

No. 18-13592

**UNITED STATES COURT OF APPEALS FOR THE
ELEVENTH CIRCUIT**

DREW ADAMS,

Plaintiff-Appellee,

v.

SCHOOL BOARD OF ST. JOHNS COUNTY, FLORIDA,

Defendant-Appellant.

Appeal from the United States District Court
for the Middle District of Florida

Honorable Timothy J. Corrigan, Case No. 3:17-cv-00739-TJC-JBT

**EN BANC BRIEF OF AMICI CURIAE MEDICAL AND
MENTAL HEALTH PROFESSIONALS SUPPORTING
DEFENDANT-APPELLANT SCHOOL BOARD OF ST. JOHNS
COUNTY, FLORIDA AND URGING REVERSAL**

John J. Bursch

Counsel of Record

Gary S. McCaleb

ALLIANCE DEFENDING FREEDOM

15100 N. 90th Street

Scottsdale, AZ 85260

(480) 444-0020

jbursch@adflegal.org

Counsel for Amici Curiae

CERTIFICATE OF INTERESTED PERSONS

Pursuant to 11th Cir. R. 26.1-1 through 26.1-3, the undersigned certifies that they believe that the Certificate of Interested Persons set forth in the Petition for Panel Rehearing and Rehearing En Banc of Appellant The School Board of St. Johns County, Florida (Aug. 4, 2021) is complete, subject to the following amendments:

Added:

Bursch, John J. – Counsel for Amici Curiae

Hansen, Jeffrey E. – Amicus Curiae

Deleted:

Campbell, James A. – Counsel for Amici Curiae.

The undersigned will enter this information in the Court's web-based CIP contemporaneously with filing this Certificate of Interested Persons. As the Amici Curiae appear as individuals, no corporate disclosure statement is required.

TABLE OF CONTENTS

CERTIFICATE OF INTERESTED PERSONS	C-1
TABLE OF CITATIONS	ii
STATEMENT OF THE ISSUE	1
INTEREST OF AMICI CURIAE.....	1
SUMMARY OF THE ARGUMENT	5
ARGUMENT	8
I. A person’s gender identity does not establish his or her sex.	8
II. There is no scientific consensus for treating gender dysphoric children in accordance with their gender identity rather than their sex.	15
III. There are strong trends toward psychotherapy as the first-line treatment for gender dysphoria in youth and away from using gender-affirming efforts, driven by the concern that gender affirmation approaches may harm gender-dysphoric children.....	20
CONCLUSION	35

TABLE OF CITATIONS

Other Authorities

Abigail Shrier, <i>Top Trans Doctors Blow the Whistle on ‘Sloppy’ Care</i> , Common Sense with Bari Weiss, https://bariweiss.substack.com/p/top-trans-doctors-blow-the-whistle	33, 34
Amanda C. Pustilnika & Leslie Meltzer Henry, <i>Adolescent Medical Decision Making and the Law of the Horse</i> , 15 J. Health Care L. & Pol’y (2012).....	34
American College of Pediatricians, <i>Gender Ideology Harms Children</i> , Sept. 2017.....	21
American Psychological Association, <i>Answers to Your Questions About Transgender People, Gender Identity and Gender Expression</i> (2011)	10, 12
American Psychological Association, <i>Diagnostic & Statistical Manual of Mental Disorders</i> (5th ed. 2013).....	9, 12
Anne Lawrence, <i>Clinical and Theoretical Parallels Between Desire for Limb Amputation and Gender Identity Disorder</i> , 35 Archives of Sexual Behav. (2006)	15
Cecilia Dhejne et al., <i>Long-Term Follow-up of Transsexual Persons Undergoing Sex Reassignment Surgery: Cohort Study in Sweden</i> , PLOS ONE (Feb. 22, 2011).....	29
David Batty, <i>Mistaken Identity</i> , The Guardian, July 30, 2004.....	30
Devita Singh, et al., <i>A Follow-Up Study of Boys With Gender Identity Disorder</i> , 12 Frontiers in Psychiatry, Mar. 29, 2021.....	17

Elisabeth DC Sievert, et al., *Not social transition status, but peer relations and family functioning predict psychological functioning in a German clinical sample of children with Gender Dysphoria*, 26 *Clinical Child Psych. and Psychiatry* (Oct. 2020) 24

