### 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 OPPOSITION TO DEFENDANT-INTERVENOR AND DEFENDANT STATE OF WEST VIRGINIA'S MOTION TO EXCLUDE THE EXPERT TESTIMONY OF DR. DEANNA ADKINS

# TABLE OF CONTENTS

	]	Page
INTRODUCT	TON	1
LEGAL STA	NDARD	4
ARGUMENT		5
I.	Dr. Adkins' Opinions About The Nature Of Sex Are Both Reliable And Relevant.	5
	A. Defendants Fail To Show That Dr. Adkins' Testimony About "Biological Sex" Is Unreliable	5
	B. Dr. Adkins' Testimony About Differences Of Sex Development Is Relevant.	9
II.	Dr. Adkins' Opinion That Gender Identity Is Not Subject To Voluntary Change Is Both Reliable And Relevant.	11
III.	Dr. Adkins' Opinion That The Exclusion Of Transgender Adolescents From Sex-Separated Sports Causes Harm Is Well-Supported By Her Clinical Experience.	14
IV.	Dr. Adkins' Testimony About The Standard Of Care For Treatment Of Gender Dysphoria Is Both Reliable And Relevant.	18
V.	Dr. Adkins' Opinion About The Safety Of Treatment Protocols Is Reliable And Relevant.	19
CONCLUSIO	N	22

## TABLE OF AUTHORITIES

	Page(s)
Cases	
Adams v. Sch. Bd. of St. Johns Cnty., Fla., 318 F. Supp. 3d 1293 (M.D. Fla. 2018)	3
Brandt v. Rutledge, 551 F. Supp. 3d 882 (E.D. Ark. 2021)	3, 20
Buckman Co. v. Plaintiffs' Legal Comm., 531 U.S. 341 (2001)	21
Daubert v. Merrell Dow Pharms., Inc., 509 U.S. 579 (1993)	3, 4
Eghnayem v. Bos. Sci. Corp., 57 F. Supp. 3d 658 (S.D. W.Va. 2014)	15
Grimm v. Gloucester Cnty. Sch. Bd., 972 F.3d 586 (4th Cir. 2020)	11, 12, 19
Hecox v. Little, 479 F. Supp. 3d 930 (D. Idaho 2020)	3, 5, 16
Huskey v. Ethicon, Inc., 29 F. Supp. 3d 691 (S.D. W.Va. 2014)	15
Md. Cas. Co. v. Therm-O-Disc, Inc., 137 F.3d 780 (4th Cir. 1998)	4
United States v. Moreland, 437 F.3d 424 (4th Cir. 2006)	4
United States v. Powers, 59 F.3d 1460 (4th Cir. 1995)	4
Westberry v. Gislaved Gummi AB, 178 F.3d 257 (4th Cir. 1999)	4
Statutes	
W. Va. Code Ann. § 18-2-25d(b)(1)	10

## TABLE OF CONTENTS

(continued)

	rage
Other Authorities	
Fed. R. Evid. 702	4
703	2
Jack Turban, et al., Gender Incongruence & Gender Dysphoria. In Martin A, Bloch MH, Volkmar FR (Editors): Lewis's Child and Adolescent Psychiatry: A Comprehensive Textbook, Fifth Edition. Philadelphia: Wolters Kluwer 2018)	13
WPATH, Chapter Draft for Public Comment, Mental Health, "Statement 7" (8th Version, forthcoming 2022)	
Wylie C. Hembree, et al., Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline, The Journal of Clinical Endocrinology & Metabolism, Vol. 102, Iss. 11, 3869—	,
3903 (Nov. 1, 2017), https://doi.org/10.1210/jc.2017-01658	6

Plaintiff B.P.J. respectfully submits this memorandum in opposition to the Motion to Exclude the Expert Testimony of Dr. Deanna Adkins submitted by Defendant-Intervenor and Defendant State of West Virginia (collectively, "Defendants"). (Dkt. No. 308 (Defs.' Mot.).) Because Dr. Adkins' expert testimony is both highly relevant to this case and probative of important questions of law and fact in this matter, Defendants' motion should be denied.

### **INTRODUCTION**

Defendants fail to identify any legitimate basis to exclude Dr. Adkins' expert testimony. Defendants do not—and indeed, cannot—question Dr. Adkins' qualifications to offer testimony regarding the nature of sex and gender identity, the safety and efficacy of treatment protocols for gender dysphoria, and the harms transgender youth experience when excluded from sex-separated programs consistent with their gender identity. Dr. Adkins is a pediatric endocrinologist who has been licensed to practice medicine in North Carolina for more than 20 years. (Dkt. No. 289-23 (Adkins Rep.) ¶ 6.) She is the founder and Director of the Center for Child and Adolescent Gender Care within the Duke University School of Medicine, where she treats children and adolescents aged 7 through 22 with gender dysphoria and/or differences or disorders of sex development. (*Id.* at 3 ¶ 9.) Dr. Adkins has treated hundreds of transgender and intersex patients throughout her career. (*Id.* ¶ 10.)

Dr. Adkins' testimony and opinions in this case are consistent with current scientific literature as well as the standards of care, clinical guidelines, and official position statements of the leading medical and mental health organizations in the United States and internationally,

including the medical associations that inform her practice areas as well as those of Defendants' proposed experts.<sup>1</sup>

In support of her opinions, Dr. Adkins relies on current, peer-reviewed scientific literature, as well as the generally accepted standards of care, clinical guidelines, and official position statements of the American Medical Association, American Academy of Child & Adolescent Psychiatry, American Psychiatric Association, the Endocrine Society, and the World Professional Association on Transgender Health ("WPATH"). These are precisely the type of facts or data that other "experts in the particular field would reasonably rely on . . . in forming an opinion on the subject." Fed. R. Evid. 703.

