affords the County Board no discretion.

REQUEST NO. 52: Admit that, but for the injunction in this case (Dkt. 67), the Harrison County School Board and Bridgeport Middle School would not permit Plaintiff B.P.J. to try out for any girls' athletic team offered at Bridgeport Middle School because of H.B. 3293 (codified at Code of West Virginia §18-2-25d(c)(2)).

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, the County Board states as follows: Because H.B. 3293 is a West Virginia State law that applies to County Boards of Education, including the County Board and its County Superintendent, because H.B. 3293 provides for private causes of action, and thus imposes liability against County Boards of Education, like the County Board, and while the County Board and its County Superintendent did not devise and have not adopted H.B. Bill 3293 as their own policy, the County Board admits this request because, absent an injunction by a court, the County Board would be compelled and required to enforce H.B. Bill 3293 because it is a mandatory State law that affords the County Board no discretion.

REQUEST NO. 53: Admit that, but for the injunction issued in this case (Dkt. 67), the Harrison County School Board and Bridgeport Middle School would not permit Plaintiff B.P.J. to be a member of any girls' athletic team offered at Bridgeport Middle School because of H.B. 3293 (codified at Code of West Virginia §18-2-25d(c)(2)).

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, the County

Board states as follows: Because H.B. 3293 is a West Virginia State law that applies to County Boards of Education, including the County Board and its County Superintendent, because H.B. 3293 provides for private causes of action, and thus imposes liability against County Boards of Education, like the County Board, and while the County Board and its County Superintendent did not devise and have not adopted H.B. Bill 3293 as their own policy, the County Board admits this request because, absent an injunction by a court, the County Board would be compelled and required to enforce H.B. Bill 3293 because it is a mandatory State law that affords the County Board no discretion.

REQUEST NO. 54: Admit that Plaintiff B.P.J.'s gender is identified as "male" in the West Virginia Education Information System ("WVEIS").

RESPONSE: Admitted.

REQUEST NO. 55: Admit that you have the ability to change Plaintiff B.P.J.'s gender in WVEIS to "female."

RESPONSE: **OBJECTION**. The County Board objects to the request because it seeks information that is not relevant to any party's claim or defense and is not proportional to the needs of the case. Subject to and without waiving the objection, the County Board admits that it has the ability to change data in WVEIS.

REQUEST NO. 56: Admit that H.B. 3293 allows a student to bring an action against you for alleged violations of H.B. 3293.

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, the County Board admits this request.

REQUEST NO. 57: Admit that you are required to regulate athletic activities offered by public secondary schools in Harrison County. See Code of West Virginia §18-2-25.

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, the County Board admits that the provisions of West Virginia Code §18-2-25 require it to regulate athletic activities of public secondary schools in Harrison County.

REQUEST NO. 58: Admit that you are required to control interscholastic athletic events in which Bridgeport Middle School participates. See Code of West Virginia §18-2-25.

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, the County Board admits that the provisions of West Virginia Code §18-2-25 require it to control athletic activities of public secondary schools in Harrison County.

REQUEST NO. 59: Admit that you are required supervise interscholastic athletic events in which Bridgeport Middle School participates. See Code of West Virginia §18-2-25.

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, the County Board admits that the provisions of West Virginia Code §18-2-25 require it to supervise athletic activities of public secondary schools in Harrison County.

REQUEST NO. 60: Admit that you are required regulate interscholastic athletic events in which Bridgeport Middle School participates. See Code of West Virginia §18-2-25.

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, the County

Board admits that the provisions of West Virginia Code §18-2-25 require it to regulate athletic events in which Bridgeport Middle School participates.

REQUEST NO. 61: Admit that Bridgeport Middle School is a member school of the West Virginia Secondary School Activities Commission.

RESPONSE: Admitted.

REQUEST NO. 62: Admit that you have delegated control over interscholastic athletic events in Harrison County to the West Virginia Secondary School Activities Commission.

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, the County Board admits that it has delegated some, but not all, control over interscholastic athletic events in Harrison County to the West Virginia Secondary School Activities Commission.

REQUEST NO. 63: Admit that you have delegated supervision over interscholastic athletic events to the West Virginia Secondary School Activities Commission.

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, the County Board admits that it has delegated some, but not all, supervision over interscholastic athletic events to the West Virginia Secondary School Activities Commission.

REQUEST NO. 64: Admit that you have delegated regulation of interscholastic athletic events to the West Virginia Secondary School Activities Commission.

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, the County

Board admits that it has delegated some, but not all, regulation of interscholastic athletic events to the West Virginia Secondary School Activities Commission.

REQUEST NO. 65: Admit that the State Board of Education controls you. See Code of West Virginia §18-2-5.

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, the County Board denies this request because West Virginia Code §18-2-5 states that "the State Board of Education shall exercise general supervision of the public schools of the state, and shall promulgate rules[.]"

REQUEST NO. 66: Admit that you receive federal financial assistance.

RESPONSE: Admitted.

REQUEST NO. 67: Admit that you must comply with Title IX of the Education Amendments of 1972, 20 U.S.C. §1681 *et seq.*

RESPONSE: **OBJECTION**. The County Board objects to the extent this request is seeking a legal conclusion. Subject to and without waiving the objection, the County Board admits this request.

Dated this the 10th day of March, 2022.

/s/ Susan L. Deniker

Susan L. Deniker (WV ID #7992)
Jeffrey M. Cropp (WV ID #8030)
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OF COUNSEL

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA
CHARLESTON DIVISION

B.P.J., by her next friend and mother,
HEATHER JACKSON,

Plaintiff,

v.

Civil Action No. 2:21-cv-00316
Hon. Joseph R. Goodwin, District Judge

WEST VIRGINIA STATE BOARD OF EDUCATION, HARRISON COUNTY BOARD OF EDUCATION, WEST VIRGINIA SECONDARY SCHOOL ACTIVITIES COMMISSION, W. CLAYTON BURCH in his official capacity as State Superintendent, DORA STUTLER in her official capacity as Harrison County Superintendent, PATRICK MORRISEY in his official capacity as Attorney General, and THE STATE OF WEST VIRGINIA,

Defendants,

and

LAINEY ARMISTEAD,

Defendant-Intervenor.

CERTIFICATE OF SERVICE

I hereby certify that on the 10th day of March, 2022, I electronically filed the foregoing Certificate of Service of "Defendant Harrison County Board of Education's Responses and Objections to Plaintiff's Second Set of Requests for Admission" with the Clerk of the Court using the CM/ECF system, and a true and exact copy of such filing was sent by email to the following counsel of record:

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OF COUNSEL

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SARGENT'S COURT REPORTING SERVICE, INC. 210 Main Street Johnstown, PA 15901 814-536-8908 www.sargents.com

ERRATA SHEET

AFFIDAVIT
State of Pennsylvania
County of _____

I, Joshua Safer, MD , certify under oath or affirmation that I have read the transcript of my testimony dated 3/24/2022 and that the transcript of my testimony is accurate with the following corrections:

Page	Line	Error	Correction	Reason
19	6	bad	better	
26	14	sensitive	scientific	
29	21	adults	adult	
30	14	committee	community	
33	1	farther	further	
33	3	at	that at	
33	23	make	take	
53	11	nanomolars	nanomolar	
54	21	7.5	5	
57	6	press	suppressed	
68	8	will be described in that	will describe the	
68	24	context	contexts	
72	3	prefer	refer	
74	12	least	at least	
74	20	body	the body	
75	4	the coils here	—	

Are there additional corrections on a following page? __ NO X YES

Signature of Deponent/Affiant _____

Sworn to and subscribed before me, a Notary Public, on this

_____ day of _____, 20_____.

_____
Notary Public

SARGENT'S COURT REPORTING SERVICE, INC. 210 Main Street Johnstown, PA 15901 814-536-8908 www.sargents.com

Additional Corrections to the Testimony of Joshua Safer, MD

Page	Line	Error	Correction	Reason
80	22	right	—	
85	24	needs	need	
86	23	they	there	
90	24	of tab	—	
91	19	air	error	
94	13	about higher	—	
94	22	of the	—	
96	20	were	or	
111	19	that	there	
126	8	pre-pubertis gender	pre-pubertal cisgender	
127	7	an	the	
134	7	recognized	recognize	
135	14	collections	directions	
136	17	I got	I've got	
140	11	as	is	
150	23	a league	elite	
151	6	intermural	intramural	
154	8	Kilio	Healio	
154	9	Kilio	Healio	
163	1	for	or	
167	2	on	beyond	
178	15	it	if	
179	12	loopholed	—	
181	4	than	then	
181	14	brought	broad	
185	14	vaginal plasty	vaginoplasty	
185	21	construction	reconstruction	

Are there additional corrections on a following page? __NO X YES

Deponent's / Affiant's Name: _____ Initials: _____

SARGENT'S COURT REPORTING SERVICE, INC. 210 Main Street Johnstown, PA 15901 814-536-8908 www.sargents.com

Additional Corrections to the Testimony of Joshua Safer, MD

Page	Line	Error	Correction	Reason
187	11	know	no	
197	3	is I	is what I	
198	10	if	with	
207	6	expectation	explanation	
207	14	there in 2021 as	there. In 2021 has	
211	17	not	—	
215	16	the sum	some	
216	5	is	it's	
215	13	endocrine Society	Endocrine Society	
216	7	endocrine Society	Endocrine Society	
216	8	project	subject	
223	13	identity	gender identity	
230	3	incongruent	congruent	
241	6	overtime	over time	
241	7	any absence of	absent	
241	17	discorded	discordant	
250	19	is to	is not to	
268	17	intuitions	institutions	
285	21	permeations	permutations	

Are there additional corrections on a following page? X NO ___ YES

Deponent's / Affiant's Name: _____ Initials: _____

Message

From: Natalie McBrayer [nataliemcbrayer@gmail.com]
Sent: 9/17/2021 12:40:51 PM
To: Danyelle Schoonmaker [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=8f240a140f514d269f0bb8dd1486fec2-dlead001]; bridgeportmiddlexc@gmail.com
Subject: Varsity Sheet and All Athlete Finish Time Order from Doddridge
Attachments: BMS XC-Sept 16-Doddridge Inv Varsity Qualifiers.pdf; BMS XC-Sept 16-Doddridge Inv Finish Time Order.pdf

[EXTERNAL SENDER]: Do not click links, open attachments or reply to this email unless you recognize the sender and know the content is safe.

Sorry I didn't do this last night. I have been super tired lately. By the time we finished dinner and got everyone in bed, I was passing out.

I am working on something for next week. :-D I will try to work on sending you a couple weekend homework assignments too.

[redacted] is going to be one of the fastest boys that Bridgeport has ever seen. He is the fastest middle school boy I have seen so far and he is just a joy!

Also, I want to partner some of these kids up. [redacted] and [redacted] need to train together.

BMS XC-Boys		Doddridge Invitational Thursday, September 16		
First Name	Last Name	Distance	Actual Time	Pace Per Mile
[redacted]		1.9	11:01.2	05:48.0
		1.9	13:21.8	07:02.0
		1.9	13:39.2	07:11.2
		1.9	14:06.3	07:25.4
		1.9	14:29.7	07:37.7
		1.9	14:36.2	07:41.2
		1.9	15:02.7	07:55.1
		1.9	15:50.6	08:20.3
		1.9	16:37.4	08:44.9
		1.9	16:51.0	08:52.1
		1.9	18:32.6	09:45.6
		1.9	18:57.9	09:58.9
		1.9	21:07.7	11:07.2
		N/A	N/A	N/A
		N/A	N/A	N/A
		N/A	N/A	N/A
		N/A	N/A	N/A

BMS XC-Girls		Doddridge Invitational Thursday, September 16		
First Name	Last Name	Distance	Actual Time	Pace Per Mile
[redacted]		1.9	14:13.0	07:28.9
		1.9	14:25.4	07:35.5
		1.9	15:59.3	08:24.9
		1.9	16:40.5	08:46.6
		1.9	16:40.9	08:46.8
		1.9	16:50.8	08:52.0
		1.9	17:25.7	09:10.4
		1.9	17:39.3	09:17.5
		1.9	18:01.3	09:29.1
		1.9	18:05.5	09:31.3
		1.9	19:36.0	10:18.9
		1.9	19:49.2	10:25.9
B[redacted]	P[redacted]-J[redacted]	1.9	21:50.5	11:29.7
[redacted]		1.9	22:06.9	11:38.4
		1.9	22:25.5	11:48.2
		1.9	28:48.5	15:09.8
		N/A	N/A	N/A
		N/A	N/A	N/A

USCA4 Appeal: 23-1078 Doc: 48-2 Filed: 02/15/2023 Pg: 1792 of 1787)
Case 2:21-cv-00316 Document 286-1 Filed 04/21/22 Page 1543 of 1551 PageID #: 10170

USCA4 Appeal: 23-1078 Doc: 48-2 Filed: 02/15/2023 Pg: 1703 of 1787)
Case 2:21-cv-00316 Document 286-1 Filed 04/21/22 Page 1544 of 1551 PageID #: 10171

		Doddridge Invitational		
		Thursday, September 16		
First Name	Last Name	Distance	Actual Time	Pace Per Mile
[redacted]		1.9	11:01.2	05:48.0
		1.9	13:21.8	07:02.0
		1.9	13:39.2	07:11.2
		1.9	14:06.3	07:25.4
		1.9	14:13.0	07:28.9
		1.9	14:25.4	07:35.5
		1.9	14:29.7	07:37.7
		1.9	14:36.2	07:41.2
		1.9	15:02.7	07:55.1
		1.9	15:50.6	08:20.3
		1.9	15:59.3	08:24.9
		1.9	16:37.4	08:44.9
		1.9	16:40.5	08:46.6
		1.9	16:40.9	08:46.8
		1.9	16:50.8	08:52.0
		1.9	16:51.0	08:52.1
		1.9	17:25.7	09:10.4
		1.9	17:39.3	09:17.5
		1.9	18:01.3	09:29.1
		1.9	18:05.5	09:31.3
		1.9	18:32.6	09:45.6
		1.9	18:57.9	09:58.9
		1.9	19:36.0	10:18.9
		1.9	19:49.2	10:25.9
		1.9	21:07.7	11:07.2
B[redacted]	P[redacted]-J[redacted]	1.9	21:50.5	11:29.7
		1.9	22:06.9	11:38.4
		1.9	22:25.5	11:48.2
		1.9	28:48.5	15:09.8
		N/A	N/A	N/A
		N/A	N/A	N/A
		N/A	N/A	N/A
		N/A	N/A	N/A
		N/A	N/A	N/A
		N/A	N/A	N/A

Message

From: Natalie McBrayer [nataliemcbrayer@gmail.com]
Sent: 9/27/2021 1:02:03 PM
To: bridgeportmiddlexc@gmail.com; Danyelle Schoonmaker [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=8f240a140f514d269f0bb8dd1486fec2-dlead001]
Subject: Braxton Results and Varsity Qualifiers
Attachments: BMS XC-Sept 25-Braxton Inv Finish Time Order.pdf; BMS XC-Sept 25-Braxton Inv Varsity Qualifiers.pdf

[EXTERNAL SENDER]: Do not click links, open attachments or reply to this email unless you recognize the sender and know the content is safe.