Emiliano Santarnecchi et al., *Intrinsic Cerebral Connectivity Analysis in an Untreated Female-to-Male Transsexual Subject: A First Attempt Using Resting-State fMRI*, 96 *Neuroendocrinology* (2012) 13

Oxford Dictionary of Biology (Oxford Univ. Press 7th ed. 2015) 9

Francisco I. Reyes et al., *Studies on Human Sexual Development I. Fetal Gonadal and Adrenal Sex Steroids*, 37 *J. of Clinical Endo. & Metab.* (1973) 9

Giuseppina Rametti et al., *The Microstructure of White Matter in Male to Female Transsexuals Before Cross-sex Hormonal Treatment: A DTI Study*, 45 *J. of Psychiatric Rsch.* (2011) 13

Giuseppina Rametti et al., *White Matter Microstructure in Female to Male Transsexuals Before Cross-sex Hormonal Treatment: A Diffusion Tensor Imaging Study*, 45 *J. of Psychiatric Rsch.* (2011) 13, 22

Hans Berglund et al., *Male-to-Female Transsexuals Show Sex-Atypical Hypothalamus Activation When Smelling Odorous Steroids*, 18 *Cerebral Cortex* (2008)..... 13

Hayes, Inc., *Hormone Therapy for the Treatment of Gender Dysphoria*, Hayes Medical Technology Directory (2014) 29

Hayes, Inc., *Sex Reassignment Surgery for the Treatment of Gender Dysphoria*, Hayes Medical Technology Directory (2018) 29

Hayes, Inc., *The Hayes Difference*, <https://www.hayesinc.com/about-hayes/> 28

Hayes, Inc., *The Hayes Rating*, <https://www.hayesinc.com/about-hayes/>.....28

Henriette A. Delemarre-van de Waal & Peggy T. Cohen-Kettenis, *Clinical Management of Gender Identity Disorder in Adolescents: A Protocol on Psychological and Pediatric Endocrinology Aspects*, 155 Eur. J. of Endocrinology (2006) ..26, 27

J. Michael Bailey & Kiira Triea, *What Many Transsexual Activists Don't Want You to Know and Why You Should Know It Anyway*, 50 Perspectives in Biology & Med. (2007) 13

James Cantor, *American Academy of Pediatrics Policy and Trans-kids: Fact-checking*, Sexology Today, Oct. 17, 2018 32

Jiska Ristori & Thomas Steensma, *Gender dysphoria in childhood*, 28 Int'l Rev. of Psychiatry (2016)..... 17

Judith Butler, *Gender Trouble: Feminism and the Subversion of Identity* (1990) 11

Kelley D. Drummond et al., *A Follow-up Study of Girls with Gender Identity Disorder*, 44 Developmental Psych. (2008) 16

Kenneth J. Zucker et al., *A Developmental, Biopsychosocial Model for the Treatment of Children with Gender Identity Disorder*, 59 J. of Homosexuality (2012)..... 16

Kenneth J. Zucker, *Debate: Different strokes for different folks*, 25 Child and Adolescent Mental Health (2019)23

Kristina Olson, et al., *Mental Health of Transgender Children Who Are Supported in Their Identities*, 137 Pediatrics (2016).....24

Lauren Schmidt & Rachel Levine, *Psychological Outcomes and Reproductive Issues Among Gender Dysphoric Individuals*, 44 Endo. Metab. Clinics of N. Am. (2015).....28

Lawrence S. Mayer & Paul R. McHugh, *Sexuality and Gender: Findings from the Biological, Psychological, and Social Sciences*, New Atlantis, Fall 2016.....8

Lily Durwood, et al., *Mental Health and Self-worth in Socially Transitioned Transgender Youth*, 57 J. Am. Acad. of Child & Adolescent Psych. (2017)..... 24

Michael K. Laidlaw et al., *Letter to the Editor from Laidlaw et al: “Erythrocytosis in a Large Cohort of Transgender Men Using Testosterone: A Long-Term Follow-Up Study on Prevalence, Determinants, and Exposure Years,”* J. Clinical Endo. & Metab. (July 23, 2021)..... 27

Michael K. Laidlaw et al., *Letter to the Editor: Endocrine Treatment of Gender-Dysphoria/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline*, 104 J. Clinical Endo. & Metab. (2019)..... 14, 31

Michael K. Laidlaw, *The Gender Identity Phantom*, gdworkinggroup.org (Oct. 24, 2018)..... 27