Further, Dr. Adkins' expert opinions and testimony are relevant, authoritative, reliable, and highly probative of important issues surrounding this case. For example, her testimony establishes that: (1) sex is made up of multiple characteristics, which are not always in alignment; and (2) that various conditions known as differences of sex development help illustrate why no single sex-related characteristic determines a person's sex. This is highly relevant to H.B. 3293's use and cramped definition of "biological sex," a misnomer that is scientifically inaccurate and not a proper basis for excluding girls like B.P.J. from interscholastic sports. Dr. Adkins also explains that (3) the treatment protocols for gender-affirming care are widely accepted and safe; and (4) denying transgender youth access to programs and activities matching their gender identity is inconsistent with these treatment protocols and inflicts harms on transgender young people. These opinions

<sup>&</sup>lt;sup>1</sup> Defendants' proposed expert, Stephen B. Levine, contrary to his arguments about gender-affirming care generally, has provided treatment to transgender patients consistent with the same standards of care that guide Dr. Adkins' clinical practice and opinions in this case. (*See* Dkt. No. 324 (Pl.'s Mem. of Law in Supp. of Mot. to Exclude the Expert Test. of Stephen B. Levine) at 20.)

relate directly to the injuries imposed by H.B. 3293's categorical ban on participation in athletics by transgender girls and women.

Indeed, another district court rejected arguments similar to the ones Defendants raise here and found Dr. Adkins well-qualified to testify on these subjects and her opinions well-supported. See Adams v. Sch. Bd. of St. Johns Cnty., Fla., 318 F. Supp. 3d 1293 (M.D. Fla. 2018), aff'd 968 F.3d 1286 (11th Cir. 2020), reh'g en banc granted on other issues, 9 F.4th 1369 (11th Cir. 2021). In denying the Daubert motion filed in Adams, the court explained that to "the extent the motion seeks to exclude portions of [Dr. Adkins'] testimony related to understanding the nature of gender, the protocols for addressing gender transitioning, and the treatment of gender dysphoria, the motion is denied, the Court finding [she is] qualified to testify on those matters (and others not challenged by this motion), the methodologies upon which [she] rel[ies] for these limited matters are sufficiently reliable, and [her] testimony assists the Court in understanding the evidence." Id. at 1298 n.12.

Dr. Adkins also submitted expert testimony on similar topics in cases involving another ban on athletic participation for transgender youth, and a ban on access to gender-affirming care. The courts in those cases have ruled on grounds consistent with her testimony in preliminarily enjoining those laws. *See Hecox v. Little*, 479 F. Supp. 3d 930 (D. Idaho 2020) (preliminarily enjoining Idaho statute barring transgender girls and women from participating in athletics); Adkins Decl., *Hecox v. Little*, No. 20 Civ. 184 (D. Idaho Apr. 30, 2020), Dkt. No. 22-2; *Brandt v. Rutledge*, 551 F. Supp. 3d 882 (E.D. Ark. 2021) (preliminarily enjoining Arkansas statute prohibiting gender-affirming care for transgender adolescents); Adkins Decl., *Brandt v. Rutledge*, No. 21 Civ. 450 (E.D. Ark. June 15, 2021), Dkt. No. 11-11.

For these reasons, and those outlined below, Defendants' motion should be denied.

#### LEGAL STANDARD

The admissibility of expert testimony is governed by the framework set out in Federal Rule of Evidence 702 and *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993). According to Rule 702:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

Fed. R. Evid. 702.

Courts use a two-part test to determine the admissibility of expert testimony under Rule 702, examining whether it is both relevant and reliable. *United States v. Powers*, 59 F.3d 1460, 1470 (4th Cir. 1995). This inquiry does not require the proffering party to "prove" anything before the testimony can be admitted and functions as more of a "preliminary assessment" of relevance and reliability. *Md. Cas. Co. v. Therm-O-Disc, Inc.*, 137 F.3d 780, 783 (4th Cir. 1998). The district court's inquiry "is 'a flexible one' focusing on the 'principles and methodology' employed by the expert, not on the conclusions reached." *Westberry v. Gislaved Gummi AB*, 178 F.3d 257, 261 (4th Cir. 1999) (quoting *Daubert*, 509 U.S. at 594–95). The district court "need not determine that the expert testimony . . . is irrefutable or certainly correct" because, "[a]s with all other admissible evidence, expert testimony is subject to testing by vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof." *United States v. Moreland*, 437 F.3d 424, 431 (4th Cir. 2006) (quote omitted), *overruled on other grounds by Rita v. United States*, 551 U.S. 338 (2007).

#### **ARGUMENT**

- I. Dr. Adkins' Opinions About The Nature Of Sex Are Both Reliable And Relevant.
  - A. Defendants Fail To Show That Dr. Adkins' Testimony About "Biological Sex" Is Unreliable.

Defendants first argue that Dr. Adkins should be precluded from opining that the term "biological sex" is too imprecise to capture the complexity of a person's sex. (*See* Dkt. No. 289-23 (Adkins Rep.) ¶¶ 37-41; Dkt. No. 308 (Defs.' Mot.) at 6-8.) Defendants raise the singular objection that her opinion is unreliable, but Dr. Adkins' testimony hews carefully to the clinical practice guidelines and literature in this area. It is Defendants' argument that hopelessly distorts the literature and relies on their own *ipse dixit*.

As Dr. Adkins explains, "the notion of a singular 'biological sex,' is inherently flawed" because every person's sex is a multifaceted collection of sex-related characteristics, including "external genitalia, internal reproductive organs, gender identity, chromosomes, and secondary sex characteristics." (Dkt. No. 289-23 (Adkins Rep.) ¶¶ 37-41.) Defendants wisely eschew a relevance objection, conceding that this testimony relates to whether "the West Virginia Legislature could . . . rationally or reasonably use 'biological sex'" in H.B. 3293 to exclude transgender girls from participation in scholastic sports. (Dkt. No. 308 (Defs.' Mot.) at 6); *see also Hecox*, 479 F. Supp. 3d at 948 (in a case where Dr. Adkins provided similar testimony, the court examined a statute's use of "biological sex" to conclude that its use in the challenged statute was intended to "completely exclude[] transgender girls" from athletics participation).