I attached the Varsity sheet and also a sheet based on finish order.

The race results are searchable and they also have finish line photos that are free to download here: APTiming

		Braxton Invitational		
		Saturday, September 25		
First Name	Last Name	Distance	Actual Time	Pace Per Mile
[redacted]		2	13:03.5	06:31.8
		2	14:18.5	07:09.2
		2	14:40.6	07:20.3
		2	14:44.8	07:22.4
		2	14:49.9	07:25.0
		2	15:02.3	07:31.2
		2	15:11.3	07:35.6
		2	15:49.2	07:54.6
		2	16:13.9	08:07.0
		2	16:17.8	08:08.9
		2	16:21.4	08:10.7
		2	16:26.4	08:13.2
		2	16:37.1	08:18.6
		2	17:09.2	08:34.6
		2	17:41.7	08:50.8
		2	17:50.3	08:55.2
		2	18:13.6	09:06.8
		2	18:20.2	09:10.1
		2	18:39.3	09:19.6
		2	19:29.9	09:45.0
		2	20:25.0	10:12.5
		2	20:26.5	10:13.3
		2	20:30.8	10:15.4
		2	21:06.2	10:33.1
		2	21:45.0	10:52.5
		2	22:33.3	11:16.7
		2	22:44.2	11:22.1
B[redacted]	P[redacted]-J[redacted]	2	24:08.4	12:04.2
		2	27:04.2	13:32.1
		N/A	N/A	N/A
		N/A	N/A	N/A
		N/A	N/A	N/A
		N/A	N/A	N/A
		N/A	N/A	N/A
		N/A	N/A	N/A

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Case 2:21-cv-00316 Document 286-1 Filed 04/21/22 Page 1547 of 1551 PageID #: 10174

BMS XC-Boys		Braxton Invitational Saturday, September 25		
First Name	Last Name	Distance	Actual Time	Pace Per Mile
[redacted]		2	13:03.5	06:31.8
		2	14:18.5	07:09.2
		2	14:40.6	07:20.3
		2	14:44.8	07:22.4
		2	14:49.9	07:25.0
		2	15:02.3	07:31.2
		2	15:11.3	07:35.6
		2	16:13.9	08:07.0
		2	16:21.4	08:10.7
		2	16:26.4	08:13.2
		2	16:37.1	08:18.6
		2	18:13.6	09:06.8
		2	18:39.3	09:19.6
		2	20:26.5	10:13.3
		2	22:33.3	11:16.7
		N/A	N/A	N/A
		N/A	N/A	N/A

BMS XC-Girls		Braxton Invitational Saturday, September 25		
First Name	Last Name	Distance	Actual Time	Pace Per Mile
[redacted]		2	15:49.2	07:54.6
		2	16:17.8	08:08.9
		2	17:09.2	08:34.6
		2	17:41.7	08:50.8
		2	17:50.3	08:55.2
		2	18:20.2	09:10.1
		2	19:29.9	09:45.0
		2	20:25.0	10:12.5
		2	20:30.8	10:15.4
		2	21:06.2	10:33.1
		2	21:45.0	10:52.5
		2	22:44.2	11:22.1
B[redacted]	P[redacted]-J[redacted]	2	24:08.4	12:04.2
[redacted]		2	27:04.2	13:32.1
		N/A	N/A	N/A
		N/A	N/A	N/A
		N/A	N/A	N/A
		N/A	N/A	N/A

App.01701

BMS XC-Boys		Ritchie County Saturday, October 1		
First Name	Last Name	Distance	Actual Time	Pace Per Mile
[redacted]		1.9	11:00.7	05:47.7
		1.9	12:53.6	06:47.2
		1.9	13:18.6	07:00.3
		1.9	13:23.9	07:03.1
		1.9	13:25.0	07:03.7
		1.9	14:05.5	07:25.0
		1.9	14:20.3	07:32.8
		1.9	14:25.3	07:35.4
		1.9	14:34.8	07:40.4
		1.9	14:53.4	07:50.2
		1.9	15:21.5	08:05.0
		1.9	16:40.2	08:46.4
		1.9	17:27.6	09:11.4
		1.9	19:22.6	10:11.9
		N/A	N/A	N/A
		N/A	N/A	N/A
		N/A	N/A	N/A

BMS XC-Girls		Ritchie County Saturday, October 1		
First Name	Last Name	Distance	Actual Time	Pace Per Mile
[redacted]		1.9	13:16.7	06:59.3
		1.9	13:19.4	07:00.7
		1.9	14:46.6	07:46.6
		1.9	15:00.6	07:54.0
		1.9	15:02.0	07:54.7
		1.9	15:31.2	08:10.1
		1.9	15:40.2	08:14.8
		1.9	16:03.7	08:27.2
		1.9	17:17.2	09:05.9
		1.9	17:30.1	09:12.7
		1.9	18:11.7	09:34.6
B[redacted]	P[redacted]-J[redacted]	1.9	19:02.6	10:01.4
[redacted]		1.9	19:12.5	10:06.6
		1.9	21:13.7	11:10.4
		1.9	24:06.1	12:41.1
		N/A	N/A	N/A
		N/A	N/A	N/A
		N/A	N/A	N/A

Varsity Sheets

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HCBOE 01265

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				WI Last Call			Harrison County Champs-Mountaineer Middle			XC Time Trial-Bridgeport City Park Course				Ritchie County	
				Saturday, October 16			Wednesday, October 13			Thursday, October 7				Saturday, October	
Boy/Girl	Grade:	First Name	Last Name	Distance	Actual Time	Pace Per Mile	Distance	Actual Time	Pace Per Mile	TT Place	Course Length	TT Time	TT Pace/Mile	Distance	Actual Time
Boy	8th Grade	[redacted]		2.1	13:08.6	06:15.5	2.1	12:54.1	06:08.6	1	1.55	09:34.6	0:06:11	1.9	11:00.7
Boy	8th Grade			2.1	15:00.7	07:08.9	2.1	14:20.9	06:49.9	0	N/A	N/A	N/A	N/A	N/A
Boy	6th Grade			2.1	15:19.4	07:17.8	2.1	14:43.8	07:00.9	5	1.55	11:24.7	0:07:22	1.9	14:34.8
Boy	7th Grade			2.1	15:57.5	07:35.9	2.1	14:51.7	07:04.6	3	1.55	10:54.9	0:07:03	1.9	12:53.6
Boy	7th Grade			2.1	16:04.4	07:39.2	2.1	15:17.6	07:17.0	0	N/A	N/A	N/A	1.9	13:25.0
Boy	8th Grade			2.1	16:51.4	08:01.6	2.1	16:38.1	07:55.3	8	1.55	11:42.4	0:07:33	1.9	14:53.4
Boy	6th Grade			2.1	17:20.6	08:15.5	2.1	16:49.6	08:00.8	9	1.55	11:47.7	0:07:37	1.9	14:20.3
Boy	8th Grade			2.1	17:51.5	08:30.3	2.1	16:47.5	07:59.8	10	1.55	12:04.6	0:07:47	1.9	14:05.5
Boy	7th Grade			2.1	18:05.0	08:36.7	2.1	16:53.4	08:02.6	11	1.55	12:08.3	0:07:50	1.9	14:25.3
Boy	8th Grade			2.1	18:34.3	08:50.6	2.1	18:55.8	09:00.9	0	N/A	N/A	N/A	1.9	15:21.5
Boy	7th Grade			2.1	20:39.9	09:50.4	2.1	19:23.7	09:14.1	15	1.55	13:26.9	0:08:41	1.9	17:27.6
Boy	7th Grade			2.1	22:05.1	10:31.0	2.1	19:27.0	09:15.7	18	1.55	13:52.5	0:08:57	1.9	16:40.2
Boy	7th Grade			N/A	N/A	N/A	2.1	22:04.6	10:30.8	27	1.55	19:38.5	0:12:40	1.9	19:22.6
Boy	7th Grade			N/A	N/A	N/A	2.1	22:32.3	10:44.0	0	N/A	N/A	N/A	N/A	N/A
Boy	7th Grade			N/A	N/A	N/A	N/A	N/A	N/A	0	N/A	N/A	N/A	N/A	N/A
Boy	7th Grade			N/A	N/A	N/A	N/A	N/A	N/A	2	1.55	10:52.2	0:07:01	1.9	13:18.6
Boy	6th Grade			N/A	N/A	N/A	N/A	N/A	N/A	4	1.55	10:58.8	0:07:05	1.9	13:23.9
Girl	8th Grade			2.1	15:48.7	07:31.8	2.1	15:32.7	07:24.1	6	1.55	11:25.3	0:07:22	1.9	13:16.7
Girl	6th Grade			2.1	16:12.7	07:43.2	2.1	16:53.4	08:02.6	7	1.55	11:25.8	0:07:22	1.9	13:19.4
Girl	6th Grade			2.1	17:27.3	08:18.7	2.1	18:14.6	08:41.2	13	1.55	12:31.9	0:08:05	1.9	14:46.6
Girl	7th Grade			2.1	18:08.5	08:38.4	2.1	17:55.2	08:32.0	0	N/A	N/A	N/A	1.9	15:31.2
Girl	6th Grade			2.1	19:11.0	09:08.1	2.1	18:20.5	08:44.1	23	1.55	15:23.9	0:09:56	1.9	15:02.0
Girl	8th Grade			2.1	19:24.8	09:14.7	2.1	17:56.8	08:32.8	12	1.55	12:29.5	0:08:04	1.9	16:03.7
Girl	6th Grade			2.1	19:57.8	09:30.4	2.1	19:07.4	09:06.4	17	1.55	13:49.7	0:08:55	1.9	15:40.2
Girl	7th Grade			2.1	20:57.9	09:59.0	2.1	19:02.2	09:03.9	16	1.55	13:44.4	0:08:52	1.9	17:30.1
Girl	7th Grade			2.1	21:05.5	10:02.6	2.1	19:27.7	09:16.0	19	1.55	13:56.8	0:09:00	N/A	N/A
Girl	8th Grade			2.1	21:11.3	10:05.4	2.1	18:36.9	08:51.9	20	1.55	14:52.2	0:09:36	1.9	17:17.2
Girl	6th Grade	B[redacted]	P[redacted]-J[redacted]	2.1	21:50.8	10:24.2	2.1	22:38.1	10:46.7	24	1.55	16:10.1	0:10:26	1.9	19:02.6
Girl	6th Grade	[redacted]		2.1	22:03.8	10:30.4	2.1	21:37.2	10:17.7	22	1.55	15:17.6	0:09:52	1.9	19:12.5
Girl	8th Grade			2.1	22:39.5	10:47.4	2.1	22:14.4	10:35.4	21	1.55	14:53.3	0:09:36	1.9	18:11.7
Girl	7th Grade			2.1	26:11.1	12:28.1	2.1	27:59.0	13:19.5	26	1.55	17:51.7	0:11:31	1.9	21:13.7
Girl	8th Grade			2.1	27:40.9	13:10.9	2.1	26:38.8	12:41.3	25	1.55	17:42.1	0:11:25	N/A	N/A
Girl	6th Grade			2.1	29:14.2	13:55.4	2.1	32:50.9	15:38.5	28	1.55	22:15.5	0:14:22	1.9	24:06.1
Girl	8th Grade			N/A	N/A	N/A	N/A	N/A	N/A	0	N/A	N/A	N/A	N/A	N/A
Girl	8th Grade			N/A	N/A	N/A	N/A	N/A	N/A	14	1.55	12:53.7	0:08:19	1.9	15:00.6