Michael Lombardo, *Fetal Testosterone Influences Sexually Dimorphic Gray Matter in the Human Brain*, 32 J. of Neuroscience (2012) 10

Michelle A. Cretella, *Gender Dysphoria in Children and Suppression of Debate*, 21 J. of Am. Physicians & Surgeons (2016) passim

Nancy Segal, *Two Monozygotic Twin Pairs Discordant for Female-to-Male Transsexualism*, 35 Archives of Sexual Behav. (2006) 14

P.C. Sizonenko, *Human Sexual Differentiation*, Geneva Foundation for Medical Education and Research (2017) 10

Paul W. Hruz, Lawrence S. Mayer & Paul R. McHugh, *Growing Pains: Problems with Puberty Suppression in Treating Gender Dysphoria*, The New Atlantis, Spring 2017 19, 21

Peggy Cohen-Kettenis et al., <i>The Treatment of Adolescent Transsexuals: Changing Insights</i> , 5 J. of Sexual Med. (2008)	16
Riittakerttu Kaltiala-Heino et al., <i>Gender dysphoria in adolescence: current perspectives</i> , 9 Adolescent Health, Med. and Therapeutics (2018)	32
Society for Evidence Based Gender Medicine, <i>Sweden’s Karolinska Ends All Use of Puberty Blockers and Cross-Sex Hormones for Minors Outside of Clinical Studies</i> (May 5, 2021), https://segm.org/Sweden_ends_use_of_Dutch_protocol	32
Thomas D. Steensma et al., <i>Factors Associated with Desistence and Persistence of Childhood Gender Dysphoria: A Quantitative Follow-up Study</i> , 52 J. of the Am. Acad. of Child & Adolescent Psychiatry (2013)	18
Tomer Shechner, <i>Gender Identity Disorder: A Literature Review from a Developmental Perspective</i> , 47 Isr. J. of Psychiatry & Related Sci. (2010).....	11
<i>Transgender individuals’ access to public facilities</i> , AM. MED. ASS’N (2018), https://www.ama-assn.org/system/files/2019-03/transgender-public-facilities-issue-brief.pdf	7
Walter Bockting, <i>Ch. 24: Transgender Identity Development</i> , 1 Am. Psych. Ass’n Handbook of Sexuality and Psychology (D. Tolman & L. Diamond eds., 2014)	21, 34
Walter Schumm & Duane Crawford, <i>Is Research on Transgender Children What It Seems? Comments on Recent Research on Transgender Children with High Levels of Parental Support</i> , 87 Linacre Q. (2020)	24
Wang Ivy Wong, et al., <i>Childhood Social Gender Transition and Psychosocial Well-Being: A Comparison to Cisgender Gender-Variant Children</i> , 7 Clinical Prac. in Pediatric Psych. (2019)	25

World Professional Association for Transgender Health,
*Standards of Care for the Health of Transsexual,
Transgender, and Gender-Nonconforming People* (7th vers.
2012) 7

STATEMENT OF THE ISSUE

Whether the panel was correct in using “sex” synonymously with “gender identity” in applying the Equal Protection Clause of the 14th Amendment to the United States Constitution to this case.

INTEREST OF AMICI CURIAE¹

Amici Curiae are medical professionals and scientists, well-versed in the issues surrounding gender identity theory and having particular concern that embedding a distorted understanding of sex and gender in the law—as the panel decision did—may cut against the best interests of gender dysphoric youth.

Miriam Grossman holds an M.D. from New York University. She completed an internship in pediatrics, a residency in adult psychiatry, and a fellowship in child and adolescent psychiatry. Dr. Grossman worked at UCLA’s Student Psychological Services for 12 years. In that capacity she evaluated and treated students who were conflicted about their gender identity. Dr. Grossman later provided mental health

¹ Pursuant to Fed. R. App. P. 29(a) Amici Curiae state that this brief was not authored in whole or in part by counsel for any party, and no person or entity other than amici curiae and their counsel made a monetary contribution to the preparation or submission of this brief.

treatment for children and adolescents at the Vista Del Mar clinic in Los Angeles. In that position and in her private practice, she cared for patients who struggled with their identity as male or female. Dr.

Grossman has authored two books about the dangers of social ideology in education and health care and has lectured extensively on the topic.