Defendants instead claim that Dr. Adkins' opinion is unreliable, citing vague and undefined notions of "[u]niversal human experience" to assert that "biological sex" is an "important category." (Dkt. No. 308 (Defs.' Mot.) at 6.) Dr. Adkins, in contrast, relies on scientific and peer-reviewed sources as the basis for her opinion, so Defendants shift to misrepresenting those sources.

For example, Dr. Adkins relies on the Endocrine Society's clinical guideline for treatment of gender dysphoria. (Dkt. No. 289-23 (Adkins Rep.) ¶ 41 (quoting Dkt. No. 317-3 (Wylie C. Hembree, et al., *Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline*, J. of Clinical Endocrinology & Metabolism, Vol. 102, Iss. 11, 3869–3903 (Nov. 1, 2017), <a href="https://doi.org/10.1210/jc.2017-01658">https://doi.org/10.1210/jc.2017-01658</a> ("Clinical Practice Guideline")). Defendants characterize this Clinical Practice Guideline as "a single committee position statement," and "a committee-drafted position statement, rather than a peer-reviewed scientific study." (Dkt. No. 308 (Defs.' Mot.) at 6.) This is a stunning mischaracterization:

- As evidenced by its title, this document is a "Clinical Practice Guideline" for clinicians who treat transgender people, not a "committee position statement."
- The guideline is not reflective only of the work of one "committee." To the contrary, this document reflects the practice guideline of the Endocrine Society and co-sponsoring organizations, including the American Association of Clinical Endocrinologists, American Society of Andrology, European Society for Pediatric Endocrinology, European Society of Endocrinology, Pediatric Endocrine Society, and World Professional Association for Transgender Health. (Dkt. No. 317-3 (Clinical Practice Guideline) at 3869.)
- This Clinical Practice Guideline *is* peer-reviewed. The guideline was published in The Journal of Clinical Endocrinology & Metabolism, which "is the world's leading peer-reviewed journal for the dissemination of original research as it relates to the clinical practice of endocrinology, diabetes, and metabolism." (Borelli Decl. Ex. A at 1.) This "evidence-based guideline" was developed using a rigorous grading scale "to describe the strength of the recommendations and quality of the evidence," based on two systematic reviews commissioned for the guidelines and "the best available evidence from other

published systematic reviews and individual studies." (Dkt. No. 317-3 (Clinical Practice Guideline) at 3869.)

Defendants next accuse Dr. Adkins of "cherry-pick[ing]" her support from the Clinical Practice Guideline, and ignoring a "deep well of scientific literature" that purportedly disagrees. (Dkt. No. 308 (Defs.' Mot.) at 6.) But Dr. Adkins' statement is well supported, not cherry-picked, and Defendants' "deep well" of opposing literature turns out to be dry.

First, the Endocrine Society's Clinical Practice Guideline refers consistently to the multifaceted nature of sex, as illustrated by Defendants' own cited example. Defendants note that the Clinical Practice Guideline defines "sex" as including "attributes that characterize biological maleness or femaleness," (*id.*), but omit the remainder of that definition explaining that "sex" also includes "sex-determining genes, the sex chromosomes, the H-Y antigen, the gonads, sex hormones, internal and external genitalia, and secondary sex characteristics." (Dkt. No. 317-3 (Clinical Practice Guideline) at 3875.)

Defendants' "deep well" of support appears to consist of three items:

1. A publication entitled "Considering Sex as a Biological Variable in Basic and Clinical Studies: An Endocrine Society Scientific Statement," which Defendants claim endorses their rigid notion of "biological sex." (Dkt. No. 308 (Defs.' Mot.) at 7.) Far from it—this article recognizes that "[a] simple biological definition of male and female, satisfactory to all people, is elusive." (Dkt. No. 307-2 (App. to Defs.' Mot. to Exclude Pl.'s Experts) at 381.) The article goes on to recognize the wide breadth of gender diversity, discussing at length transgender people and the "neuroanatomic, genetic, and hormonal" variables associated with being transgender. (*Id.* at 387.)

- 2. A one-page National Institute of Health infographic entitled "How Sex and Gender Influence Health and Disease," which has no publication date, does not use the term "biological sex," and does not discuss transgender people. (*Id.* at 627.) This one-page document also does not purport to provide a complete and scientifically accurate definition of sex, but rather identifies how health and disease risks affect "women" and "men" broadly. (*Id.*)
- 3. A statement plucked from a one-page print-out from a World Health Organization ("WHO") website. (Dkt. No. 308 (Defs.' Mot.) at 7.) This webpage, however, is *consistent* with Dr. Adkins' opinion, explaining that there are multiple "different biological and physiological characteristics of females, males and intersex persons, such as chromosomes, hormones and reproductive organs." (Dkt. No. 307-2 (App. to Defs.' Mot. to Exclude Pl.'s Experts) at 946; *see also* Dkt. No. 289-23 (Adkins Rep.) ¶ 41 (referring to multiple "biological sex-related characteristics").) This WHO website also warns against "[r]igid gender norms" which can "negatively affect people with diverse gender identities." (Dkt. No. 307-2 (App. to Defs.' Mot. to Exclude Pl.'s Experts) at 946.)

Defendants suggest that Dr. Adkins' opinion also is unreliable because a publication she coauthored relating to transgender health used the term "biological sex." (Dkt. No. 308 (Defs.' Mot.) at 6-7.) What Defendants do not tell the Court is that when they questioned Dr. Adkins about this publication at her deposition, she explained that her publication uses language "reflective of the original publications" cited therein, and that under the standards for scientific publications, when "reporting [an] original article's information, it would be inappropriate to change the language" of that article. (Dkt. No. 289-24 (Adkins Dep. Tr.) at 60:17-63:17.)

Finally, Defendants inaccurately claim that Dr. Adkins "conceded the reality of the biological binary of sex during her deposition." (Dkt. No. 308 (Defs.' Mot.) at 7-8.) Not so.