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	Braxton Invitational			Doddridge Invitational			Taylor County Invitational			Mountain Holler Invitational-University HS			XC Time Trial-Bridgeport City Park Course			
1	Saturday, September 25			Thursday, September 16			Wednesday, September 8			Thursday, September 2			Tuesday, August 24, 2021			
Pace Per Mile	Distance	Actual Time	Pace Per Mile	Distance	Actual Time	Pace Per Mile	Distance	Actual Time	Pace Per Mile	Distance	Actual Time	Pace Per Mile	Place	Course Length	TT Time	TT Pace/Mile
05:47.7	2	13:03.5	06:31.8	1.9	11:01.2	05:48.0	1.9	11:26.0	06:01.1	2	12:10.1	06:05.0	1	1.55	10:28.9	0:06:46
N/A	2	14:18.5	07:09.2	N/A	N/A	N/A	1.9	13:00.0	06:50.5	2	13:36.1	06:48.1	4	1.55	11:24.8	0:07:22
07:40.4	2	14:40.6	07:20.3	1.9	13:21.8	07:02.0	1.9	13:33.0	07:07.9	2	14:20.7	07:10.3	3	1.55	11:23.5	0:07:21
06:47.2	2	14:44.8	07:22.4	1.9	13:39.2	07:11.2	1.9	13:49.0	07:16.3	2	14:41.8	07:20.9	11	1.55	12:13.5	0:07:53
07:03.7	2	15:11.3	07:35.6	N/A	N/A	N/A	1.9	13:52.0	07:17.9	2	15:07.6	07:33.8	8	1.55	12:07.3	0:07:49
07:50.2	2	16:21.4	08:10.7	1.9	14:36.2	07:41.2	1.9	14:32.0	07:38.9	2	16:17.5	08:08.8	9	1.55	12:12.6	0:07:53
07:32.8	2	16:13.9	08:07.0	1.9	15:50.6	08:20.3	1.9	16:05.0	08:27.9	2	18:13.1	09:06.6	12	1.55	12:33.4	0:08:06
07:25.0	2	16:26.4	08:13.2	N/A	N/A	N/A	1.9	14:34.0	07:40.0	2	16:52.3	08:26.1	0	N/A	N/A	N/A
07:35.4	2	16:37.1	08:18.6	1.9	16:37.4	08:44.9	1.9	16:49.0	08:51.1	2	18:20.5	09:10.3	16	1.55	13:06.2	0:08:27
08:05.0	2	18:13.6	09:06.8	1.9	16:51.0	08:52.1	1.9	16:49.1	08:51.1	2	20:03.9	10:02.0	20	1.55	14:31.7	0:09:22
09:11.4	2	18:39.3	09:19.6	1.9	18:32.6	09:45.6	1.9	17:28.0	09:11.6	2	20:05.1	10:02.5	28	1.55	18:37.2	0:12:01
08:46.4	2	20:26.5	10:13.3	1.9	18:57.9	09:58.9	1.9	18:50.0	09:54.7	2	21:20.4	10:40.2	26	1.55	16:21.2	0:10:33
10:11.9	2	22:33.3	11:16.7	1.9	21:07.7	11:07.2	1.9	20:40.0	10:52.6	2	21:54.7	10:57.4	33	1.55	19:37.6	0:12:40
N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.9	20:58.0	11:02.1	N/A	N/A	N/A	29	1.55	18:41.0	0:12:03
N/A	N/A	N/A	N/A	1.9	15:02.7	07:55.1	N/A	N/A	N/A	N/A	N/A	N/A	10	1.55	12:13.0	0:07:53
07:00.3	2	15:02.3	07:31.2	1.9	14:29.7	07:37.7	1.9	14:10.0	07:27.4	2	15:32.1	07:46.1	17	1.55	13:50.2	0:08:56
07:03.1	2	14:49.9	07:25.0	1.9	14:06.3	07:25.4	1.9	14:08.0	07:26.3	2	15:28.4	07:44.2	5	1.55	11:33.5	0:07:27
06:59.3	2	15:49.2	07:54.6	1.9	14:25.4	07:35.5	1.9	13:46.7	07:15.1	2	16:17.8	08:08.9	7	1.55	11:38.7	0:07:31
07:00.7	2	16:17.8	08:08.9	1.9	14:13.0	07:28.9	1.9	15:25.0	08:06.8	2	14:24.5	07:12.3	13	1.55	12:53.0	0:08:19
07:46.6	2	17:09.2	08:34.6	1.9	16:40.9	08:46.8	1.9	16:28.0	08:40.0	2	16:24.8	08:12.4	24	1.55	15:28.1	0:09:59
08:10.1	2	18:20.2	09:10.1	1.9	16:40.5	08:46.6	N/A	N/A	N/A	N/A	N/A	N/A	19	1.55	14:18.2	0:09:14
07:54.7	2	17:50.3	08:55.2	1.9	16:50.8	08:52.0	1.9	17:41.0	09:18.4	2	18:08.4	09:04.2	27	1.55	16:56.1	0:10:56
08:27.2	2	19:29.9	09:45.0	1.9	15:59.3	08:24.9	1.9	16:52.0	08:52.6	2	17:20.1	08:40.0	15	1.55	12:59.8	0:08:23
08:14.8	N/A	N/A	N/A	1.9	17:25.7	09:10.4	1.9	16:43.0	08:47.9	2	17:09.8	08:34.9	22	1.55	14:47.2	0:09:32
09:12.7	2	17:41.7	08:50.8	1.9	17:39.3	09:17.5	1.9	17:58.0	09:27.4	2	18:35.8	09:17.9	23	1.55	15:25.5	0:09:57
N/A	2	20:30.8	10:15.4	1.9	18:01.3	09:29.1	1.9	17:06.0	09:00.0	2	17:34.4	08:47.2	21	1.55	14:32.2	0:09:23
09:05.9	2	21:06.2	10:33.1	1.9	18:05.5	09:31.3	1.9	18:09.0	09:33.2	2	19:17.1	09:38.6	18	1.55	14:17.7	0:09:13
10:01.4	2	24:08.4	12:04.2	1.9	21:50.5	11:29.7	1.9	20:31.0	10:47.9	2	21:46.1	10:53.0	30	1.55	19:04.5	0:12:18
10:06.6	2	22:44.2	11:22.1	1.9	19:49.2	10:25.9	1.9	20:53.0	10:59.5	2	22:33.9	11:17.0	35	1.55	20:52.5	0:13:28
09:34.6	2	21:45.0	10:52.5	1.9	19:36.0	10:18.9	1.9	19:30.0	10:15.8	2	20:43.7	10:21.8	25	1.55	15:42.3	0:10:08
11:10.4	2	27:04.2	13:32.1	1.9	22:25.5	11:48.2	1.9	23:30.0	12:22.1	2	24:55.9	12:28.0	34	1.55	20:34.8	0:13:17
N/A	N/A	N/A	N/A	1.9	22:06.9	11:38.4	1.9	21:47.0	11:27.9	2	22:55.7	11:27.9	32	1.55	19:16.2	0:12:26
12:41.1	N/A	N/A	N/A	1.9	28:48.5	15:09.8	1.9	25:58.0	13:40.0	N/A	N/A	N/A	36	1.55	23:44.9	0:15:19
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	31	1.55	19:08.6	0:12:21
07:54.0	2	20:25.0	10:12.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	14	1.55	12:56.1	0:08:21

CONFIDENTIAL

		Time Trial Comparison		XC Time Trial-Bridgeport City Park Course Thursday, October 7, 2021				XC Time Trial-Bridgeport City Park Course Tuesday, August 24, 2021				Difference (BOLD is improved)	
Boy/Girl	Grade:	First Name	Last Name	TT Place	Course Length	TT Time	TT Pace/Mile	Place	Course Length	TT Time	TT Pace/Mile	Time	Pace/Mile
Boy	7th Grade	[redacted]		0	N/A	N/A	N/A	10	1.55	12:13.0	0:07:53	N/A	N/A
Girl	8th Grade			0	N/A	N/A	N/A	31	1.55	19:08.6	0:12:21	N/A	N/A
Boy	8th Grade			0	N/A	N/A	N/A	20	1.55	14:31.7	0:09:22	N/A	N/A
Boy	7th Grade			0	N/A	N/A	N/A	8	1.55	12:07.3	0:07:49	N/A	N/A
Boy	8th Grade			0	N/A	N/A	N/A	4	1.55	11:24.8	0:07:22	N/A	N/A
Girl	7th Grade			0	N/A	N/A	N/A	19	1.55	14:18.2	0:09:14	N/A	N/A
Boy	7th Grade			0	N/A	N/A	N/A	29	1.55	18:41.0	0:12:03	N/A	N/A
Boy	8th Grade			1	1.55	09:34.6	0:06:11	1	1.55	10:28.9	0:06:46	**00:54.3**	**0:00:35**
Boy	7th Grade			2	1.55	10:52.2	0:07:01	17	1.55	13:50.2	0:08:56	**02:58.0**	**0:01:55**
Boy	7th Grade			3	1.55	10:54.9	0:07:03	11	1.55	12:13.5	0:07:53	**01:18.5**	**0:00:51**
Boy	6th Grade			4	1.55	10:58.8	0:07:05	5	1.55	11:33.5	0:07:27	**00:34.7**	**0:00:22**
Boy	6th Grade			5	1.55	11:24.7	0:07:22	3	1.55	11:23.5	0:07:21	*00:01.2*	*0:00:01*
Girl	8th Grade			6	1.55	11:25.3	0:07:22	7	1.55	11:38.7	0:07:31	**00:13.4**	**0:00:09**
Girl	6th Grade			7	1.55	11:25.8	0:07:22	13	1.55	12:53.0	0:08:19	**01:27.2**	**0:00:56**
Boy	8th Grade			8	1.55	11:42.4	0:07:33	9	1.55	12:12.6	0:07:53	**00:30.2**	**0:00:19**
Boy	6th Grade			9	1.55	11:47.7	0:07:37	12	1.55	12:33.4	0:08:06	**00:45.7**	**0:00:29**
Boy	8th Grade			10	1.55	12:04.6	0:07:47	0	N/A	N/A	N/A	N/A	N/A
Boy	7th Grade			11	1.55	12:08.3	0:07:50	16	1.55	13:06.2	0:08:27	**00:57.8**	**0:00:37**
Girl	8th Grade			12	1.55	12:29.5	0:08:04	15	1.55	12:59.8	0:08:23	**00:30.3**	**0:00:20**
Girl	6th Grade			13	1.55	12:31.9	0:08:05	24	1.55	15:28.1	0:09:59	**02:56.2**	**0:01:54**
Girl	8th Grade			14	1.55	12:53.7	0:08:19	14	1.55	12:56.1	0:08:21	**00:02.4**	**0:00:02**
Boy	7th Grade			15	1.55	13:26.9	0:08:41	28	1.55	18:37.2	0:12:01	**05:10.3**	**0:03:20**
Girl	7th Grade			16	1.55	13:44.4	0:08:52	23	1.55	15:25.5	0:09:57	**01:41.1**	**0:01:05**
Girl	6th Grade			17	1.55	13:49.7	0:08:55	22	1.55	14:47.2	0:09:32	**00:57.5**	**0:00:37**
Boy	7th Grade			18	1.55	13:52.5	0:08:57	26	1.55	16:21.2	0:10:33	**02:28.7**	**0:01:36**
Girl	7th Grade			19	1.55	13:56.8	0:09:00	21	1.55	14:32.2	0:09:23	**00:35.4**	**0:00:23**
Girl	8th Grade			20	1.55	14:52.2	0:09:36	18	1.55	14:17.7	0:09:13	*00:34.5*	*0:00:22*
Girl	8th Grade			21	1.55	14:53.3	0:09:36	25	1.55	15:42.3	0:10:08	**00:49.0**	**0:00:32**
Girl	6th Grade			22	1.55	15:17.6	0:09:52	35	1.55	20:52.5	0:13:28	**05:34.9**	**0:03:36**
Girl	6th Grade			23	1.55	15:23.9	0:09:56	27	1.55	16:56.1	0:10:56	**01:32.2**	**0:01:00**
Girl	6th Grade	B[redacted]	P[redacted]-J[redacted]	24	1.55	16:10.1	0:10:26	30	1.55	19:04.5	0:12:18	**02:54.4**	**0:01:53**
Girl	8th Grade			25	1.55	17:42.1	0:11:25	32	1.55	19:16.2	0:12:26	**01:34.1**	**0:01:01**
Girl	7th Grade			26	1.55	17:51.7	0:11:31	34	1.55	20:34.8	0:13:17	**02:43.1**	**0:01:45**
Boy	7th Grade			27	1.55	19:38.5	0:12:40	33	1.55	19:37.6	0:12:40	*00:00.9*	*0:00:01*
Girl	6th Grade			28	1.55	22:15.5	0:14:22	36	1.55	23:44.9	0:15:19	**01:29.4**	**0:00:58**

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IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA

CHARLESTON DIVISION

B. P. J., et al.,

Plaintiffs,

v. CIVIL ACTION NO. 2:21-cv-00316

WEST VIRGINIA STATE BOARD OF EDUCATION, et al.,

Defendants.

MEMORANDUM OPINION AND ORDER

West Virginia passed a law that defines "girl" and "woman," for the purpose of secondary school sports, as biologically female. Under the law, all biological males, including those who identify as transgender girls, are ineligible for participation on girls' sports teams. B.P.J., a transgender girl who wants to play girls' sports, challenges the law. The question before the court is whether the legislature's chosen definition of "girl" and "woman" in this context is constitutionally permissible. I find that it is.

I. Relevant Facts

A. B.P.J.

B.P.J. is an eleven-year-old transgender girl. This means that although B.P.J.'s biological sex is male, she now identifies and lives as a girl. According to her First Amended Complaint, B.P.J. began expressing her female gender identity when she

was three years old. [ECF No. 285-2]. By the end of third grade, B.P.J. expressed herself fully—both at home and otherwise—as a girl. In 2019, B.P.J. was diagnosed with gender dysphoria and, at the first signs of puberty, she began taking puberty blocking medications to treat that condition. [ECF No. 289-21]. As a result, B.P.J. has not undergone endogenous male puberty.

In 2021, as she prepared to enter middle school, B.P.J. expressed interest in trying out for the girls' cross-country and track teams. When her mother, Plaintiff Heather Jackson, asked the school to allow B.P.J. to participate on the girls' teams, the school initially informed her that whether B.P.J. would be permitted to play on the girls' teams depended on the outcome of House Bill ("H.B.") 3293, which was then pending in the West Virginia legislature. When the law passed, the school informed Ms. Jackson that B.P.J. would not be permitted to try out for the girls' teams.

B. The "Save Women's Sports Bill"

H.B. 3293, entitled the "Save Women's Sports Bill," was introduced in the West Virginia House of Delegates on March 18, 2021. The bill passed and was codified as West Virginia Code Section 18-2-25d, entitled "Clarifying participation for sports events to be based on biological sex of the athlete at birth." The law, which was clearly carefully crafted with litigation such as this in mind, begins with the following legislative findings:

> (1) There are inherent differences between biological males and females, and that these differences are cause for celebration, as determined by the Supreme Court of the United States in *United States v. Virginia* (1996);

(2) These inherent differences are not a valid justification for sex-based classifications that make overbroad generalizations or perpetuate the legal, social, and economic inferiority of either sex. Rather, these inherent differences are a valid justification for sex-based classifications when they realistically reflect the fact that the sexes are not similarly situated in certain circumstances, as recognized by the Supreme Court of the United States in *Michael M. v. Sonoma County, Superior Court* (1981) and the Supreme Court of Appeals of West Virginia in *Israel v. Secondary Schools Act. Com'n* (1989);

(3) In the context of sports involving competitive skill or contact, biological males and biological females are not in fact similarly situated. Biological males would displace females to a substantial extent if permitted to compete on teams designated for biological females, as recognized in *Clark v. Ariz. Interscholastic Ass'n* (9th Cir. 1982);

(4) Although necessarily related, as concluded by the United States Supreme Court in *Bostock v. Clayton County* (2020), gender identity is separate and distinct from biological sex to the extent that an individual's biological sex is not determinative or indicative of the individual's gender identity. Classifications based on gender identity serve no legitimate relationship to the State of West Virginia's interest in promoting equal athletic opportunities for the female sex; and

(5) Classifications of teams according to biological sex is necessary to promote equal athletic opportunities for the female sex.

W. Va. Code § 18-2-25d(a)(1)–(5).

After making these findings, the law sets forth definitions of "biological sex," "female," and male" as follows:

(1) "Biological sex" means an individual's physical form as a male or female based solely on the individual's reproductive biology and genetics at birth.

> (2) "Female" means an individual whose biological sex determined at birth is female. As used in this section, "women" or "girls" refers to biological females.
>
> (3) "Male" means an individual whose biological sex determined at birth is male. As used in this section, "men" or "boys" refers to biological males.

Id. § 18-2-25d(b)(1)–(3).

Finally, the law requires that each athletic team that is "sponsored by any public secondary school or a state institution of higher education" "be expressly designated as" either male, female, or coed, "based on biological sex." *Id.* § 18-2-25d(c). Teams that are designated "female" "shall not be open to students of the male sex where selection for such teams is based upon competitive skill or the activity involved is a contact sport." *Id.* § 18-2-25d(c)(2).

C. Procedural History

On May 26, 2021, B.P.J., through her mother, filed this lawsuit against the West Virginia State Board of Education and its then-Superintendent W. Clayton Burch, the Harrison County Board of Education and its Superintendent Dora Stutler, and the West Virginia Secondary Schools Activities Commission ("WVSSAC"). The State of West Virginia moved to intervene, and that motion was granted. Plaintiff then amended her complaint, [ECF No. 64], naming the State of West Virginia and Attorney General Patrick Morrisey as defendants. Mr. Morrisey has since been dismissed as a party from this lawsuit.

In her amended complaint, B.P.J. alleges that Defendants Burch, Stutler, and the WVSSAC deprived her of the equal protection guaranteed to her by the

Fourteenth Amendment and that the State, the State Board of Education, the Harrison County Board of Education, and the WVSSAC have violated Title IX. B.P.J. seeks a declaratory judgment that Section 18-2-25d of the West Virginia Code violates Title IX and the Equal Protection Clause; an injunction preventing Defendants from enforcing the law against her; a waiver of the requirement of a surety bond for preliminary injunctive relief; nominal damages; and reasonable attorneys' fees.