Michael K. Laidlaw, M.D. is board-certified in Endocrinology, Diabetes, and Metabolism. Dr. Laidlaw earned his medical degree from the University of Southern California in 2001 and completed his residency in internal medicine and a fellowship in endocrinology, diabetes and metabolism at Los Angeles County University of Southern California Medical Center. He works in private practice and is a contributing member of gdworkinggroup.org, which is the international, professional work group on childhood and adolescent gender dysphoria.

Quentin L. Van Meter, M.D. is a board-certified Pediatric Endocrinologist in private practice in Atlanta, Georgia, with extensive training in issues of transgender health over the past 40 years. Dr. Van Meter is currently President of the American College of Pediatricians, fellow of the Endocrine Society, and member of the Pediatric Endocrine Society and of the American Association of Clinical Endocrinologists. He

served as Associate Clinical/Adjunct Professor of Pediatrics at Emory University School of Medicine and the Morehouse Medical College.

Andre Van Mol, M.D., is a board-certified Family Physician and Co-chair of the Committee on Adolescent Sexuality for the American College of Pediatricians. Before establishing his distinguished family practice in Northern California, he served as a U.S. Navy family practice doctor and carrier air wing flight surgeon.

Jeffery E. Hansen, Ph.D. is a Pediatric and Adolescent Psychologist in private practice and the founder and director of The Center for Connected Living, LLC in Olympia, WA. He holds a B.A. in psychology from the University of California at Berkeley, and an M.A. in psychology and a Ph.D. in clinical psychology from the University of Arkansas. Dr. Hansen completed a post-doctoral fellowship in pediatric psychology at Madigan Army Medical Center in Tacoma, Washington where he now serves as a senior Pediatric Psychologist and lead for clinical training and education in the Child and Family Behavioral Health Service. His clinical and research interests include gender dysphoria in children and adolescents.

Amici critically evaluate Plaintiff-Appellee Adams' assertion that "gender-affirming" policies and treatments for students who identify with a gender discordant from their sex are grounded in contemporary scientific consensus. By "gender," Amici mean an individual's subjective perception of being male, female, both, neither, or something else, which may be known to others only by the individual's statement. In contrast, "sex" refers to the objective physiological biology of being male or female as determined by chromosomes and normative human development into one of the two sexes.

As medical professionals, Amici are profoundly concerned that youth are not being well-served by gender affirmation policies or treatments unmoored from sound science. Indeed, mainstream medicine is retreating from using gender affirmation as a first-line treatment for gender dysphoria and returning to mental health treatment as the preferred approach.

SUMMARY OF THE ARGUMENT

The legal issues in this lawsuit center on the meaning of the medical term *sex*, referring to a person being male or female in the objective, biological sense. In contrast, “*gender*,” as used by Appellee Adams, is a recent cultural concept of a person’s inner experience or feeling of being male, female, or anywhere between those two “extremes” as they are called. Thus, *sex* is innate, objective, fixed, and binary while *gender* is a subjective, fluid continuum.

In this context, *gender identity* means a persistent identification with a set of norms promoted by society as the behaviors, attitudes, and preferences associated with either sex. This definition is grounded in culture and perceived identity, not biology. Deciding to identify and present as one sex, some variant of either sex, or something else is not caused by nor causes any biological changes with respect to sex in the affected individual. There is no credible scientific literature suggesting that a person’s professed gender identity affects the objective biological fact that one is male or female. Nor are there any objective indicia of a person’s gender. According to gender identity theory, a person’s gender is what he or she claims it to be.

Some humans experience disquiet with their sex and thus struggle to identify with it. They may feel a distressing and persisting incongruity between their sex and their sense of themselves as male, female, or something else. But no matter how disturbing one's gender dysphoria may be, nothing about it affects the objective reality that all persons remain male or female throughout life as they were at conception.

Adams tries to sidestep biological reality by asserting that there are *two* types of sex: one that is "assigned at birth," typically by observing a newborn's primary sex characteristics, and a novel "true sex" established by a person's subjective feeling of gender identity. 1st Am. Compl. 7, DE 60. Science rejects the notion that the sex binary may be defined by where one falls within a fluid continuum of gender feelings.