Defendants list a series of quotes in which Dr. Adkins observed, unremarkably, that our many sexrelated characteristics relate to our physiology or biology, and that typically people with XX chromosomes identify as female and people with XY chromosomes identify as male. (*Id.*) This testimony is consistent with the opinions in her expert report. *See, e.g.*, (Dkt. 289-23 (Adkins Rep.) ¶ 39 ("Usually, though not always, a person's gender identity aligns with the sex designation based on the person's genitals at birth.").)

Fundamentally, Defendants appear to misunderstand the opinion they seek to exclude. Dr. Adkins does not suggest that no one should ever use the word "biology," or that people's sexrelated characteristics do not relate to their physiology. Dr. Adkins simply opines that the concept of a singular "biological sex" is not precise. (Dkt. 289-23 (Adkins Rep.) ¶ 37.) Because all credible sources agree, Dr. Adkins' opinion is reliable.

## B. Dr. Adkins' Testimony About Differences Of Sex Development Is Relevant.

Dr. Adkins also opines about various conditions known as differences of sex development ("DSDs," also referred to as being intersex), to help illustrate the reasons that practitioners and researchers understand that no singular sex-related characteristic determines a person's sex. (Dkt. No. 289-23 (Adkins Rep.) ¶¶ 42-49.) For example, DSDs help us understand the centrality of gender identity in determining sex. Before DSDs were well-understood, surgeries were more commonly performed on infants and young children with genitalia not clearly identifiable as male or female to create more typically appearing gendered anatomy. As Dr. Adkins explained in her rebuttal report, "surgical interventions undertaken on children [with DSDs] . . . to supposedly normalize their genital structures, without adequate information about the child's gender identity, have sometimes had disastrous results because gender identity cannot be involuntarily altered." (Borelli Decl. Ex. E (Adkins Reb.) ¶ 12.) "Many of these children have had to endure further

surgeries to reverse earlier surgical intervention because their gender identity did not match the initial sex designation." (Dkt. No. 289-23 (Adkins Rep.) ¶ 46.)

Without ever addressing the purpose of Dr. Adkins' testimony, Defendants instead attack a series of other straw men—*e.g.*, arguing that this testimony is not relevant because B.P.J. does not have a DSD, and because DSDs are distinct from being transgender. (Dkt. No. 308 (Defs.' Mot.) at 8-10.) No one has claimed otherwise, and these assertions do not prove anything. (*See, e.g.*, Borelli Decl. Ex. E (Adkins Reb.) ¶ 12 ("[M]y testimony is not that having a difference of sex development and being transgender are the same, but that the similarities in these conditions help demonstrate that gender identity is deeply rooted for people who are transgender or intersex, just as for cisgender people.").)

Indeed, Defendants' own brief belies their claim that these opinions are not relevant. Defendants expressly rely on what they call "the reality of the biological binary of sex." (Dkt. No. 308 (Defs.' Mot.) at 8.) Dr. Adkins' opinions debunking this rigid, binary notion of sex are a squarely relevant response to Defendants' theory of the case. Similarly, Defendants' claim that this issue has "nothing to do" with H.B. 3293 is simply false. (*Id.*) H.B. 3293 purports to define "biological sex" for purposes of participation on athletic teams as being "based solely on the individual's reproductive biology and genetics at birth." W. Va. Code Ann. § 18-2-25d(b)(1). As Dr. Adkins explains, DSDs help us understand that even those characteristics do not always align, making the statute's criteria for participation arbitrary and incoherent. (*See, e.g.*, Dkt. No. 289-23 (Adkins Rep.) ¶ 48 (describing conditions in which reproductive anatomy does not match sex chromosomes).)

Defendants' invocation of the Endocrine Society to support their argument is particularly disingenuous. (Dkt. No. 308 (Defs.' Mot.) at 8.) Defendants cite one Endocrine Society article, but

ignore that the Endocrine Society's Clinical Practice Guideline for the treatment of gender dysphoria expressly states that:

[S]tudies in individuals with a disorder/difference of sex development (DSD) have informed our understanding of the role that hormones may play in gender identity outcome, even though most persons with GD/gender incongruence do not have a DSD. For example, although most 46,XX adult individuals with virilizing congenital adrenal hyperplasia caused by mutations in CYP21A2 reported a female gender identity, the prevalence of GD/gender incongruence was much greater in this group than in the general population without a DSD. This supports the concept that there is a role for prenatal/postnatal androgens in gender development [], although some studies indicate that prenatal androgens are more likely to affect gender behavior and sexual orientation rather than gender identity per se [].

(Dkt. No. 317-3 (Clinical Practice Guideline) at 3874.) This supports Dr. Adkins' opinions, not those of Defendants.

In sum, Dr. Adkins' opinions about DSDs are relevant to the issues in this case, including H.B. 3293's definition of the sex-based criteria used to exclude transgender girls from athletics.<sup>2</sup>

# II. Dr. Adkins' Opinion That Gender Identity Is Not Subject To Voluntary Change Is Both Reliable And Relevant.

Dr. Adkins opines that a "person's gender identity (regardless of whether that identity matches other sex-related characteristics) cannot be voluntarily changed, and is not undermined or altered by the existence of other sex-related characteristics that do not align with it." (Dkt. No. 289-23 (Adkins Rep.) ¶ 18.) Defendants claim her opinion is unreliable and irrelevant, but neither is true. First, the Fourth Circuit already has explained that the mainstream medical consensus recognizes that forcible efforts to change one's gender identity are unsuccessful and cause profound harm. *Grimm*, 972 F.3d at 595 ("For many years, mental health practitioners attempted

<sup>&</sup>lt;sup>2</sup> Defendants mischaracterize B.P.J. as taking the position that "males who identify as female are similarly situated to females for purposes of sports participation regardless of their physiological characteristics." (Dkt. No. 308 (Defs.' Mot.) at 9.) This argument is based on the erroneous and unsupported contention that girls and women who are transgender are the same as "males," which the Fourth Circuit already has rejected. *Grimm v. Gloucester Cnty. Sch. Bd.*, 972 F.3d 586, 609 (4th Cir. 2020).

to convert transgender people's gender identity to conform with their sex assigned at birth, which did not alleviate dysphoria, but rather caused shame and psychological pain."). This alone confirms that Dr. Adkins' opinion is consistent with the mainstream medical consensus. Defendants' other related arguments are easily debunked.