B.P.J. initially requested a preliminary injunction to allow her to compete on the girls' track and cross-country teams during the pendency of this case. Finding that B.P.J. had a likelihood of success on the merits of her as-applied challenge to the law, I granted the preliminary injunction. All defendants moved to dismiss, and those motions were denied. Lainey Armistead, a cisgender[1] female college athlete then moved to intervene as a defendant and that motion was granted. All parties have now moved for summary judgment.

II. Legal Standard

Summary judgment is appropriate where the "depositions, documents, electronically stored information, affidavits or declarations, stipulations . . . , admissions, interrogatory answers, or other materials" show that "there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed R. Civ. P. 56(a), (c)(1)(A).

[1] "Cisgender" means a person whose gender identity aligns with her biological sex. *See Grimm v. Gloucester Cnty. Sch. Bd.*, 972 F.3d 586, 594 (4th Cir. 2020), *as amended* (Aug. 28, 2020), *cert. denied*, 141 S. Ct. 2878 (2021).

III. Analysis

B.P.J. alleges that H.B. 3293 violates the Constitution's Equal Protection Clause and Title IX. I will address each argument in turn. Before turning to the merits of those arguments, however, I find it important to address some preliminary matters.

A. The WVSSAC's Motion

The WVSSAC does not argue the merits of Plaintiff's Equal Protection or Title IX claims. Rather, the WVSSAC only argues that it is not a state actor and is therefore not subject to scrutiny under either the Equal Protection Clause or Title IX. I disagree. Defendant WVSSAC's motion [ECF No. 276] is **DENIED**.

A court may only apply equal protection scrutiny to state action. U.S. Const. amend. XIV, § 1, cl. 4.; *Lugar v. Edmondson Oil Co., Inc.*, 457 U.S. 922, 923–24 (1982). Likewise, only a party acting under the color of state law is subject to suit pursuant to 42 U.S.C. § 1983. Despite differing terms, the color-of-law requirement in a § 1983 claim and the state action requirement under the Fourteenth Amendment are synonymous and are analyzed the same way. *See Lugar*, 457 U.S. at 923–24; *United States v. Price*, 383 U.S. 787, 794 (1966).

"[T]he character of a legal entity is determined neither by its expressly private characterization in statutory law, nor by the failure of the law to acknowledge the entity's inseparability from recognized government officials or agencies." *Brentwood Acad. v. Tenn. Secondary Sch. Athletic Ass'n*, 531 U.S. 288, 931 (2001) (citing *Lebron v. Nat'l R.R. Passenger Corp.*, 513 U.S. 374 (1995)). For example, an ostensibly

private actor can become a state actor when it is "controlled by an 'agency of the State,'" or "entwined with governmental policies[,]" or the government is "entwined in [its] management or control." *Pennsylvania v. Bd. of Dir. of City Trs. of Phila.*, 353 U.S. 230, 231 (1957); *Evans v. Newton*, 382 U.S. 296, 299 (1966). There is, however, no rigid test to determine when a challenged action becomes a state action. *Brentwood Acad.*, 531 U.S. at 295. No single fact nor set of conditions will definitively confer state action because there may be a better "countervailing reason against attributing activity to the government." *Id.* at 295–96. "Only by sifting facts and weighing circumstances can the nonobvious involvement of the State in private conduct be attributed its true significance." *Lugar*, 457 U.S. at 939 (citing *Burton v. Wilmington Parking Auth.*, 365 U.S. 715, 860 (1961); *Peltier v. Charter Day Sch., Inc.*, 37 F.4th 104, 116 (4th Cir. 2022) ("[T]he inquiry is highly fact-specific in nature.").

After considering its composition, rulemaking process, obligations under state law, and other rules for student eligibility, I find the WVSSAC is a state actor. Like in *Brentwood Acad.*, the WVSSAC's nominally private character "is overborne by the pervasive entwinement of public institutions and public officials in its composition and workings, and there is no substantial reason to claim unfairness in applying constitutional standards to it." 531 U.S. at 298. I find that the WVSSAC is a state actor for several reasons. Though county boards of education have the statutory authority to supervise and control interscholastic athletic events, they have delegated that authority to the WVSSAC. [ECF No. 285-1]. Every public secondary school in

West Virginia is a member of the WVSSAC, and the school principals sit on the WVSSAC's Board of Control to propose and vote on sports rules and regulations. *Id.* Any rule the WVSSAC passes is then subject to approval by the State Board of Education, and the State Board of Education requires that any coach who is not also a teacher be trained by the WVSSAC and certified by the State Board of Education. *Id.* And the WVSSAC Board of Directors—the entity that enforces the rules—includes representatives of the State Superintendent and the State Board of Education, among other governmental entities. *Id.*; 127 C.S.R. § 127-1-8.2. Here, it appears that the WVSSAC cannot exist without the state, and the state cannot manage statewide secondary school activities without the WVSSAC. The WVSSAC is pervasively entwined with the state.

The WVSSAC's motion for summary judgment [ECF No. 276] is therefore **DENIED**.

B. Animus

In her Amended Complaint, B.P.J. alleges that H.B. 3293 was introduced in the legislature "as part of a concerted, nationwide effort to target transgender youth for unequal treatment." [ECF No. 64, ¶ 45]. B.P.J. alleges that the law was "targeted at, and intended only to affect, girls who are transgender." *Id.* ¶ 46. In support of these contentions, B.P.J. points to the actions of bill co-sponsor Delegate Jordan Bridges. According to the Amended Complaint, Delegate Bridges made a Facebook post announcing the introduction of the bill and then "'liked' comments on his post that advocated for physical violence against girls who are transgender, compared

girls who are transgender to pigs, and called girls who are transgender by a pejorative term." *Id.* ¶ 47. In her summary judgment motion, B.P.J. again points the court to the actions of Delegate Bridges and points to several instances where legislators made clear that the purpose of the bill was to address transgender participation in sports.

Notwithstanding these statements, B.P.J. does not argue that the law is unconstitutional under the Supreme Court's animus doctrine, and the record lacks sufficient legislative history to make such a finding. The record makes abundantly clear, however, that West Virginia had no "problem" with transgender students playing school sports and creating unfair competition or unsafe conditions. In fact, at the time it passed the law, West Virginia had no known instance of any transgender person playing school sports. While the legislature did take note of transgender students playing sports in other states, it is obvious to me that the statute is at best a solution to a potential, but not yet realized, "problem."

Even so, the law is only unconstitutional under the animus doctrine if the reason for its passage was the "bare desire" to harm transgender people. *U.S. Dep't of Agric. v. Moreno*, 413 U.S. 528, 535 (1973). While the record before me does reveal that at least one legislator held or implicitly supported private bias against, or moral disapproval of, transgender individuals, it does not contain evidence of that type of animus more broadly throughout the state legislature. Therefore, I cannot find unconstitutional animus on the record before me.

C. Other Matters

Next, before proceeding to the merits of the case, I find it important to briefly discuss what this case is *not*.

First, despite the politically charged nature of transgender acceptance in our culture today, this case is *not* one where the court needs to accept or approve B.P.J.'s existence as a transgender girl. B.P.J., like all transgender people, deserves respect and the ability to live free from judgment and hatred for simply being who she is. But for the state legislature, creating a "solution" in search of a problem, the courts would have no reason to consider eligibility rules for youth athletics. Nevertheless, I must do so now.

This is also *not* a case where B.P.J. challenges the entire structure of school sports. B.P.J. does not challenge, on a broad basis, sex-separation in sports. B.P.J. wants to play on a girls' team. And she admits that there are benefits associated with school athletics, "including when such athletics are provided in a sex-separated manner." [ECF No. 286-1, at 1445]. Ultimately, B.P.J.'s issue here is not with the state's offering of girls' sports and boys' sports. It is with the state's definitions of "girl" and "boy." The state has determined that for purposes of school sports, the definition of "girl" should be "biologically female," based on physical differences between the sexes. And the state argues that its definition is appropriate here because it is substantially related to an important government interest. B.P.J., for her part, seeks a legal declaration that a transgender girl is "female."

I will not get into the business of defining what it means to be a "girl" or "woman." The courts have no business creating such definitions, and I would be hard-pressed to find many other contexts where one's sex and gender are relevant legislative considerations. But I am forced to consider whether the state's chosen definition passes constitutional muster in this one discrete context.

D. Equal Protection

Having addressed those matters, I now turn to the merits of B.P.J.'s claim that H.B. 3293 violates the Constitution's Equal Protection Clause.

1. Legal Standard

The Equal Protection Clause of the Fourteenth Amendment provides that no state may deny any person within its jurisdiction "equal protection of the laws." U.S. Const. amend. XIV, § 1, cl. 4. In other words, "all persons similarly situated should be treated alike." *City of Cleburne, Tex. v. Cleburne Living Ctr.*, 473 U.S. 432, 439 (1985). Realistically, though, every law impacts people differently, and the Fourteenth Amendment does not prohibit that outcome. *Reed v. Reed*, 404 U.S. 71, 75 (1971). But the Equal Protection Clause does forbid a statute from placing people into different classes and treating them unequally for reasons "wholly unrelated to the objective of that statute." *Id.* at 75–76. Ultimately, if a law seeks to treat different groups of people differently, it must do so "upon some ground of difference having a fair and substantial relation to the object of the legislation, so that all persons similarly circumstanced shall be treated alike." *Id.* at 76 (quoting *Royster Guano Co. v. Virginia*, 253 U.S. 412, 415 (1920)).

In general, courts presume that a law is constitutional. Based on that presumption, courts may only overturn a law if the challenger can show that the law's classification is not rationally related to *any* government interest. *Moreno*, 413 U.S. at 533. This general review is known as rational basis review. However, the court's inquiry becomes more searching if the law disadvantages a group of people who have historically been discriminated against and whose identity has nothing to do with their ability to participate in society. Race-based laws, for example, are "immediately suspect" because "they threaten to stigmatize individuals by reason of their membership in a racial group." *Shaw v. Reno*, 509 U.S. 630, 643 (1993). Laws based on race, or other suspect classifications such as alienage and national origin, are subject to strict scrutiny and will only be upheld "upon an extraordinary justification." *Id.* at 643–44 (quoting *Pers. Adm'r of Mass. v. Feeney*, 442 U.S. 256, 272 (1979)). Under strict scrutiny, the law must be "narrowly tailored to serve a compelling governmental interest." *Cleburne*, 473 U.S. at 440.

In the middle of rational basis review and strict scrutiny lies intermediate scrutiny. Intermediate scrutiny applies to laws that discriminate on the basis of a quasi-suspect classification, like sex, *United States v. Virginia*, 518 U.S. 515, 533 (1996), and transgender status, *Grimm v. Gloucester Cnty. Sch. Bd.*, 972 F.3d 586, 611 (4th Cir. 2020), *as amended* (Aug. 28, 2020), *cert. denied*, 141 S. Ct. 2878 (2021) ("Engaging with the suspect class test, it is apparent that transgender persons constitute a quasi-suspect class."). Sex discrimination receives intermediate scrutiny because while states have historically used sex as a basis for invidious discrimination,

we recognize that there are some "real differences" between males and females that could legitimately form the basis for different treatment. *Virginia*, 518 U.S. at 533.

The Supreme Court has long "viewed with suspicion laws that rely on 'overbroad generalizations about the different talents, capacities, or preferences of males and females.'" *Sessions v. Morales-Santana*, 137 S. Ct. 1678, 1692 (2017) (quoting *Virginia*, 518 U.S. at 533). Therefore, laws that discriminate based on sex must be backed by an "exceedingly persuasive justification." *Virginia*, 518 U.S. at 513. That is to say, the law's proponents must show that it "serves important governmental objectives and that the discriminatory means employed are substantially related to the achievement of those objectives." *Miss. Univ. for Women v. Hogan*, 458 U.S. 718, 724 (1982). Even if the law's objective is to protect the members of one sex, that "objective itself is illegitimate" if it relies on "fixed notions concerning [that sex's] roles and abilities." *Morales-Santana*, 137 S. Ct. at 1692.

The party defending the statute must "present[] sufficient probative evidence in support of its stated rationale for enacting a [sex] preference, i.e., . . . the evidence [must be] sufficient to show that the preference rests on evidence-informed analysis rather than on stereotypical generalizations." *H.B. Rowe Co. v. Tippett*, 615 F.3d 233, 242 (4th Cir. 2010) (quoting *Eng'g Contractors Ass'n of S. Fla. v. Metro. Dade Cnty.*, 122 F.3d 895, 910 (11th Cir. 1997)); *Concrete Works of Colo., Inc. v. City & Cnty. of Denver*, 321 F.3d 950, 959 (10th Cir. 2003) ("[T]he gender-based measures . . . [must be] based on 'reasoned analysis rather than [on] the mechanical application of

traditional, often inaccurate, assumptions.'" (quoting *Miss. Univ. for Women*, 458 U.S. at 726)).

2. Discussion

There is no debate that intermediate scrutiny applies to the law at issue here—H.B. 3293 plainly separates student athletes based on sex. And even B.P.J. agrees that the state has an important interest in providing equal athletic opportunities for female students. [ECF No. 291, at 24]. As discussed earlier, B.P.J. does not challenge sex-separation in sports on a broad basis; she does not argue that teams should be separated based on some other factor or not separated at all. Rather, B.P.J. recognizes the benefits of sex-separated athletics and takes issue only with the state's definitions of "girl" and "woman" as based on biological sex.

B.P.J. argues that "H.B. 3293 excludes students from sports teams based on 'biological sex' and defines 'biological sex' solely in terms of 'reproductive biology and genetics at birth.'" *Id.* at 19. According to B.P.J., H.B. 3293 uses this "'ends-driven definition[] of "biological sex"' to 'guarantee a particular outcome': Barring girls who are transgender from qualifying as girls for purposes of school sports and thereby categorically excluding them from girls' teams and therefore from school sports altogether." *Id.* (quoting *Grimm*, 972 F.3d at 626 (Wynn, J., concurring)). B.P.J. argues that this definition of "biological sex," and the related definitions of "girl" and "woman," are not substantially related to the government interest in providing equal athletic opportunities for females.

The State of West Virginia, the State Board defendants, the Harrison County defendants, and Intervenor Lainey Armistead all argue that the state's classification based on "biological sex" is substantially related to its important interest in providing equal athletic opportunities for females. The state points to a longstanding recognition in the courts that "'[p]hysical differences between men and women . . . are enduring' and render 'the two sexes . . . not fungible.'" [ECF No. 305, at 13–14 (quoting *Virginia*, 518 U.S. at 533)]. And the state argues that in order to preserve athletic opportunities for females, it is necessary to exclude biological males from female teams because males as a group have significant athletic advantage over females and thus the two groups are not similarly situated. [ECF No. 287, at 6–8].

The record does make clear that, in passing this law, the legislature intended to prevent transgender girls from playing on girls' sports teams. In making that decision, the legislature considered an instance in Connecticut where two transgender girls ran on the girls' track team and won at least one event. Cisgender girls there sued, claiming the state's policy allowing the transgender girls to play on girls' teams violated Title IX. *Id.* at 5. But acting to prevent transgender girls, along with all other biological males, from playing on girls' teams is not unconstitutional if the classification is substantially related to an important government interest. The state's interest in providing equal athletic opportunity to females is not at issue here, and B.P.J. does not argue that sex-separate sports in general are not substantially related to that interest. Rather, B.P.J. argues that she and other transgender girls

should be able to play on girls' teams despite their male sex, because their gender identity is "girl."