When gender dysphoria arises, gender identity advocates insist that the only ethical treatment is to affirm the perceived gender. In this case, that view is manifest by Adams' effort to force the school to participate in affirming Adams' gender identity by authorizing use of opposite-sex privacy facilities. This is one technique of socially affirming

perceived gender which, according to gender identity advocates, is often a medically indicated treatment regimen.²

Gender identity advocates insist that there is a scientific consensus that the *only* ethical approach to gender dysphoria is gender affirming treatment. World Pro. Ass'n for Transgender Health, *Standards of Care for the Health of Transsexual, Transgender, and Gender-Nonconforming People* 15-16 (7th vers. 2012). But that approach is unsupported by any sound scientific evidence showing that such policies help the youths they aim to serve. Conversely, there is strong scientific reason to believe that gender-affirmation efforts do no lasting good and may cause harm in many circumstances, leading to damaging outcomes for some youths. This is leading an increasing number of

² Gender identity advocates claim that for “many transgender individuals, social transition is a critically important part of medically necessary treatment” and this includes “using restrooms and other single-sex facilities consistent with that identity.” *Transgender individuals’ access to public facilities*, AM. MED. ASS’N (2018), <https://www.ama-assn.org/system/files/2019-03/transgender-public-facilities-issue-brief.pdf>. Adams’ expert, Dr. Diane Ehrensaft, states that “[s]upport for social transition—such as . . . providing access to restrooms that match who they are—can thus both treat and prevent negative psychological and psychophysiological symptoms of gender dysphoria.” Ehrensaft Rep. 10-11, DE 137-2. And Adams states that “[s]ocial transition requires that a transgender boy be recognized as a boy and treated the same as all other boys by family members, educators, and others in the community.” 1st Am. Compl. 8, DE 60.

nations and practitioners to reject gender affirmation as a first-line treatment in favor of conventional psychotherapy and watchful waiting approaches.

Amici conclude that obligating the School Board to adopt policies that amount to scientifically unwarranted, dangerous experiments upon its students is not in the students' interests.

ARGUMENT

I. A person's gender identity does not establish his or her sex.

Sex and *gender* are two distinct categories. While *sex* is binary and objective, determined by one's chromosomal constitution, and ultimately by clearly defined reproductive capacities, *gender* is a subjective sense of identity, a social role generated by cultural norms.³ The central underlying basis for sex is the distinction between the reproductive roles of males and females. Lawrence S. Mayer & Paul R. McHugh, *Sexuality and Gender: Findings from the Biological, Psychological, and Social Sciences*, New Atlantis, Fall 2016 at 89–90. In biology, an

³ Gender identity advocates may cloud the binary nature of sex by discussing intersex conditions, which are rare, objectively diagnosable disorders of sexual development. Intersex disorders are not at issue here, nor do they invalidate the objective taxonomy of humans being male or female.

organism is male or female if it is biologically and physiologically designed to perform one of the respective roles in sexual reproduction. *Id.*; *Female*, *Oxford Dictionary of Biology* (Oxford Univ. Press 7th ed. 2015); *Male*, *Id.* Sex is the “biological indication of male and female (understood in the context of reproductive capacity), such as sex chromosomes, gonads, sex hormones, and nonambiguous internal and external genitalia.” Am. Psych. Ass’n, *Diagnostic & Statistical Manual of Mental Disorders* (“DSM-V”) 829 (5th ed. 2013).

Sex is a physiological reality that permeates every cell of an organism containing a nucleus. Sex is thus innate and immutable; the genetic information directing development of male or female gonads and other primary sexual traits, which normally are encoded on chromosome pairs “XY” and “XX,” are present immediately at conception. As early as eight weeks’ gestation, endogenously produced sex hormones cause prenatal brain imprinting that ultimately influences postnatal behaviors. See Francisco I. Reyes et al., *Studies on Human Sexual Development I. Fetal Gonadal and Adrenal Sex Steroids*, 37 *J. of Clinical Endo. & Metab.* 74-78 (1973); Michael Lombardo, *Fetal Testosterone Influences Sexually Dimorphic Gray Matter in the Human*

Brain, 32 *J. of Neuroscience* 674-80 (2012); P.C. Sizonenko, *Human Sexual Differentiation*, Geneva Foundation for Medical Education and Research (2017).⁴ While the reproductive system serves as a virtually infallible identifier of one's sex, *every cell in the body containing a nucleus is marked with a sexual identity by its chromosomal constitution, XX or XY*. Accordingly, sex is not "assigned" at birth but being established at conception, "declares itself anatomically in utero and is acknowledged at birth." Michelle A. Cretella, *Gender Dysphoria in Children and Suppression of Debate*, 21 *J. of Am. Physicians & Surgeons* 51 (2016).