Defendants claim that Dr. Adkins' opinion is "a declaration of personal faith" that is unsupported by any citation in her report. (Dkt. No. 308 (Defs.' Mot.) at 10.) But the sources cited in her report provide ample support for her opinion. The Endocrine Society's Clinical Practice Guideline contains an entire section devoted to the "Biological Determinants of Gender Identity Development," explaining the research finding that gender identity is rooted in biological traits. (See Dkt. No. 317-3 (Clinical Practice Guideline) at 3875 (discussing, for example, "studies [that] have suggested heritability of GD/gender incongruence").) Dr. Adkins also cites a policy statement of The American Academy of Pediatrics, published in the peer-reviewed medical journal Pediatrics, (Dkt. 289-23 (Adkins Rep.) ¶ 25 n.4), which explains that "conversion' or 'reparative' treatment models" that try to dissuade transgender youth from "exhibiting gender-diverse expressions . . ." are not only "unsuccessful but also deleterious and are considered outside the mainstream of traditional medical practice." (Borelli Decl. Ex. B at 4; see also id. (explaining that the U.S. Substance Abuse and Mental Health Services Administration has concluded that these kinds of interventions are "inappropriate").)

Defendants then suggest that in rendering her opinion, Dr. Adkins "fail[ed] to account for multiple scientific sources that assert gender identity is not fixed or unchanging," and point to studies regarding children who may have had gender dysphoria that did not persist into adolescence. (Dkt. No. 308 (Defs.' Mot.) at 10.) This is revisionist history. Not only does Dr. Adkins "account" for this literature, but she expressly addresses the concept of desistance in her

rebuttal report. (*See, e.g.*, Borelli Decl. Ex. E (Adkins Reb.) ¶¶ 10-11 (explaining that adolescents with persistent gender dysphoria after reaching Tanner Stage 2 of puberty "almost always persist in their gender identity in the long-term, whether or not they were provided gender-affirming care," and "[n]o medical treatment is provided to transgender youth," who may or may not continue to experience gender dysphoria, "until they have reached Tanner Stage 2.").) Dr. Adkins' explanation is fully consistent with the literature she has cited. (Borelli Decl. Ex. B at 4 (explaining that articles suggesting high rates of desistance (such as those invoked by Defendants here) constitute "a group of early studies with validity concerns, methodologic flaws, and limited follow-up on children who identified as [transgender and gender diverse]").)

Defendants' response is a lengthy attempt to claim that Dr. Adkins' testimony about desistance is unsupported by her cited source, (Dkt. No. 308 (Defs.' Mot.) at 11), but her source squarely and firmly supports her opinion that the vast majority of adolescents with gender dysphoria persist in identifying as transgender. (*Compare* Borelli Decl. Ex. E (Adkins Reb.) ¶ 11 n.3 (citing Jack Turban, et al., Gender Incongruence & Gender Dysphoria. In Martin A, Bloch MH, Volkmar FR (Editors): *Lewis's Child and Adolescent Psychiatry: A Comprehensive Textbook*, Fifth Edition. Philadelphia: Wolters Kluwer 2018.) *with* Borelli Decl. Ex. C (excerpt of that cited source, which explains that "it appears that the vast majority of transgender adolescents persist in their transgender identity").) The only parties engaging in "incoherent semantic games" are Defendants. (Dkt. No. 308 (Defs.' Mot.) at 11.)

Defendants next invoke the rare phenomenon of detransition, in which an individual may pause or end their gender transition, suggesting this undermines Dr. Adkins' opinion that gender identity cannot be changed through coercion. (*Id.*) But Defendants' own sources admit they cannot quantify this rare occurrence, let alone reach scientific conclusions about whether one can be

coerced to change their gender identity. (*See id.* (invoking article by Leah Littman at Dkt. No. 307-2 (App. to Defs.' Mot. to Exclude Pl.'s Experts)) at 591-607); Dkt. No. 307-2 (App. to Defs.' Mot. to Exclude Pl.'s Experts) at 593 (admission in the same article that "nor is [this study] designed to assess the prevalence of detransition as an outcome of transition").)

Defendants colorfully accuse Dr. Adkins of "epistemological mysticism" because she explains that gender identity is a person's internal sense of gender. (Dkt. No. 308 (Defs.' Mot.) at 12 (quoting Dr. Adkins' deposition testimony that "can only be explained by a person because it is their knowledge of themselves").) This is how the scientific literature defines it as well. (*See e.g.*, Dkt. No. 317-3 (Clinical Practice Guideline) at 3875 (the Endocrine Society's Clinical Practice Guideline defines gender identity as "one's internal, deeply held sense of gender").) Even the sources Defendants invoke to try to discredit Dr. Adkins' opinions agree with her testimony. (*See, e.g.*, Dkt. 307-2 (App. to Defs.' Mot. to Exclude Pl.'s Experts) at 946 (WHO website, which defines gender identity as "a person's deeply felt, internal and individual experience of gender").)

Finally, Defendants' argument that this opinion is irrelevant fails. In fact, Defendants have made arguments about desistance and detransition a centerpiece of their expert testimony. (Dkt. No. 325-1 (Levine Rep.) ¶¶ 113-29; Dkt. No. 321-1 (Cantor Rep.) ¶¶ 36-45.) As Defendants admit at least twice in their motion, Dr. Levine testified at some length about desistance and detransition in his report. (Dkt. No. 308 (Defs.' Mot.) at 11-12 (citing Dr. Levine's testimony about detransition and desistance).) Defendants thus cannot credibly claim that Dr. Adkins' testimony is irrelevant when it merely rebuts their own expert presentation.