While sex and gender are related, they are not the same. *See e.g., PFLAG, PFLAG National Glossary of Terms* (June 2022), http://pflag.org/glossary (defining "biological sex" as the "anatomical, physiological, genetic, or physical attributes that determine if a person is male, female, or intersex . . . includ[ing] both primary and secondary sex characteristics, including genitalia, gonads, hormone levels, hormone receptors, chromosomes, and genes" and explaining that "[b]iological sex is often conflated or interchanged with gender, which is more societal than biological, and involves personal identity factors"). It is beyond dispute that, barring rare genetic mutations not at issue here, a person either has male sex chromosomes or female sex chromosomes. Gender, on the other hand, refers to "a set of socially constructed roles, behaviors, activities, and attributes that a given society considers appropriate." *Id.* Gender identity, then, is "[a] person's deeply held core sense of self in relation to gender." *Id.* For most people, gender identity is in line with biological sex. *See Grimm*, 972 F.3d at 594. That is, most females identify as girls or women, and most males identify as boys or men. But gender is fluid. There are females who may prefer to dress in a style that is more typical of males (or vice versa), and there are males who may not enjoy what are considered typical male activities. These individuals may, however, still identify as the gender that aligns with their sex. Others may not. When one's gender identity is incongruent with their sex, that person is transgender. To be transgender, one must have a deeply held "consistent[], persistent[], and insistent[]"

conviction that their gender is, "on a binary, . . . opposite to their" biological sex. *Id.* I recognize that being transgender is natural and is not a choice. But one's sex is also natural, and it dictates physical characteristics that are relevant to athletics.

Whether a person has male or female sex chromosomes determines many of the physical characteristics relevant to athletic performance. Those with male chromosomes, regardless of their gender identity, naturally undergo male puberty, resulting in an increase in testosterone in the body. B.P.J. herself recognizes that "[t]here is a medical consensus that the largest known biological cause of average differences in athletic performance between [males and females] is circulating testosterone beginning with puberty." [ECF No. 291, at 28]. While some females may be able to outperform some males, it is generally accepted that, on average, males outperform females athletically because of inherent physical differences between the sexes. This is not an overbroad generalization, but rather a general principle that realistically reflects the average physical differences between the sexes. Given B.P.J.'s concession that circulating testosterone in males creates a biological difference in athletic performance, I do not see how I could find that the state's classification based on biological sex is not substantially related to its interest in providing equal athletic opportunities for females.

In parts of her briefing, B.P.J. asks me to find that specifically excluding transgender girls from the definition of "girl" in this context is unconstitutional because transgender girls can take puberty blockers or other hormone therapies to mitigate any athletic advantage over cisgender females. B.P.J., for example, is

biologically male, but she identifies as a girl. To express her gender identity, she goes by a traditionally feminine name, wears her hair long, uses female pronouns, and in all other respects lives as a girl. Before the first signs of puberty, B.P.J. made no other changes as a result of her transgender identity. But, once she started showing signs of male puberty, B.P.J. began taking puberty blocking medications, pausing the male puberty process. In that respect, B.P.J. argues that she has not gained the physical characteristics typical of males during and after puberty.

While this may be true for B.P.J., other transgender girls may not take those medications. They may not even come to realize or accept that they are transgender until after they have completed male puberty. Even if a transgender girl wanted to receive hormone therapy, she may have difficulty accessing those treatment options depending on her age and the state where she lives. And, as evidenced by the thousands of pages filed by the parties in this case, there is much debate over whether and to what extent hormone therapies after puberty can reduce a transgender girl's athletic advantage over cisgender girls. Additionally, of course, there is no requirement that a transgender person take any specific medications or undergo hormone therapy before or after puberty. A transgender person may choose to only transition socially, rather than medically. In other words, the social, medical, and physical transition of each transgender person is unique.

The fact is, however, that a transgender girl is biologically male and, barring medical intervention, would undergo male puberty like other biological males. And biological males generally outperform females athletically. The state is permitted to

legislate sports rules on this basis because sex, and the physical characteristics that flow from it, are substantially related to athletic performance and fairness in sports.

Could the state be more inclusive and adopt a different policy, as B.P.J. suggests, which would allow transgender individuals to play on the team with which they, as an individual, are most similarly situated at a given time? Of course. But it is not for the court to impose such a requirement here. Sex-based classifications fall under intermediate scrutiny and therefore do not have a "narrowly-tailored" requirement. As intervenor, Lainey Armistead, points out, "[s]ome boys run slower than the average girl . . . [and] [s]ome boys have circulating testosterone levels similar to the average girl because of medical conditions or medical interventions," but B.P.J. denies that the latter "would be similarly situated [to cisgender girls] for purposes of Title IX and the Equal Protection Clause," and does not argue that they should be allowed to play on girls' teams. [ECF No. 288, at 17 (citing ECF No. 286-1, at 1473)]. This is inconsistent with her argument that the availability of hormone therapies makes transgender girls similarly situated to cisgender girls. In fact, after reviewing all of the evidence in the record, including B.P.J.'s telling responses to requests for admission, it appears that B.P.J. really argues that transgender girls are similarly situated to cisgender girls for purposes of athletics at the moment they verbalize their transgender status, regardless of their hormone levels.

The legislature's definition of "girl" as being based on "biological sex" is substantially related to the important government interest of providing equal athletic

opportunities for females. B.P.J.'s motion for summary judgment on this basis is **DENIED**.

E. Title IX

Finally, I address B.P.J.'s claim that H.B. 3293 violates Title IX. B.P.J. brings this claim against the State of West Virginia, the State Board of Education, the County Board of Education, and the WVSSAC.

1. Legal Standard

Title IX provides that "no person . . . shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance." 20 U.S.C. § 1681(a). To succeed on a Title IX claim, a plaintiff must prove that she was (1) excluded from an educational program on the basis of sex; (2) that the educational institution was receiving federal financial assistance at the time; and (3) that "improper discrimination caused [her] harm." *Grimm*, 972 F.3d at 616 (citing *Preston v. Va. ex rel. New River Cmty. Coll.*, 31 F.3d 203, 206 (4th Cir. 1994)). "In the Title IX context, discrimination 'mean[s] treating [an] individual worse than others who are similarly situated.'" *Id.* at 618 (quoting *Bostock v. Clayton Cnty.*, 140 S. Ct. 1731, 1741 (2020)). Title IX permits sex-separate athletic teams "where selection for such teams is based upon competitive skill or the activity involved is a contact sport." 34 C.F.R. § 106.41(b).

2. Discussion

B.P.J. argues that H.B. 3293 violates Title IX because it excludes transgender girls from participation on girls' sports teams. B.P.J. argues that this amounts to complete exclusion from school sports altogether, and that it is discrimination because she and other transgender girls are similarly situated to cisgender girls. [ECF No. 291, at 17]. The state responds that the law does not violate Title IX because it does not exclude B.P.J. from school athletics. "To the contrary, it simply designates on which team [she] shall play." [ECF No. 287, at 22]. And, the County Defendants argue that Title IX authorizes sex separation in sports in the same scenarios outlined in H.B. 3293—"where selection for such teams is based upon competitive skill or the activity involved is a contact sport." W. Va. Code § 18-2-25d(c)(2). All Defendants[2] argue that while it did not define the term, Title IX used "sex" in the biological sense because its purpose was to promote sex equality. Therefore, they argue that H.B. 3293 furthers, not violates, Title IX. I agree.

Title IX authorizes sex separate sports in the same manner as H.B. 3293, so long as overall athletic opportunities for each sex are equal. 34 C.F.R. § 106.41(b)–(c). As other courts that have considered Title IX have recognized, although the regulation "applies equally to boys as well as girls, it would require blinders to ignore that the motivation for the promulgation of the regulation" was to increase opportunities for women and girls in athletics. *Williams v. Sch. Dist. of Bethlehem, Pa.*, 998 F.2d 168, 175 (3d Cir. 1993). There is no serious debate that Title IX's

[2] Excluding the WVSSAC.

endorsement of sex separation in sports refers to biological sex. Nevertheless, B.P.J. argues that transgender girls are similarly situated to cisgender girls, and therefore their exclusion from girls' teams is unlawful discrimination. But as I have already discussed, transgender girls are biologically male. Short of any medical intervention that will differ for each individual person, biological males are not similarly situated to biological females for purposes of athletics. And, despite her repeated argument to the contrary, transgender girls are not excluded from school sports entirely. They are permitted to try out for boys' teams, regardless of how they express their gender.

I do not find that H.B. 3293, which largely mirrors Title IX, violates Title IX. B.P.J.'s motion for summary judgment on this basis is **DENIED.**

IV. Conclusion

I have no doubt that H.B. 3293 aimed to politicize participation in school athletics for transgender students. Nevertheless, there is not a sufficient record of legislative animus. Considering the law under the intermediate scrutiny standard, I find that it is substantially related to an important government interest. B.P.J.'s motion for summary judgment is **DENIED**. Defendant WVSSAC's motion for summary judgment [ECF No. 276] is **DENIED**. The motions for summary judgment filed by the State of West Virginia [ECF No. 285], the Harrison County defendants [ECF No. 278], the State Board defendants [ECF No. 283], and Intervenor Lainey Armistead [ECF No. 286] are **GRANTED** to the extent they argue that H.B. 3293 is constitutional and complies with Title IX. The preliminary injunction is **DISSOLVED**. All other pending motions are **DENIED as moot.**

The court **DIRECTS** the Clerk to send a copy of this Order to counsel of record and any unrepresented party. The court further **DIRECTS** the Clerk to post a copy of this published opinion on the court's website, www.wvsd.uscourts.gov.

ENTER: January 5, 2023

JOSEPH R. GOODWIN
UNITED STATES DISTRICT JUDGE

EXHIBIT A

Athletic NET — Team Results Management

Connect-Bridgeport Middle School Invitational MS

OFFICIAL Mar 25, 2022 Bridgeport HS

Show More Details...

Womens Middle School Discus

Finals - 1kg

1.	7	Mattie Brown	66-08	PR	Ritchie County
2.	7	Reese Lambert	65-07		Taylor County
3.	7	Chloe Bramos	64-09	PR	Ritchie County
4.	6	Morgan Morris	64-01	PR	Ritchie County
5.	-	Isabella McCullough	58-11		Bridgeport
6.	8	Courtney Knight	58-08.50	PR	South Harrison
7.	8	Kailee Haymond	58-04.50	PR	East Fairmont
8.	7	Jadyn Pifer	56-09.50		South Preston
9.	7	Lillian Boyles	56-02		Tucker Valley
10.	7	Kennedy Marsh	53-01.50		Bridgeport
11.	6	Katie Samples	52-07		Buckhannon-Upshur
12.	8	Karley Knotts	52-00		Tucker Valley
13.	7	Mercy Frase	51-06.50		South Harrison
14.	8	Hannah Kirk	48-09.50		Tyler Consolidated
15.	8	Quinn McGervey	47-02.50	PR	West Fairmont
16.	8	Markiah Guthrie	46-09.50	SR	Taylor County
17.	8	Demi Billotti	45-11		South (Morgantown)
18.	8	Eliana Winfrey	45-07	PR	Tyler Consolidated
19.	7	Olivia Markley	43-09.50	PR	East Fairmont
20.	7	Nellann Pase	42-06		South Preston
21.	8	Alexa Riffle	42-02.50		Washington Irving
22.	8	Brookelyn Martin	41-03.50		Washington Irving
23.	8	Kate Gaines	40-05.50		Westwood
24.	7	Layla Frazer	39-04	PR	West Fairmont
25.	-	Adaleia Wolfe	39-01.50		Bridgeport
26.	8	Tacy Pollock	37-09.50		Buckhannon-Upshur
27.	-	London Davis	36-08		Bridgeport
28.	8	Ryder Thompson	33-08		Tucker Valley
29.	6	Becky Pepper-Jackson	31-11.50		Bridgeport
--	6	Halo Redman	ND		Westwood
--	7	Madison Richeson	ND		Tyler Consolidated
--	8	Madison Alt	ND		Keyser
--	7	Kaitlyn Gill	ND		Westwood

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Athletic NET Team Results Management

Connect-Bridgeport Middle School Invitational MS

OFFICIAL Mar 25, 2022 Bridgeport HS

Show More Details...

Womens Middle School Shot Put

Finals - 6lb

1.	7	Mattie Brown	28-08.00	PR	Ritchie County
2.	8	Kyra Nolan	27-11.50		Tyler Consolidated
3.	7	Gabby Conrad	27-02.50		Robert L. Bland
4.	7	Kennedy Marsh	26-08.50		Bridgeport
5.	-	Isabella McCullough	25-08.00		Bridgeport
6.	6	Morgan Morris	25-07.50	PR	Ritchie County
7.	7	Kasey Rogers	25-05.50		East Fairmont
8.	7	Reese Lambert	25-00.50		Taylor County
8.	8	Courtney Knight	25-00.50		South Harrison
10.	8	Hannah Amsler	24-08.50		South (Morgantown)
11.	7	Emma Casto	24-07.50		East Fairmont
12.	7	Lillian Boyles	24-06.00	PR	Tucker Valley
12.	7	Emily Smith	24-06.00		Tygarts Valley
14.	8	Madilynn Kyle	23-10.50		West Fairmont
15.	8	Eliana Winfrey	23-08.50		Tyler Consolidated
16.	8	Ada Workman	23-00.50	PR	South Harrison
17.	8	MaKenzie Bryant	22-08.00	PR	Washington Irving
18.	8	Eliana Price	22-07.00		West Fairmont
19.	8	Karley Knotts	22-06.50		Tucker Valley
20.	7	Nellann Pase	22-02.50		South Preston
21.	8	Alyssa Swecker	22-00.50		Tygarts Valley
22.	8	Maddy Haddix	21-11.00	PR	Taylor County
23.	6	Katie Samples	21-09.50		Buckhannon-Upshur
24.	7	Chloe Bramos	21-03.50	PR	Ritchie County
25.	8	Demi Billotti	20-11.00		South (Morgantown)
26.	8	Madison Sypolt	20-10.00		East Preston
27.	-	Adaleia Wolfe	20-09.00	PR	Bridgeport
28.	8	Tacy Pollock	20-04.50		Buckhannon-Upshur
29.	7	Ryleigh Freshour	20-03.00		South (Morgantown)
30.	8	Alexa Riffle	20-01.00		Washington Irving
31.	8	Zola Bailey	19-03.50		West Fairmont
32.	6	Halee Rowe	19-01.00	PR	South Harrison
33.	-	London Davis	18-11.50		Bridgeport
34.	8	Kate Gaines	18-10.50		Westwood
35.	7	Lilly Anger	18-09.00		Elkins
36.	6	Becky Pepper-Jackson	18-06.50		Bridgeport
37.	7	Breonna Plumley	18-05.00	PR	Elkins
38.	6	Isabella Bowers	18-02.00		Buckhannon-Upshur
39.	8	Madison Alt	17-05.50		Keyser
40.	6	Madalyn Snyder	16-03.50	PR	East Fairmont
41.	7	Emma Russell	15-10.00		Westwood
42.	6	Chloe Lee	13-04.00		Westwood
43.	6	Daelyn Leach	12-10.00	PR	Tygarts Valley
43.	7	Sophia Ratnaker	12-10.00		Elkins
45.	8	Ryder Thompson	12-03.50		Tucker Valley