In contrast, gender has come to refer to "the socially constructed roles, behaviors, activities, and attributes that a given society considers appropriate for boys and men or girls and women," which "influence the ways people act, interact, and feel about themselves." Am. Psych. Ass'n, *Answers to Your Questions About Transgender People, Gender Identity and Gender Expression* 1 (2011) ("APA Answers").⁵ A child's *gender*

⁴ Available at <http://bit.ly/2CrBDWE>.

⁵ Available at <http://www.apa.org/topics/lgbt/transgender.pdf>.

reflects how much he or she conforms to or deviates from socially normative behavior for young males or females.

There is no objective, biological definition for what it means to behave like a boy or a girl. Moreover, what is considered gender-typical behavior for males and females changes over time within a given culture and varies between cultures. A girl who behaves like a “tomboy” may modify her behavior as she ages, and a boy who prefers quiet play imitating domestic life may develop an interest in adventure, sports, or hunting. Consequently, “gender is neither the causal result of sex nor as seemingly fixed as sex,” but rather “a free-floating artifice, with the consequence that *man* and *masculine* might just as easily signify a female body as a male one, and *woman* and *feminine* a male body as easily as a female one.” Judith Butler, *Gender Trouble: Feminism and the Subversion of Identity* 6-7 (1990).

A gender-dysphoric youth experiences a sense of incongruity between the gender expectations associated with her or his biological sex and her or his biological sex itself. Tomer Shechner, *Gender Identity Disorder: A Literature Review from a Developmental Perspective*, 47 *Isr. J. of Psychiatry & Related Sci.* 132-38 (2010). Gender-dysphoric boys

may subjectively feel as if they are girls, and gender-dysphoric girls may subjectively feel as if they are boys—according to their sense of what that feeling of being a member of the opposite sex must be like. DSM-V 452. As the DSM-V explains, “[t]ransgender refers to the broad spectrum of individuals who transiently or persistently identify with a gender different from their natal gender.” *Id.* at 451. So, too, dysphoria may manifest with males or females claiming an array of non-binary genders or no gender at all. *See* APA Answers, *supra*, at 2 (explaining that some “[g]enderqueer” people “identify their gender as falling outside the binary constructs of ‘male’ and ‘female,’” and indicating that other gender identities include “androgynous, multigendered, gender nonconforming, third gender, and two-spirit”).

Yet subjective feelings, strong as they may be, neither constitute nor change objective reality. Cretella, *supra*, at 51 (“[T]his ‘alternate perspective’ of an ‘innate gender fluidity’ arising from prenatally ‘feminized’ or ‘masculinized’ brains trapped in the wrong body is an ideological belief that has no basis in rigorous science.”); J. Michael Bailey & Kiira Triea, *What Many Transsexual Activists Don’t Want You to Know and Why You Should Know It Anyway*, 50 Perspectives in

Biology & Med. 521-34 (2007) (finding little scientific basis for the belief that male-to-female transsexuals are women trapped in men's bodies).

Studies of brain structure and function have not demonstrated any conclusive biological basis for transgendered identity. See Giuseppina Rametti et al., *White Matter Microstructure in Female to Male Transsexuals Before Cross-sex Hormonal Treatment: A Diffusion Tensor Imaging Study*, 45 J. of Psychiatric Rsch. 199-204 (2011) (offering no evidence to support the hypothesis that transgenderism is caused by differences in the structure of the brain); Giuseppina Rametti et al., *The Microstructure of White Matter in Male to Female Transsexuals Before Cross-sex Hormonal Treatment: A DTI Study*, 45 J. of Psychiatric Rsch. 949-54 (2011) (same); Emiliano Santarnecchi et al., *Intrinsic Cerebral Connectivity Analysis in an Untreated Female-to-Male Transsexual Subject: A First Attempt Using Resting-State fMRI*, 96 Neuroendocrinology 188-93 (2012) (in a study of brain activity, finding that a transsexual's brain profile was more closely related to his biological sex than his desired one); Hans Berglund et al., *Male-to-Female Transsexuals Show Sex-Atypical Hypothalamus Activation When Smelling Odorous Steroids*, 18 Cerebral Cortex 1900-08 (2008)

(brain-activity study found no support for the hypothesis that transgenderism is caused by some innate, biological condition of the brain).