## III. Dr. Adkins' Opinion That The Exclusion Of Transgender Adolescents From Sex-Separated Sports Causes Harm Is Well-Supported By Her Clinical Experience.

Dr. Adkins testifies that she knows from "experience with [her] patients that it can be extremely harmful for transgender youth to be excluded from the team consistent with their gender

identity." (Dkt. 289-23 (Adkins Rep.) ¶ 28.) Dr. Adkins' clinical experience with transgender adolescents is extensive; she currently treats more than 400 transgender and intersex adolescents, and has treated more than 500 over her career. (*Id.* ¶ 10.) This kind of clinical experience is well-established as a proper basis for rendering an expert opinion. *See, e.g., Eghnayem v. Bos. Sci. Corp.*, 57 F. Supp. 3d 658, 725 (S.D. W. Va. 2014) (finding that doctor who had completed more than 600 of the relevant procedures had "ample clinical experience" to opine about them). Moreover, Dr. Adkins expressly states that her opinion is based on her clinical "experience with [her] patients." (Dkt. 289-23 (Adkins Rep.) ¶ 28.) An expert opinion "limited to the fact that [a doctor has or] has not observed" a particular trend "in her clinical practice" "[o]bviously . . . is not subject to testing or peer-review." *Huskey v. Ethicon, Inc.*, 29 F. Supp. 3d 691, 727 (S.D. W. Va. 2014). Accordingly, "drawing on her own clinical experience is a sufficiently reliable method of forming this particular opinion." *Id.* 

Dr. Adkins testified at deposition that removing a young person from their sport because they are transgender can cause "harm with regard to depression, anxiety, suicidality. It also causes metabolic harm, changes in the performance." (Dkt. No. 289-24 (Adkins Dep. Tr.) at 148:5-8.) Defendants make the peculiar argument that Dr. Adkins is "careful to refer to 'suicidality' rather than 'suicide," which they complain is "weakly correlated with actual suicide," and therefore "lowers the hurdle." (Dkt. No. 308 (Defs.' Mot.) at 14.)<sup>3</sup> The fact that Dr. Adkins' opinions are "careful" and nuanced is a mark of her professional expertise, not a deficiency in her opinions.

<sup>&</sup>lt;sup>3</sup> Counsel for Intervenor-Defendant raised a similar argument in *Hecox*, which the Court flatly rejected. *See Hecox*, 479 F. Supp. 3d at 987 n.40 (stating that intervenor's argument that transgender plaintiff failed to show irreparable harm because she has not alleged she will commit suicide is "outrageous[]" and "distasteful").

The remainder of Defendants' argument is simply based on falsehood. Defendants claim that Dr. Adkins "cites *nothing*" to support her opinion that a student may suffer extreme harm if excluded from athletics. (Dkt. No. 308 (Defs.' Mot.) at 14 (emphasis added).) But Dr. Adkins testified about "two patients" who "no longer participated in sports, gained weight, become obese and developed type two diabetes." (Dkt. No. 289-24 (Adkins Dep. Tr.) at 129:13-130:10.) Dr. Adkins also testified that her patients lost their friend groups as a result of being "asked to leave their sport," which "can push them down the slope of suicidal ideation and depression." (*Id.* at 130:2-10.) She also explained that these outcomes were not idiosyncratic, but apply to a much broader swath of her patients. (*Id.* at 128:15-19 ("[M]ost 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.").)

This testimony is supported by her expert report, which explains that "[e]xperiences of discrimination and gender-minority stress associated with rejection and non-affirmation are correlated with suicidal ideation." (Dkt. 289-23 (Adkins Rep.) ¶ 22; see also id. at n.2 (citing advance draft of the next version of WPATH's Standards of Care).) This advance WPATH draft Dr. Adkins cites collects literature regarding the correlation between discrimination and gender minority stress with suicidal ideation. (See WPATH, Chapter Draft for Public Comment, Mental Health, "Statement 7" (8th Version, forthcoming 2022).)<sup>4</sup> Defendants claim that one of Dr. Adkins' examples consisted of a student who "chose not to participate," but this is misleading in the extreme. (Dkt. No. 308 (Defs.' Mot.) at 15.) Dr. Adkins testified that this middle school student, who was not known to be transgender to their peers, was asked to participate on a team matching

<sup>&</sup>lt;sup>4</sup> Available at <a href="https://www.wpath.org/media/cms/Documents/SOC%20v8/SOC8%20Chapters%20for%20Public%20Comment/SOC8%20Chapter%20Draft%20for%20Public%20Comment%20-%20Mental%20Health.pdf?\_t=1638409644</a>.

their birth-assigned sex, which would have revealed their transgender identity to others. (Dkt. No. 289-24 (Adkins Dep. Tr.) at 127:9-18.) That action effectively barred them from participation. (*Id.*)

The fact that an NCAA policy *allows* transgender athletes to participate under certain circumstances does not undermine Dr. Adkins' opinions. (*See* Dkt. No. 308 (Defs.' Mot.) at 15 (arguing that Dr. Adkins cites no evidence to show harm from the NCAA's previous testosterone suppression requirement).) Dr. Adkins testified that she is not familiar with the details of the NCAA policy, (Dkt. No. 289-24 (Adkins Dep. Tr.) at 131:22-132:8), and that the reasonableness of a testosterone suppression policy is nuanced and may depend on the context. (*Id.* at 134:1-136:3.) None of this affects the scientific validity and reliability of the opinions she actually is offering in this case.

Relatedly, Defendants seek to disqualify Dr. Adkins from offering opinions about whether H.B. 3293 is "fair" or "reasonable." (Dkt. No. 308 (Defs.' Mot.) at 22-23.) But Dr. Adkins never offered opinions in her expert report about the "fairness" or "reasonableness" of the law. She offered opinions about the harm imposed by a categorical ban such as H.B. 3293, which she is well-qualified to do. The references to fairness and reasonableness to which Defendants point are the result of testimony that Defendants affirmatively generated at her deposition by asking whether she is offering an opinion on those topics. (Dkt. No. 289-24 (Adkins Dep. Tr.) at 124:8-13; 125:16-23.) As is evident from Defendants' motion, Defendants' questions used the phrase "offering an opinion" as a legal term of art, which is a confusing phrase to use with non-attorney witnesses. Plaintiff's counsel accordingly objected to the form of both questions. (*Id.*) Defendants' attempt to disqualify Dr. Adkins from offering views generated by Defendants' own confusing questions is misplaced. There simply are no proffered opinions for the Court to consider disqualifying.