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HY-TEK's Meet Manager 4/23/2022 10:06 PM

Ritchie Middle Pizza Box Invitational - 4/23/2022

Chuck Schofield Memorial

Results

Girls 100 Meter Dash

	Name	Year	School	Finals	H#	Points
Finals						
1	Lipscomb, Jaycee	08	Doddridge	13.60	5	10
2	Courtney, Savannah		Bms Red	13.80	5	8
3	Angiulli, Julia	7	Mountaineer(H)	13.84	5	6
4	Ashcraft, Eryn	7	Mountaineer(H)	13.85	4	4
5	Lathon, Brea	8	Mountaineer(H)	13.86	4	2
6	Stitt, Kadessa		Mini Titans	14.15	5	1
7	Sass, Liza	6	Wash. Irving	14.32	5	
8	Riley, Emery		Lincoln	14.47	5	
9	Harnett, Madison	8	Wash. Irving	14.52	5	
10	Kniceley-See, Emma		Bms Red	14.70	4	
11	Sharpe, Emma	7	South Harrison	14.87	1	
12	McKinney, Jalin		Bms Red	15.04	4	
13	Poyser, JaeCea		Pcms	15.04	3	
14	Winfrey, Eliana		Tyler	15.14	4	
15	Rodeheaver, Audrey		Lincoln	15.19	3	
16	Gilfillan, Lana		Pcms	15.32	3	
17	Lewis, Kami	8	Wash. Irving	15.38	4	
18	Blackhurst, Jayla		TCMS	15.44	3	
19	McGuffey, Rielee		TCMS	15.58	3	
20	Misel, Maura		Wildcats	15.67	1	
21	Ratliff, Brooklyn		Mini Titans	15.85	2	
22	Clemm, Liya		TCMS	15.90	3	
23	Householder, Katie		PCMS	15.94	3	
24	Kirk, Hannah		Tyler	16.19	2	
25	Gerlach, Sidni		Pcms	16.64	4	
26	Hagedorn, Nylah	06	Doddridge	17.50	2	
27	Bishop, Sienna		Ritchie	18.15	1	
28	Workman, Ada	8	South Harrison	18.22	1	
29	Richeson, Madison		Tyler	18.51	1	
30	Krolick, Taylor		Ritchie	18.58	2	
31	Cayton, Cynthia	6	South Harrison	18.69	1	
32	Nelson, Emma		PCMS	18.79	2	
33	Kumpyte, Elze		Mini Titans	19.81	2	
34	Hardman, Katelyn		Ritchie	21.72	1	

Girls 200 Meter Dash

	Name	Year	School	Finals	H#	Points
1	Lipscomb, Jaycee	08	Doddridge	28.42	5	10
2	Angiulli, Julia	7	Mountaineer(H)	29.04	5	8
3	Stitt, Kadessa		Mini Titans	29.27	5	6
4	Ashcraft, Eryn	7	Mountaineer(H)	29.38	5	4
5	Perine, Eliza		Bms Red	29.50	5	2
6	Trent, Payton	08	Doddridge	29.63	5	1
7	Burdette, Destiny		Lincoln	30.55	4	
8	Harnett, Madison	8	Wash. Irving	30.96	3	
9	McCall, Ellie		Bms Red	31.37	4	
10	Riley, Addison		Lincoln	31.80	4	
11	Sass, Liza	6	Wash. Irving	32.28	4	
12	Runner, Alizae		TCMS	32.52	3	
13	Fiber, Andi		Tyler	33.31	3	
14	Linville, Bentli		Ritchie	33.36	4	

15	Nolan, Kyra		Tyler	33.45	4
16	Freeman, Payge		Lincoln	33.92	4
17	Misel, Maura		Wildcats	33.94	1
18	Parsons, Autumn		Ritchie	34.00	3
19	Hess, Hope	8	Mountaineer(H)	34.19	3
20	Cecil, Autumn		Pcms	34.97	2
21	Davis, Brooklyn		Pcms	35.18	3
22	Clutter, Alyssa	7	South Harrison	35.32	2
23	Radabaugh, Irelyn	6	South Harrison	35.70	1
24	Kimball, Olivia		Pcms	35.75	3
25	Guthrie, Markiah		TCMS	36.78	1
26	Bailey, Hailey		TCMS	36.99	2
27	Erlandson, Madelyn		Wildcats	37.06	1
28	Smith, Kendall		Ritchie	37.38	2
29	Fincham, Maddie	7	South Harrison	38.23	2
30	Yeager, Addison		Nms Girls	38.39	1
31	Baker, Braylin		Nms Girls	40.28	1
32	Nelson, Emma		PCMS	41.25	2
33	Kumpyte, Elze		Mini Titans	42.78	1

Girls 400 Meter Dash

	Name	Year	School	Finals	H#	Points
1	Trent, Payton	08	Doddridge	1:03.83	5	10
2	Lathon, Brea	8	Mountaineer(H)	1:06.60	5	8
3	Day, Maria		Bms Red	1:08.36	5	6
4	Angelos, Calli		Wildcats	1:09.46	1	4
5	Bennett, Avry		Pcms	1:09.95	5	2
6	Fiber, Andi		Tyler	1:10.50	5	1
7	Wilson, Allie		Bms Red	1:10.68	5	
8	Kniceley-See, Emma		Bms Red	1:11.70	4	
9	Householder, Katie		PCMS	1:12.05	4	
10	Snyder, Bella	06	Doddridge	1:13.26	4	
11	Smith, Callie		Ritchie	1:13.37	4	
12	Sturgeon, Reagan		Pcms	1:14.78	3	
13	Duncan, Jadyn		PCMS	1:14.86	4	
14	Cartwright, Natalee		TCMS	1:14.96	4	
15	Williams, Bentlee		Ritchie	1:16.15	4	
16	Weaver, Bailey		TCMS	1:16.96	2	
17	Perkins, Amber		Wildcats	1:18.52	2	
18	Weekley, Taya		Tyler	1:19.24	3	
19	Erlandson, Madelyn		Wildcats	1:19.43	1	
20	Clutter, Alyssa	7	South Harrison	1:20.45	5	
21	Brown, Lauren	7	South Harrison	1:20.95	3	
22	Pumphrey, Kyley	7	Mountaineer(H)	1:21.42	2	
23	Long, Jazzmyne		Lincoln	1:21.80	2	
24	Bailey, Hailey		TCMS	1:22.03	2	
25	Gentilozzi, Estelle	7	Wash. Irving	1:23.72	1	
26	Counts, Lilliana		Lincoln	1:23.93	2	
27	Van Pelt, Payton		Lincoln	1:24.51	3	
28	Doak, Olivia		Ritchie	1:24.60	3	
29	Cain, Rayonna	7	Mountaineer(H)	1:24.93	3	
30	Frase, Mercy	7	South Harrison	1:25.24	3	
31	Catena, Justyna	6	Wash. Irving	1:27.75	1	
32	Zorick, Leah	6	Wash. Irving	1:53.96	2	

Girls 800 Meter Run

	Name	Year	School	Finals	Points
1	Bennett, Anna		Pcms	2:40.18	10
2	Angelos, Calli		Wildcats	2:46.46	8
3	Sias, Marley	07	Doddridge	2:50.24	6
4	Lathon, Brea	8	Mountaineer(H)	2:54.30	4

	Name	Year	School	Finals	Points
5	Henderson, Haydn		Bms Red	2:55.22	2
6	Austin, Sophia		TCMS	2:56.67	1
7	Cartwright, Natalee		TCMS	2:57.13	
8	Key, Kaitlyn	8	Mountaineer(H)	2:58.96	
9	Williams, Bentlee		Ritchie	3:01.18	
10	Duncan, Jadyn		PCMS	3:01.23	
11	White, McKenzie		Lincoln	3:02.44	
12	Glass, Abigail		Lincoln	3:02.65	
13	Moore, Adreona	7	Wash. Irving	3:05.46	
14	Stewart, Madison		Bms Red	3:06.41	
15	Haught, Lily		Tyler	3:10.44	
16	Fetty, Mya		Tyler	3:15.74	
17	Weaver, Bailey		TCMS	3:18.96	
18	Brown, Lauren	7	South Harrison	3:19.70	
19	Tomes, Payton		Bms Red	3:20.31	
20	Davis, Lariah	6	South Harrison	3:22.02	
21	Moore, Charlotte		Nms Girls	3:25.22	
22	Balcerek, Sydney		Nms Girls	3:26.27	
23	Landis, Lindy		Tyler	3:32.83	
24	Jeffers, Makinsey		Pcms	3:37.05	
25	Gooden, Kiersten		Lincoln	3:37.70	
26	Krolick, Taylor		Ritchie	3:51.70	
27	Handley, Elliot		Wildcats	3:53.51	

Girls 1600 Meter Run

	Name	Year	School	Finals	Points
1	Bennett, Anna		Pcms	5:41.91	10
2	Glass, Abigail		Lincoln	6:21.00	8
3	Martin, MaKenna		Tyler	6:24.48	6
4	Cochran, Raley		Lincoln	6:27.75	4
5	Key, Kaitlyn	8	Mountaineer(H)	6:28.33	2
6	Austin, Sophia		TCMS	6:34.57	1
7	Williams, Bentlee		Ritchie	6:40.36	
8	Henderson, Haydn		Bms Red	6:44.29	
9	Moore, Adreona	7	Wash. Irving	6:52.51	
10	Duncan, Jadyn		PCMS	6:53.51	
11	Stewart, Madison		Bms Red	6:58.03	
12	Shuman, Annika	8	Mountaineer(H)	7:03.74	
13	Perkins, Amber		Wildcats	7:07.80	
14	Bartlett, Payton		Ritchie	7:08.56	
15	Cartwright, Natalee		TCMS	7:11.20	
16	Balcerek, Sydney		Nms Girls	7:17.09	
17	Jeffers, Makinsey		Pcms	8:02.78	
18	Handley, Elliot		Wildcats	8:38.83	
19	Catena, Justyna	6	Wash. Irving	8:44.48	
20	Conley, Elizabeth	8	Wash. Irving	10:28.45	

Girls 3200 Meter Run

	Name	Year	School	Finals	Points
1	Key, Kaitlyn	8	Mountaineer(H)	13:39.82	10
2	Whitlock, Mariah		Pcms	13:45.65	8
3	Sias, Marley	07	Doddridge	13:52.38	6
4	Austin, Sophia		TCMS	14:01.91	4
5	Burd, Savana		Pcms	14:02.60	2
6	Shuman, Annika	8	Mountaineer(H)	14:13.47	1
7	Cochran, Raley		Lincoln	14:19.67	
8	Ahmed, Emma		Bms Red	15:34.28	
9	Bartlett, Payton		Ritchie	15:34.36	
10	Guthrie, Katrina		Lincoln	15:49.02	
11	Mace, Annelise		Bms Red	16:59.99	
12	Janssen, Payton		Bms Red	18:01.02	

Girls 100 Meter Hurdles

	Name	Year	School	Finals	H#	Points
1	Hoard, Airiana		Mini Titans	18.15	5	10
2	Parrish, Kahlen		Mini Titans	18.76	5	8
3	Adams, Kimberly	08	Doddridge	18.88	5	6
4	Vandergrift, Carly		TCMS	19.04	5	4
5	Dillaman, Lily		Tyler	19.56	4	2
6	White, Alivia		Lincoln	19.62	4	1
7	Blosser, Addison		Tyler	19.65	5	
8	Haddix, Maddy		TCMS	19.68	4	
9	McGill, Ava		Lincoln	20.24	3	
10	Heintzman, Ralynn		Tyler	20.43	5	
11	Beaver, Emma	08	Doddridge	20.52	5	
12	Small, Kamryn		Bms Red	20.69	3	
13	Hollar, Emily	6	Mountaineer(H)	20.98	3	
14	Singer, Kalie	08	Doddridge	21.09	4	
15	Bell, Olivia		Bms Red	21.44	4	
16	Christian, Audrina	6	South Harrison	21.45	3	
17	Caplan, Lyhla		Bms Red	21.50	4	
18	Purnell, Hayley	8	Wash. Irving	21.88	2	
19	Crabtree, Kara	7	Mountaineer(H)	22.14	3	
20	Pumphrey, Kyley	7	Mountaineer(H)	22.17	3	
21	Lynch, Maddie		TCMS	22.45	4	
22	Huffman, Andrea		Ritchie	22.84	3	
23	Radabaugh, Irelyn	6	South Harrison	23.68	2	
24	Freed, Colleen		Ritchie	24.22	1	
25	Brackman, Emily	7	Wash. Irving	24.39	2	
26	Freeman, Izabella		Lincoln	24.93	2	
27	Rowe, Halee	6	South Harrison	25.90	2	
28	Hatcher, Lily		PCMS	26.19	1	
29	Davis, Lexie	8	Wash. Irving	26.35	1	

Girls 200 Meter Hurdles

	Name	Year	School	Finals	H#	Points
1	Hoard, Airiana		Mini Titans	31.62	4	10
2	Adams, Kimberly	08	Doddridge	33.28	4	8
3	Lattea, Carley		Bms Red	33.33	4	6
4	Burdette, Destiny		Lincoln	34.81	3	4
5	Sharpe, Emma	7	South Harrison	34.95	4	2
6	Kelley, Lyla		Bms Red	35.16	4	1
7	Haddix, Maddy		TCMS	36.22	3	
8	Vandergrift, Carly		TCMS	36.53	4	
9	Beaver, Emma	08	Doddridge	37.08	4	
10	Hess, Hope	8	Mountaineer(H)	37.26	3	
11	Hardy, Isabella		Bms Red	37.48	3	
12	Sturgeon, Reagan		Pcms	37.97	2	
13	Hollar, Emily	6	Mountaineer(H)	38.01	3	
14	Carroll, Katelyn		Ritchie	38.23	3	
15	Donaldson, Taylor		Tyler	38.37	3	
16	Cecil, Autumn		Pcms	39.57	2	
17	Rhodes, Faith		Ritchie	39.80	2	
18	Householder, Katie		PCMS	41.47	2	
19	Brackman, Emily	7	Wash. Irving	43.29	1	
20	Cottrill, Brooklynn	7	Mountaineer(H)	44.83	1	
21	Hatcher, Lily		PCMS	47.10	1	
22	Freeman, Izabella		Lincoln	47.15	2	
23	Hayes, Skylar		Lincoln	47.47	2	
--	Underwood, Kasey	07	Doddridge	DQ	2	