Some researchers believe that transgenderism can be attributed to other biological causes, such as hormone exposure in utero. *See, e.g.,* Nancy Segal, *Two Monozygotic Twin Pairs Discordant for Female-to-Male Transsexualism*, 35 *Archives of Sexual Behav.* 347-58 (2006) (examining two sets of twins and hypothesizing, without evidence, that uneven prenatal androgen exposures led one twin in each set to be transsexual).

But no existing scientific evidence supports that conclusion. Medically speaking, “There are no laboratory, imaging, or other objective tests to diagnose a ‘true transgender’ child.” Michael K. Laidlaw et al., *Letter to the Editor: Endocrine Treatment of Gender-Dysphoria/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline*, 104 *J. Clinical Endo. & Metab.* (2019). A gender-dysphoric girl is not a boy trapped in a girl’s body, and a gender-dysphoric boy is not a girl trapped in a boy’s body. Students in St. Johns County schools retain their sex no matter their beliefs about their gender.

II. There is no scientific consensus for treating gender dysphoric children in accordance with their gender identity rather than their sex.

In standard medical and psychological practice, a youth who has a persistent, mistaken belief that is inconsistent with reality is not encouraged to try to align reality (such as their body) with his or her belief. *See Cretella, supra*, at 51 (listing similar conditions); Anne Lawrence, *Clinical and Theoretical Parallels Between Desire for Limb Amputation and Gender Identity Disorder*, 35 *Archives of Sexual Behav.* 263-78 (2006) (finding similarities between body-integrity-identity disorder and gender dysphoria). For instance, an anorexic child who experiences herself as obese is *not* encouraged to lose weight. He or she is not treated with liposuction, nor would a school cafeteria be obligated to supply special, weight-reduction meals to affirm the student's perception. Instead, the child is encouraged to align his or her belief with reality—i.e., to see himself or herself as he or she really is. Such an approach is both sound medical practice and common sense.

Until quite recently, these considerations predominated in how gender-dysphoric children were treated. Dr. Kenneth Zucker, long acknowledged as one of the foremost authorities on gender dysphoria in

children, spent years helping his patients align their subjective gender identity with their objective biological sex. He used psychosocial treatments (talk therapy, family counseling, and so forth) to treat gender dysphoria, with much success. See Cretella, *supra*, at 50 (describing Zucker's work); Kenneth J. Zucker et al., *A Developmental, Biopsychosocial Model for the Treatment of Children with Gender Identity Disorder*, 59 J. of Homosexuality 369-97 (2012). And a systematic follow-up study by Dr. Zucker and his colleagues on the children they treated found that gender dysphoria persisted in only three of the 25 female patients (12%). Kelley D. Drummond et al., *A Follow-up Study of Girls with Gender Identity Disorder*, 44 Developmental Psych. 34-45 (2008).

Dr. Zucker's eminently sound practice is anchored in the ineradicable reality that each child is immutably either male or female, and recognizes that gender dysphoria in children is almost always transient: the vast majority of gender-dysphoric youth naturally reconcile their gender identity with their biological sex. Peggy Cohen-Kettenis et al., *The Treatment of Adolescent Transsexuals: Changing Insights*, 5 J. of Sexual Med. 1892, 1893 (2008) (80 to 95% aligned); Devita Singh, et al., *A Follow-Up Study of Boys With Gender Identity*

Disorder, 12 *Frontiers in Psychiatry*, Mar. 29, 2021, at 1, <https://doi.org/10.3389/fpsy.2021.632784> (87.8% desistance in “largest sample to date of boys clinic-referred for gender dysphoria”); Jiska Ristori & Thomas Steensma, *Gender dysphoria in childhood*, 28 *Int'l Rev. of Psychiatry* 13-20 (2016) (61-98% of dysphoric children desisted by adulthood).

Traditional psychosocial treatments for gender dysphoria, such as those used by Dr. Zucker, work with and not against the facts of science and the predictable rhythms of children’s psycho-sexual development. They allow gender-dysphoric children to reconcile their subjective gender identity with their objective biological sex without irreversible effects or using harmful medical treatments.

Although some researchers report that they have identified certain factors associated with the persistence of gender dysphoria into adulthood, *no* evidence shows that *any* clinician can identify with any certainty the perhaps one-in-20 children for whom gender dysphoria will to some extent persist. *See, e.g.*, Thomas D. Steensma et al., *Factors Associated with Desistence and Persistence of Childhood Gender Dysphoria: A Quantitative Follow-up Study*, 52 *J. of the Am. Acad. of*

Child & Adolescent Psychiatry 582-90 (2013).