# IV. Dr. Adkins' Testimony About The Standard Of Care For Treatment Of Gender Dysphoria Is Both Reliable And Relevant.

Dr. Adkins opines that the accepted "treatment for gender dysphoria is to eliminate the clinically significant distress by helping a transgender person live in alignment with their gender identity," with social transition forming a "critical part of treatment"; she also explains that denying access to single-sex activities such as athletics undermines this critical part of gender transition. (Dkt. No. 289-23 (Adkins Rep.) ¶¶ 25, 27-28.) Defendants first argue this opinion "is irrelevant to any issue in this case." (Dkt. No. 308 (Defs.' Mot.) at 17.) This argument is odd coming from Defendants, as they proffered reports from Dr. Levine and Dr. Cantor discussing at great length their disagreement with the established treatment protocols for gender dysphoria with much of this supposed "rebuttal" material venturing far afield of the scope of Dr. Adkins' opinions. (Dkt. No. 325-1 (Levine Rep.) ¶¶ 55-89, 127-207; Dkt. No. 321-1 (Cantor Rep.) ¶¶ 30-106.) At a minimum, Dr. Adkins' opinions are relevant to rebut the wide-ranging and lengthy opinions that Defendants clearly thought relevant enough to disclose. (Id.) Moreover, Dr. Adkins' opinions are directly relevant to the issues in this case. Her opinions focus on social transition as a "critical part of treatment" for transgender youth, including access to single-sex activities in accordance with gender identity. (Dkt. No. 289-23 (Adkins Rep.) ¶ 25, 27-28.) This opinion speaks directly to the harms of exclusion inflicted by H.B. 3293 on transgender girls such as B.P.J.

Defendants next argue that Dr. Adkins' opinions about the standard of care are unreliable, but her opinions reflect the medical consensus recognized and credited by the Fourth Circuit. (Dkt. No. 308 (Defs.' Mot.) at 17-19.) As the Fourth Circuit has explained, the WPATH Standards of Care upon which Dr. Adkins relies "represent the consensus approach of the medical and mental health community. . . and have been recognized by various courts, including this one, as the authoritative standards of care." *Grimm*, 972 F.3d at 595. "There are no other competing, evidence-

based standards that are accepted by any nationally or internationally recognized medical professional groups." *Id.* at 595–96 (quote omitted). And as *Grimm* noted, "transgender students have better mental health outcomes when their gender identity is affirmed." *Id.* at 597.

Trying to gin up disagreement where there is none, Defendants invoke a statement by the Royal Australian and New Zealand College of Psychiatrists about "polarised views" regarding treatment for minors. (Dkt. No. 308 (Defs.' Mot.) at 19.) Once again, they misrepresent their source, which does not suggest this is a basis for withholding care. Instead, this statement explains that "[p]olarised views can be unhelpful and can make the task of clinicians assisting young people presenting with complex presentations more difficult," and should not interfere with ensuring "that there is adequate care available" for people with gender dysphoria. (Borelli Decl. Ex. D at 3.) The statement "endorses practice which supports and validates the identity, strength, and experience of the individual, recognising that all experiences of gender are equally healthy and valuable," and states that "[p]sychiatric assessment and treatment should . . . allow for full exploration of the person's gender identity." (Id. at 4 (emphasis added).) The view of one former WPATH board member that some minors are "being too hastily encouraged to socially transition" also does not undermine Dr. Adkins' testimony. (Dkt. No. 308 (Defs.' Mot.) at 19.) Defendants cite no peerreviewed literature for this proposition, and the hearsay comments of one individual are not an adequate basis to exclude Dr. Adkins' opinions.

# V. Dr. Adkins' Opinion About The Safety Of Treatment Protocols Is Reliable And Relevant.

Defendants raise four primary attacks on Dr. Adkins' opinion that gender-affirming treatment is safe where medically indicated, but none are persuasive. First, they invoke Dr. Adkins' detailed informed consent process, claiming that she cannot really believe the care is safe if she provides thorough information about potential side effects. (Dkt. No. 308 (Defs.' Mot.) at 20-22.)

This argument is difficult to reconcile with the suggestion by Defendants' own experts that practitioners in the field provide "affirmation-on-demand." (Dkt. No. 321-1 (Cantor Rep.) ¶¶ 95-98, 137.) On the one hand, Defendants' experts opine at length that patients do not receive sufficient informed consent (*id.*), while on the other hand spinning Dr. Adkins' thoughtful informed consent process as an implicit concession that the treatment is not safe. Defendants cannot have it both ways. Moreover, contrary to Defendants' suggestion that Dr. Adkins refuses to tell her patients that this treatment is safe (Dkt. No. 308 (Defs.' Mot.) at 21), Dr. Adkins' approach is specific to each patient. As she explained, "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." (Dkt. No. 289-24 (Adkins Dep. Tr.) at 277:7-11.) Other courts have received expert testimony on this point and agreed that this care is safe. *See, e.g., Brandt*, 551 F. Supp. 3d at 891 (preliminarily enjoining law that banned providers from offering this "safe, legal, and medically necessary care" to transgender youth).