Girls 4x100 Meter Relay

	School	Finals	H#	Points
1	Doddridge County Middle School 'A'	54.91	2	10
	1) Lipscomb, Jaycee 08	2) Adams, Kimberly 08		
	3) Trent, Payton 08	4) Rymer, Hannah 07		
2	Bridgeport Middle School Red 'A'	55.37	2	8
	1) Day, Maria	2) Perine, Eliza		
	3) Courtney, Savannah	4) McCall, Ellie		
3	Washington Irving Middle 'A'	58.87	2	6
	1) Lewis, Kami 8	2) Sass, Liza 6		
	3) Purnell, Hayley 8	4) Harnett, Madison 8		
4	Tyler Consolidated MS 'A'	59.23	2	4
	1) Dillaman, Lily	2) Winfrey, Eliana		
	3) Blosser, Addison	4) Martin, MaKenna		
5	Lincoln Middle School 'A'	1:00.27	2	2
	1) Riley, Emery	2) Rodeheaver, Audrey		
	3) Riley, Addison	4) White, Alivia		
6	Taylor County Middle School 'A'	1:01.84	2	1
	1) Runner, Alizae	2) Clemm, Liya		
	3) McGuffey, Rielee	4) Blackhurst, Jayla		
7	New Martinsville School Girls 'A'	1:02.01	2	
	1) Hartline, Leah	2) Barcus, Halle		
	3) Moore, Charlotte	4) Campbell, Bindy		
8	Ritchie County Middle School 'A'	1:05.05	1	
	1) Smith, Callie	2) Bennett, Katelyn		
	3) Freed, Colleen	4) Linville, Bentli		
9	Pleasants County Middle School 'A'	1:05.26	1	
	1) Gerlach, Sidni	2) Gilfillan, Lana		
	3) Renner, Rylee	4) Poyser, JaeCea		
10	South Harrison Middle School 'A'	1:06.91	1	
	1) Fincham, Maddie 7	2) Scheuvront, Crystal 7		
	3) Rowe, Halee 6	4) Workman, Ada 8		
11	Gilmer County Mini Titans 'A'	1:07.07	1	
	1) Woodford, Bristol	2) Kumpyte, Elze		
	3) Woodford, Reese	4) Ward, Mackenzie		
12	Mountaineer Middle Harrison 'A'	1:11.46	1	
	1) Mcelwee, Tabitha 6	2) Wolford, Shylynn 7		
	3) Leon, Taylor 8	4) Scardina, Alexis 7		

Girls 4x200 Meter Relay

	School	Finals	H#	Points
1	Bridgeport Middle School Red 'A'	1:57.84	2	10
	1) Perine, Eliza	2) Courtney, Savannah		
	3) Day, Maria	4) McCall, Ellie		
2	Lincoln Middle School 'A'	2:03.37	2	8
	1) Riley, Emery	2) Riley, Addison		
	3) Burdette, Destiny	4) White, McKenzie		
3	Doddridge County Middle School 'A'	2:05.46	2	6
	1) Snyder, Bella 06	2) Mclane, Paytin 06		
	3) Wiseman, Rachel 07	4) Rymer, Hannah 07		
4	Gilmer County Mini Titans 'A'	2:10.43	1	4
	1) Woodford, Bristol	2) Ratliff, Brooklyn		
	3) Woodford, Reese	4) Parrish, Kahlen		
5	Tyler Consolidated MS 'A'	2:11.00	2	2
	1) Nolan, Kyra	2) Weekley, Taya		
	3) Donaldson, Taylor	4) Winfrey, Eliana		
6	New Martinsville School Girls 'A'	2:11.92	2	1
	1) Hartline, Leah	2) Barcus, Halle		
	3) Moore, Charlotte	4) Campbell, Bindy		
7	Taylor County Middle School 'A'	2:12.94	1	
	1) Runner, Alizae	2) Clemm, Liya		
	3) Lynch, Maddie	4) Blackhurst, Jayla		

8	Ritchie County Middle School 'A'		2:14.12	2	
	1) Smith, Callie	2) Freed, Colleen			
	3) Bennett, Katelyn	4) Carroll, Katelyn			
9	Washington Irving Middle 'A'		2:15.48	1	
	1) Gentilozzi, Estelle 7	2) Martin, Brookelyn 8			
	3) Jordan, Kalei 8	4) Henley, Makila 6			
10	Pleasants County Middle School 'A'		2:19.11	2	
	1) Kimball, Olivia	2) Davis, Brooklyn			
	3) Renner, Rylee	4) Allen, Bella			
11	South Harrison Middle School 'A'		2:24.79	1	
	1) Christian, Audrina 6	2) Davis, Lariah 6			
	3) Fincham, Maddie 7	4) Scheuvront, Crystal 7			
12	Mountaineer Middle Harrison 'A'		2:26.35	1	
	1) Mcelwee, Tabitha 6	2) Scardina, Alexis 7			
	3) Crabtree, Kara 7	4) Leon, Taylor 8			

Girls 4x400 Meter Relay

	School	Finals	H#	Points
1	Bridgeport Middle School Red 'A'	5:10.68	2	10
	1) Small, Kamryn	2) Ahmed, Emma		
	3) Kniceley-See, Emma	4) Wilson, Allie		
2	Doddridge County Middle School 'A'	5:14.32	2	8
	1) Underwood, Jeonah 08	2) Snyder, Bella 06		
	3) Mclane, Paytin 06	4) Wiseman, Rachel 07		
3	Lincoln Middle School 'A'	5:24.56	2	6
	1) Milnes, Gabrielle	2) McGill, Ava		
	3) Yoho, Miley	4) Long, Zoey		
4	Pleasants County Middle School 'A'	5:31.21	2	4
	1) Bennett, Avry	2) Gerlach, Sidni		
	3) Davis, Brooklyn	4) Renner, Rylee		
5	Gilmer County Mini Titans 'A'	5:37.30	2	2
	1) Woodford, Bristol	2) Ratliff, Brooklyn		
	3) Woodford, Reese	4) Ward, Mackenzie		
6	South Harrison Middle School 'A'	5:45.97	1	1
	1) Brown, Lauren 7	2) Clutter, Alyssa 7		
	3) Davis, Lariah 6	4) Scheuvront, Crystal 7		
7	New Martinsville School Girls 'A'	5:48.85	2	
	1) Hartline, Leah	2) Barcus, Halle		
	3) Balcerek, Sydney	4) Campbell, Bindy		
8	Ritchie County Middle School 'A'	6:05.89	1	
	1) Bennett, Katelyn	2) Metheney, Jennalee		
	3) McDonald, Sophie	4) Smith, Kendall		
9	Mountaineer Middle Harrison 'A'	6:20.49	2	
	1) Cottrill, Brooklynn 7	2) Cain, Rayonna 7		
	3) Mutschelknaus, Scarlett 7	4) Scardina, Alexis 7		

Girls 4x800 Meter Relay

	School	Finals	Points
1	Pleasants County Middle School 'A'	11:22.84	10
	1) Bennett, Anna	2) Burd, Savana	
	3) Whitlock, Mariah	4) Bennett, Avry	
2	Bridgeport Middle School Red 'A'	12:04.10	8
	1) Stewart, Madison	2) Lattea, Carley	
	3) Henderson, Haydn	4) Tomes, Payton	
3	Doddridge County Middle School 'A'	12:18.69	6
	1) Singer, Kalie 08	2) Underwood, Kasey 07	
	3) Underwood, Jeonah 08	4) Sias, Marley 07	
4	Lincoln Middle School 'A'	12:40.82	4
	1) Guthrie, Katrina	2) Cochran, Raley	
	3) Willey, Jenna	4) Glass, Abigail	
5	Tyler Consolidated MS 'A'	13:08.22	2

1) Haught, Lily 2) Fetty, Mya
3) Landis, Lindy 4) Fiber, Andi

6 Ritchie County Middle School 'A' 14:20.65 1
1) Bartlett, Payton 2) Bishop, Sienna
3) McDonald, Sophie 4) Parsons, Autumn

7 Mountaineer Middle Harrison 'A' 14:41.88
1) Leon, Taylor 8 2) Cain, Rayonna 7
3) Mutschelknaus, Scarlett 7 4) Posey, Maggie 7

8 Washington Irving Middle 'A' 15:50.80
1) Moore, Adreona 7 2) Conley, Elizabeth 8
3) Catena, Justyna 6 4) Zorick, Leah 6

Girls 4x100 Meter Shuttle Hurdle

	School	Finals	H#	Points
1	Taylor County Middle School 'A'	46.12	3	10
	1) Vandergrift, Carly 2) McGuffey, Rielee			
	3) Lynch, Maddie 4) Haddix, Maddy			
2	Doddridge County Middle School 'A'	46.13	3	8
	1) Singer, Kalie 08 2) Cheeseman, Aleigh 07			
	3) Beaver, Emma 08 4) Rymer, Hannah 07			
3	Gilmer County Mini Titans 'A'	46.63	3	6
	1) Parrish, Kahlen 2) Ward, Mackenzie			
	3) Stitt, Kadessa 4) Hoard, Airiana			
4	Tyler Consolidated MS 'A'	46.97	2	4
	1) Blosser, Addison 2) Donaldson, Taylor			
	3) Heintzman, Ralynn 4) Dillaman, Lily			
5	Bridgeport Middle School Red 'A'	47.80	2	2
	1) Edgell, Scarlett 2) Hardy, Isabella			
	3) Linville, Graylee 4) Lattea, Carley			
6	Lincoln Middle School 'A'	49.13	1	1
	1) McGill, Ava 2) White, Alivia			
	3) Templeton, Olivia 4) Rodeheaver, Audrey			
7	Mountaineer Middle Harrison 'A'	49.82	2	
	1) Crabtree, Kara 7 2) Hess, Hope 8			
	3) Hollar, Emily 6 4) Pumphrey, Kyley 7			
8	Washington Irving Middle 'A'	51.20	1	
	1) Purnell, Hayley 8 2) Brackman, Emily 7			
	3) Gentilozzi, Estelle 7 4) Jordan, Kalei 8			
9	Ritchie County Middle School 'A'	51.80	1	
	1) Carroll, Katelyn 2) Huffman, Andrea			
	3) Rhodes, Faith 4) Linville, Bentli			

Girls High Jump

	Name	Year	School	Finals	Points
1	Adams, Kimberly	08	Doddridge	4-08.00	10
2	Lattea, Carley		Bms Red	4-08.00	8
3	Stitt, Kadessa		Mini Titans	4-08.00	6
4	Angiulli, Julia	7	Mountaineer(H)	4-06.00	4
5	Hartline, Leah		Nms Girls	4-06.00	2
6	Wilson, Allie		Bms Red	4-04.00	1
7	Dillaman, Lily		Tyler	4-04.00	
8	Parsons, Autumn		Ritchie	4-04.00	
9	Rodeheaver, Audrey		Lincoln	4-02.00	
9	Milnes, Gabrielle		Lincoln	4-02.00	
11	Lathon, Brea	8	Mountaineer(H)	4-02.00	
12	Lynch, Maddie		TCMS	4-00.00	
12	White, McKenzie		Lincoln	4-00.00	
12	Heintzman, Ralynn		Tyler	4-00.00	
15	Allen, Bella		Pcms	4-00.00	
16	Wood, Jacie		Bms Red	4-00.00	
16	Rowe, Halee	6	South Harrison	4-00.00	

16	Cheeseman, Aleigh	07	Doddridge	4-00.00	
--	Landis, Lindy		Tyler	NH	
--	Doak, Olivia		Ritchie	NH	
--	Christian, Audrina	6	South Harrison	NH	
--	Gentilozzi, Estelle	7	Wash. Irving	NH	
--	Ward, Mackenzie		Mini Titans	NH	
--	Barcus, Halle		Nms Girls	NH	

Girls Pole Vault

	Name	Year	School	Finals	Points
1	Lipscomb, Jaycee	08	Doddridge	7-00.00	10
2	Sass, Liza	6	Wash. Irving	6-06.00	8
3	Cheeseman, Aleigh	07	Doddridge	6-06.00	6
4	Beaver, Emma	08	Doddridge	6-00.00	4
5	Williams, Bentlee		Ritchie	5-06.00	2
--	Brackman, Emily	7	Wash. Irving	NH	

Girls Long Jump

	Name	Year	School	Finals	Points
1	Hoard, Airiana		Mini Titans	16-05.75	10
2	Campbell, Bindy		Nms Girls	15-00.75	8
3	Trent, Payton	08	Doddridge	14-08.00	6
4	Day, Maria		Bms Red	14-07.00	4
5	Ashcraft, Eryn	7	Mountaineer(H)	14-04.75	2
6	Angiulli, Julia	7	Mountaineer(H)	14-03.25	1
7	Blosser, Addison		Tyler	14-03.25	
8	Edgell, Scarlett		Bms Red	14-00.00	
9	Parrish, Kahlen		Mini Titans	13-05.00	
10	McGuffey, Rielee		TCMS	13-04.00	
11	Sharpe, Emma	7	South Harrison	13-04.00	
12	Martin, MaKenna		Tyler	13-00.75	
13	Riley, Emery		Lincoln	12-11.75	
14	Smith, Callie		Ritchie	12-06.50	
15	McCall, Ellie		Bms Red	12-06.25	
16	Weaver, Bailey		TCMS	12-05.25	
17	Burdette, Destiny		Lincoln	12-04.25	
18	Linville, Bentli		Ritchie	11-11.00	
19	Clemm, Liya		TCMS	11-02.50	
20	Jordan, Kalei	8	Wash. Irving	11-02.25	
21	White, Alivia		Lincoln	10-09.75	
22	Davis, Lexie	8	Wash. Irving	9-06.75	
23	Parsons, Autumn		Ritchie	9-01.00	

Girls Shot Put

	Name	Year	School	Finals	Points
1	Johnston, Savannah	07	Doddridge	34-05.50	10
2	Gauldin, Phoenix		Lincoln	32-03.50	8
3	Burnside, Brooke	08	Doddridge	32-00.50	6
4	Rymer, Hannah	07	Doddridge	31-00.00	4
5	Nolan, Kyra		Tyler	30-02.50	2
6	Stewert, Sabena		Wildcats	29-08.50	1
7	Brown, Mattie		Ritchie	29-04.00	
8	McCullough, Isabella		Bms Red	27-09.00	
9	Morris, Morgan		Ritchie	27-04.50	
10	Marsh, Kennedy		Bms Red	27-00.50	
11	Winfrey, Eliana		Tyler	26-09.00	
12	Huffman, Paige		Mini Titans	23-09.50	
13	Workman, Ada	8	South Harrison	23-06.00	
14	Guthrie, Markiah		TCMS	23-03.00	

15	Baker, Braylin		Nms Girls	22-11.00	
15	Martin, Brookelyn	8	Wash. Irving	22-11.00	
17	Poyser, JaeCea		Pcms	22-09.00	
18	Davis, London		Bms Red	22-04.50	
19	Wolford, Shylynn	7	Mountaineer(H)	22-02.00	
20	Riffle, Alexa	8	Wash. Irving	21-10.00	
21	Roy, Aubrey		TCMS	21-03.50	
22	Freeman, Darby		Lincoln	21-03.00	
23	McPherson, Chelsea	7	Mountaineer(H)	20-06.50	
24	Yeager, Addison		Nms Girls	20-04.50	
25	Rupert, Riley		Pcms	20-04.00	
26	Hartline, Jana		Nms Girls	20-01.00	
27	Posey, Maggie	7	Mountaineer(H)	19-04.50	
28	Bunner, Hope		Pcms	17-01.00	
29	Owens, Abi		Lincoln	16-11.50	
30	Peters, Ashley		Mini Titans	14-05.00	
--	Haddix, Maddy		TCMS	FOUL	