Second, Defendants argue that a lack of approval by the U.S. Food and Drug Administration ("FDA") for use of puberty-delaying hormones to treat gender dysphoria renders the treatment unsafe. (Dkt. No. 308 (Defs.' Mot.) at 21.) But as Dr. Adkins explained, clinicians "use data that wasn't presented to the FDA to—to look at this to see if it is safe." (Dkt. No. 289-24 (Adkins Dep. Tr.) at 276:19-21.) And the FDA has approved the same medications for use in adults to treat other conditions, and for fertility preservation. (*Id.* at 276:21-24.) As the Supreme Court has long recognized, off-label use of medication approved by the FDA for other uses is commonplace and "generally accepted." *Buckman Co. v. Plaintiffs' Legal Comm.*, 531 U.S. 341, 350–51 (2001).

Third, Defendants claim that the Endocrine Society's Clinical Practice Guideline suggests that puberty-delaying treatment is unsafe. (Dkt. No. 308 (Defs.' Mot.) at 21.) Defendants fundamentally misrepresent the document, which exists to *facilitate* access to this care, and "suggests" and "recommends" that the care be provided where medically indicated. (*See* Dkt. No. 317-3 (Clinical Practice Guideline) at 3871 § 2.0.) Defendants also imply that Dr. Adkins herself has reservations about the Clinical Practice Guideline, but Dr. Adkins' testimony is simply that all practitioners who use the guidelines "vary some from those guidelines when it's appropriate for the particular patient." (Dkt. No. 289-24 (Adkins Dep. Tr.) at 305:2-5.) When Defendants questioned Dr. Adkins at length during her deposition about statements they cherry-picked from the practice guideline, she stated that some of the language in the guideline could be more precise, but never expressed a disagreement with the treatment protocols themselves. (*See, e.g., id.* at 53:19-54:3.)

Fourth, Defendants claim that an article Dr. Adkins cites to shows that puberty-delaying medication is generally safe shows "just the opposite." (Dkt. No. 308 (Defs.' Mot.) at 21.) Not true. The article Dr. Adkins cites examined performance on a specific task designed to measure executive functioning and found there is "no significant effect" of puberty-delaying treatment on "performance scores (reaction times and accuracy) in either [transgender boys or girls] when compared to untreated adolescents with [gender dysphoria]." (Dkt. No. 307-2 (App. to Defs.' Mot. to Exclude Pl.'s Experts) at 719.) "In conclusion, our results suggest that there are *no detrimental effects* of [puberty-delaying treatment] on [executive functioning]." (*Id.* at 721 (emphasis added).) Defendants' misrepresentation of this paper is not a basis to exclude Dr. Adkins' opinions.

Finally, Dr. Adkins' opinion is relevant. Although they now attempt to disclaim the relevance of opinions about the treatment protocols for gender-affirming care, Defendants

dramatically increased the scope and burden of discovery in this case by disclosing experts who attacked the safety and efficacy of this care. (Dkt. No. 325-1 (Levine Rep.); Dkt. No. 321-1 (Cantor Rep.).) Defendants also questioned B.P.J.'s father on this topic. (*See, e.g.*, Dkt. No. 289-16 (Pepper Dep. Tr.) at 177:3-13 (questioning B.P.J.'s father about any risks involving in puberty-delaying treatment); *see also id.* at 177:15-16 ("So you would agree that there are long-term ramifications for puberty blockers . . . ?"); *id.* at 178:1-2 ("Have you discussed the long-term ramifications of taking puberty blockers with BPJ?"); *id.* at 177:4-20 (questioning Mr. Pepper about the risks of hormone therapy).) Dr. Adkins' response to the theory of the case that Defendants have pursued throughout discovery is relevant.

### **CONCLUSION**

For the reasons above, Defendants' motion to exclude Dr. Adkins' expert testimony should be denied.

Dated: May 26, 2022

Joshua Block\*
AMERICAN CIVIL LIBERTIES UNION
FOUNDATION
125 Broad St.
New York, NY 10004
Phone: (212) 549-2569
jblock@aclu.org

Avatara Smith-Carrington\* LAMBDA LEGAL 3500 Oak Lawn Avenue, Suite 500 Dallas, TX 75219 Phone: (214) 219-8585 asmithcarrington@lambdalegal.org

Carl Charles\*
Tara Borelli\*
LAMBDA LEGAL
158 West Ponce De Leon Ave., Ste. 105
Decatur, GA 30030
Phone: (404) 897-1880
ccharles@lambdalegal.org

Sruti Swaminathan\* LAMBDA LEGAL 120 Wall Street, 19th Floor New York, NY 10005 Phone: (212) 809-8585 sswaminathan@lambdalegal.org

Andrew Barr\*
COOLEY LLP
1144 15th St. Suite 2300
Denver, CO 80202-5686
Phone: (720) 566-4000
abarr@cooley.com

Respectfully submitted,

/s/ Loree Stark

Loree Stark (Bar No. 12936)
Nick Ward (Bar No. 13703)
AMERICAN CIVIL LIBERTIES UNION OF WEST VIRGINIA FOUNDATION
P.O. Box 3952
Charleston, WV 25339-3952
Phone: (914) 393-4614
lstark@acluwv.org

Kathleen Hartnett\*
Julie Veroff\*
Zoë Helstrom\*
COOLEY LLP
3 Embarcadero Center, 20<sup>th</sup> Floor
San Francisco, CA 94111
Phone: (415) 693-2000
khartnett@cooley.com

Katelyn Kang\*
Valeria M. Pelet del Toro\*
COOLEY LLP
55 Hudson Yards
New York, NY 10001-2157
Phone: (212) 479-6000
kkang@cooley.com

Elizabeth Reinhardt\*
COOLEY LLP
500 Boylston Street, 14th Floor
Boston, MA 02116-3736
Phone: (617) 937-2305
ereinhardt@cooley.com

\*Visiting Attorneys

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

### **CERTIFICATE OF SERVICE**

I, Loree Stark, do hereby certify that on this 26th day of May, 2022, I electronically filed a true and exact copy of *Plaintiff's Opposition to Defendant-Intervenor and Defendant State of West Virginia's Motion to Exclude the Expert Testimony of Dr. Deanna Adkins* with the Clerk of Court and all parties using the CM/ECF System.

/s/ Loree Stark
Loree Stark
West Virginia Bar No. 12936