Girls Discus Throw

	Name	Year	School	Finals	Points
1	Burnside, Brooke	08	Doddridge	88-00	10
2	Underwood, Jeonah	08	Doddridge	86-10	8
3	Gauldin, Phoenix		Lincoln	79-11	6
4	Stewert, Sabena		Wildcats	71-02	4
5	Morris, Morgan		Ritchie	67-08	2
6	Dodrill, Aaliyah		Lincoln	63-00	1
7	Johnston, Savannah	07	Doddridge	62-08	
8	Frase, Mercy	7	South Harrison	61-00	
9	McCullough, Isabella		Bms Red	60-06	
10	Wolford, Shylynn	7	Mountaineer(H)	53-08	
11	Marsh, Kennedy		Bms Red	52-11	
12	Huffman, Paige		Mini Titans	50-06	
13	Baker, Braylin		Nms Girls	50-05	
14	McPherson, Chelsea	7	Mountaineer(H)	42-01	
15	Pepper-Jackson, Becky		Bms Red	41-08	
16	Rupert, Riley		Pcms	41-03	
17	Greynolds, Emma		Lincoln	41-02	
18	Guthrie, Markiah		TCMS	40-11	
19	Wood, Aubrey		Mountaineer(H)	40-10	
20	Tennant, Abbigail		Nms Girls	39-11	
21	Peters, Ashley		Mini Titans	37-03	
22	Tharp, Billie		Nms Girls	36-11	
23	Roy, Aubrey		TCMS	35-11	
24	Holmes, Olivia		Pcms	35-09	
25	Mayle, Adalyn		Pcms	32-00	
--	Hatcher, Lily		PCMS	FOUL	
--	Riffle, Alexa	8	Wash. Irving	FOUL	
--	Kirk, Hannah		Tyler	FOUL	
--	Richeson, Madison		Tyler	FOUL	
--	Martin, Brookelyn	8	Wash. Irving	FOUL	
--	Brown, Mattie		Ritchie	FOUL	

Women - Team Rankings - 18 Events Scored

1) Doddridge County Middle Sc	169	2) Bridgeport Middle School	76
3) Gilmer County Mini Titans	63	4) Mountaineer Middle Harris	56
5) Lincoln Middle School	53	6) Pleasants County Middle S	46
7) Tyler Consolidated MS	23	8) Taylor County Middle Scho	21
9) Wood County Christian Scho	17	10) Washington Irving Middle	14
11) New Martinsville School Gi	11	12) Ritchie County Middle Sch	5
13) South Harrison Middle Scho	3		

Men - Team Rankings - 18 Events Scored

1) Doddridge County Middle Sc	116	2) Mountaineer Middle Harris	100.50
3) Ritchie County Middle Scho	76	4) Bridgeport Middle School	64.50
5) Taylor County Middle Schoo	64	6) Lincoln Middle School	49
7) South Harrison Middle Scho	30	8) Tyler Consolidated MS	24
9) Washington Irving Middle	11	10) New Martinsville School G	10
11) Wood County Christian Scho	9	12) Pleasants County Middle S	3

Harry Green Middle School Invitational MS

OFFICIAL May 14, 2022 Bridgeport HS

Show More Details...

Womens Middle School Discus

Finals - 1kg

1.	8	Brooke Burnside	98-04	PR	Doddridge County
2.	8	Jeonah Underwood	84-09	PR	Doddridge County
3.	-	Cassandra Weikle	83-02	PR	Point Pleasant
4.	8	Grace Yeager	82-01	PR	Winfield
5.	8	Phoenix Gauldin	76-10		Lincoln
6.	6	Aliyah Bonnell	74-08	PR	Doddridge County
7.	7	Jenna Geter	74-02	PR	Hurricane
8.	7	Rylee Gurnee	73-05	PR	Winfield
9.	7	Mila Herscher	73-04	PR	Winfield
10.	-	Shelby Plants	73-01		Point Pleasant
11.	7	Reese Lambert	72-01	PR	Taylor County
12.	6	Kaylee Robinson	70-11		Charles Town
13.	-	Isabella McCullough	68-01	PR	Bridgeport
14.	-	Vivian Hoang	67-09	PR	Hurricane
15.	8	Trinity Perkins	67-01	PR	Eastern Greenbrier
16.	7	Raqi Thomas	66-02	PR	Suncrest
17.	7	LaKrista Buckingham	64-04		West Preston
18.	6	Katie Samples	62-03	PR	Buckhannon-Upshur
19.	7	Hydee Wykle	61-05		Eastern Greenbrier
20.	7	Piper Baldwin	59-07	PR	Eastern Greenbrier
21.	8	Aaliyah Dodrill	58-11		Lincoln
22.	8	Hannah Kirk	58-05	PR	Tyler Consolidated
23.	7	Shylynn Wolford	57-09		Mountaineer (Clarksburg)
24.	7	Marlee Graciano	57-00	PR	Central Preston
25.	8	Lyanla Lawrence	56-05	PR	Charles Town
26.	8	Demi Billotti	56-02		South (Morgantown)
27.	8	Courtney Knight	55-08		South Harrison
28.	6	Gianna Petruzzello	54-06	PR	Wildwood
29.	8	Samantha Zizzi	52-09		South (Morgantown)
30.	6	Brynlie Austin	52-07		Shepherdstown
31.	7	Gabby Conrad	51-10	PR	Robert L. Bland
32.	7	Aylin Godfrey	50-06		Shepherdstown
33.	8	Alexa Riffle	50-03		Washington Irving
34.	8	Jocelyn Nolan	50-01		St. Francis Central Catholic
35.	6	Becky Pepper-Jackson	49-07	PR	Bridgeport
36.	7	Kayla DuVal	47-05		Wildwood
37.	7	Maggie Posey	46-02		Mountaineer (Clarksburg)
38.	7	Lorelei Namsupak	46-00		Suncrest
39.	7	Chelsea Mchperson	45-07		Mountaineer (Clarksburg)
40.	7	Jeimy Elizondo-Zavala	45-04		Wildwood
41.	-	Payge Freeman	43-11		Lincoln
42.	7	Christine Larsen	39-01		Charles Town
43.	8	Mckenna Tighe	37-11		Mountaineer (Morgantown)
44.	7	Baylee Yost	37-09		Suncrest
45.	8	Olivia Riley	37-04		South (Morgantown)
46.	-	Adaleia Wolfe	37-01		Bridgeport
47.	-	London Davis	36-11	PR	Bridgeport
48.	6	Madison Yoakum	36-00	PR	Tygarts Valley
49.	8	Tacy Pollock	35-08		Buckhannon-Upshur
50.	7	Aubrey Roy	35-00		Taylor County
51.	6	Daelyn Leach	33-07	PR	Tygarts Valley
52.	8	Madeline Martin	33-01	PR	Mountaineer (Morgantown)
53.	8	Paige Hetrick	31-01		Mountaineer (Morgantown)
	7	Summer Keener	DNS		West Preston
	8	Markiah Guthrie	FOUL		Taylor County
	8	Madison Sypolt	DNS		East Preston
	8	Karsyn Lewis	DNS		Point Pleasant
	8	Madison Alt	DNS		Keyser

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Harry Green Middle School Invitational MS

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Womens Middle School Shot Put

Finals - 6lb

1.	7	Jenna Geter	37-08.00	PR	Hurricane
2.	8	Phoenix Gauldin	34-04.00	PR	Lincoln
3.	7	Savannah Johnston	33-11.00	PR	Doddridge County
4.	8	Brooke Burnside	33-06.50	PR	Doddridge County
5.	7	Gabby Conrad	32-08.50	PR	Robert L. Bland
6.	7	Hannah Rymer	32-05.50	PR	Doddridge County
7.	-	Shelby Plants	32-03.00	PR	Point Pleasant
8.	7	Raqi Thomas	31-05.00	SR	Suncrest
9.	8	Grace Yeager	30-05.00	PR	Winfield
10.	8	Hannah Amsler	30-02.00	PR	South (Morgantown)
11.	-	Cassandra Weikle	30-00.50	PR	Point Pleasant
12.	6	Kaylee Robinson	29-09.00	PR	Charles Town
13.	8	Jocelyn Nolan	29-06.00	PR	St. Francis Central Catholic
14.	8	Kyra Nolan	29-01.50	PR	Tyler Consolidated
15.	8	Eliana Winfrey	28-11.00	PR	Tyler Consolidated
16.	8	Aubrey Skidmore	27-04.00		South (Morgantown)
17.	7	Emily Smith	27-03.00	PR	Tygarts Valley
18.	8	Sarah Diaz	27-02.00		Wildwood
19.	-	Isabella McCullough	27-00.00		Bridgeport
19.	8	Alyssa Swecker	27-00.00	PR	Tygarts Valley
21.	7	Reese Lambert	26-10.50		Taylor County
22.	7	Rylee Gurnee	26-09.00	PR	Winfield
23.	8	Grace Wolfe	26-06.00	PR	Mountaineer (Morgantown)
24.	8	Lyanla Lawrence	25-05.50		Charles Town
25.	8	Dulce Guzman	25-02.50	PR	Mountaineer (Morgantown)
26.	8	Courtney Knight	25-00.50		South Harrison
26.	-	Brooke Kelley	25-00.50	PR	Hurricane
28.	6	Reagan Watkins	24-08.00	PR	South (Morgantown)
29.	8	Markiah Guthrie	24-01.00	PR	Taylor County
30.	-	Vivian Hoang	23-09.00	PR	Hurricane
31.	8	Harper Powell	23-08.50		Wildwood
32.	6	Isabella Bowers	23-06.00	PR	Buckhannon-Upshur
33.	8	Alexa Riffle	23-05.00		Washington Irving
34.	7	Shylynn Wolford	23-00.50		Mountaineer (Clarksburg)
35.	8	Ada Workman	22-10.50		South Harrison
36.	-	London Davis	22-07.50	PR	Bridgeport
37.	6	Katie Samples	22-06.50		Buckhannon-Upshur
38.	7	Hydee Wykle	22-06.00	PR	Eastern Greenbrier
39.	7	Aylin Godfrey	22-05.50		Shepherdstown
40.	7	Marlee Graciano	22-01.50		Central Preston
41.	8	Hannah Kirk	22-00.00	PR	Tyler Consolidated
42.	7	Piper Baldwin	21-10.00	PR	Eastern Greenbrier
43.	7	Abby Decker	21-06.50		Eastern Greenbrier
44.	7	LaKrista Buckingham	21-06.00		West Preston
45.	8	Brigid Wilson	20-11.50	SR	Suncrest
46.	7	Lilly Anger	20-09.00	PR	Elkins
47.	8	Tacy Pollock	20-08.50		Buckhannon-Upshur
48.	7	Chelsea Mchperson	20-06.50		Mountaineer (Clarksburg)
49.	8	Mackenzie Willard	20-05.50	PR	Winfield
50.	6	Abi Owens	20-04.50	PR	Lincoln
51.	7	Lorelei Namsupak	20-02.50		Suncrest
52.	8	Paige Hetrick	19-11.00		Mountaineer (Morgantown)
53.	-	Adaleia Wolfe	19-08.00		Bridgeport
54.	7	Kayla DuVal	19-05.00		Wildwood
55.	7	Maggie Posey	19-02.00		Mountaineer (Clarksburg)
56.	-	Darby Freeman	18-11.00		Lincoln
57.	6	Becky Pepper-Jackson	18-10.00	PR	Bridgeport
58.	6	Brynlie Austin	18-08.00		Shepherdstown
59.	7	Aubrey Roy	18-00.50		Taylor County
60.	7	Sophia Ratnaker	16-09.50	PR	Elkins
61.	7	Emma Kinder	15-01.00		Charles Town
	7	Breonna Plumley	DNS		Elkins
	8	Karsyn Lewis	DNS		Point Pleasant
	7	Summer Keener	DNS		West Preston
	8	Madison Alt	DNS		Keyser
	8	Madison Sypolt	DNS		East Preston

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Cooley

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January 27, 2023

Molly C. Dwyer
Clerk of Court
U.S. Court of Appeals for the Ninth Circuit
95 Seventh Street
San Francisco, CA 94103

Re: Lindsay Hecox and Jane Doe with her next friends Jean Doe and John Doe v. Bradley Little, et al., and Madison Kenyon and Mary Marshall, Nos. 20-35813, 20-35815

Dear Ms. Dwyer:

Pursuant to Federal Rule of Appellate Procedure 28(j), Plaintiff-Appellee Lindsay Hecox responds to Intervenors-Appellants' 28(j) letter regarding *Adams v. School Board of St. Johns County* (Dkt. No. 187). *Adams* does not support reversal of the District Court's preliminary injunction: it is inconsistent with this Court's precedent, and its reasoning is inapplicable here.

First, *Adams*, which analyzed the claim at issue as alleged sex discrimination, does not conflict with this Court's previous holding that discrimination based on transgender status independently triggers heightened scrutiny. *Karnoski v. Trump*, 926 F.3d 1180, 1201 (9th Cir. 2019). Under this "demanding" standard, the proper inquiry is whether Appellants have demonstrated an "exceedingly persuasive" justification for the State's categorical ban of all women and girls who are transgender from school sports. *See United States v. Virginia (VMI)*, 518 U.S. 515, 533 (1996). For the reasons stated in Ms. Hecox's briefing, Appellants have not. *See, e.g.*, Dkt. 65 at 26-37.

Second, the privacy interests alleged in *Adams* are distinct from the state interests asserted here. Under heightened scrutiny, the Court must evaluate the actual, "genuine" government interests that the state said justified H.B. 500 when the legislature passed it. *See VMI*, 518 U.S. at 533. *Adams'* evaluation of state interests that are not at issue here is therefore irrelevant to this Court's inquiry of whether H.B. 500 survives constitutional scrutiny.[1]

Finally, the District Court's opinion does not contradict *Clark* (which is not supplemental authority, notwithstanding Appellants' invocation of it in their letter). *Clark* involved a policy preventing cisgender boys from playing volleyball on girls' teams. (*See* 1-ER-62-66.) As the District Court's opinion correctly held, in contrast to the policy in *Clark*, H.B. 500's categorical exclusion of girls who are transgender "discriminates against a historically disadvantaged group" and "entirely eliminates their opportunity to participate in school sports" with no evidence that "allowing transgender women to compete on women's teams would substantially displace female athletes." (1-ER-64-66.)

The District Court's opinion correctly applies this Court's precedent and should be affirmed.

[1] Contrary to Intervenors-Appellants' implication, *Adams'* holding does not apply to sports: the language that Intervenors-Appellants cite in support of their argument is from a one-judge concurrence.

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Sincerely,

/s/ Kathleen R. Hartnett

Kathleen R. Hartnett