Because such a large majority of these children will naturally resolve their confusion, proper medical practice calls for a cautious “wait-and-see” approach for *all* gender-dysphoric children. This approach can be and often is rightly supplemented by family or individual psychotherapy to identify and treat the underlying problems such as autogynephilia, homophobia, autism spectrum disorder, sexual and developmental trauma, transgender obsessive-compulsive disorder, pornography addiction, and Rapid-Onset Gender Disorder, which may present as the belief that one belongs to the opposite sex.

Policies and protocols that treat children who experience gender-atypical thoughts or behavior as if they *are* the opposite sex interfere with the natural progress of psycho-sexual development. Such treatments encourage a gender-dysphoric youth to adhere to his or her false belief that he or she *is* the opposite sex. These treatments would presumably help the child to *maintain* his or her dysphoria but purportedly with less distress by, among other things, obligating others in the child’s life to go along with it.

The word “purportedly” is important because there are *no* long-term, longitudinal, controlled studies that demonstrate the safety or efficacy of gender-affirming policies and treatments for gender dysphoria in the long term. Cretella, *supra*, at 52. *Not one*.

This lack of studies is particularly concerning when treatment moves from social and verbal affirmation to intrusive medical interventions. See Paul W. Hruz, Lawrence S. Mayer & Paul R. McHugh, *Growing Pains: Problems with Puberty Suppression in Treating Gender Dysphoria*, The New Atlantis, Spring 2017 at 6 (discussing the plasticity of youth gender identity and postulating that “[i]f the increasing use of gender-affirming care does cause children to persist with their identification as the opposite sex, then many children who would otherwise not need ongoing medical treatment would be exposed to hormonal and surgical interventions”).

Thus, for schools to adopt gender-affirmation policies is a novel—and dangerous—experiment with no objective scientific basis to support such decisions. It amounts to bad medicine based on ideology rather than good medicine grounded in sound scientific evidence. And bad medicine harms children.

III. There are strong trends toward psychotherapy as the first-line treatment for gender dysphoria in youth and away from using gender-affirming efforts, driven by the concern that gender affirmation approaches may harm gender-dysphoric children.

When schools begin using their sex-separated facilities to affirm individual student psychological perceptions, some may say that it is a harmless expedient, a bit of play-acting to help children feel better about themselves during a difficult time. But it is not harmless, and the risk of harm increases when paired with cross-sex hormone treatment to suppress the normal development of some secondary sex characteristics and foster the development of opposite-sex characteristics—which is precisely Adams’ course of treatment. 1st Am. Compl. 9, DE 60. As the American College of Pediatricians recently declared:

There is an obvious self-fulfilling nature to encouraging young [gender-dysphoric] children to impersonate the opposite sex and then institute pubertal suppression. If a boy who questions whether or not he is a boy (who is meant to grow into a man) is treated as a girl, then has his natural pubertal progression to manhood suppressed, have we not set in motion an inevitable outcome? All of his same sex peers develop into young men, his opposite sex friends develop into young women, but he remains a pre-pubertal boy. He will be left psycho-socially isolated and alone.

Am. Coll. of Pediatricians, *Gender Ideology Harms Children*, Sept. 2017⁶; cf. Hruz, *Growing Pains*, *supra*, at 23, 25 (noting that when puberty-suppressing hormones are withdrawn in girls who have been treated for a condition that causes the early onset of puberty, menstruation began at “essentially the average age as the general population”—age 13—but beginning to suppress puberty at age 12 for gender-dysphoric children may create physical or psychological challenges to “simply resum[ing] normal pubertal development down the road”).

Indeed, the American Psychological Association Handbook on Sexuality and Psychology cautions *against* a rush to affirm that “runs the risk of neglecting individual problems the child might be experiencing and may involve an early gender role transition that might be challenging to reverse if cross-gender feelings do not persist.” Walter Bockting, *Ch. 24: Transgender Identity Development*, 1 Am. Psych. Ass’n Handbook of Sexuality and Psychology 744, 750 (D. Tolman & L. Diamond eds., 2014).

⁶ Available at https://acpeds.org/assets/imported/9.14.17-Gender-Ideology-Harms-Children_updated-MC.pdf.

It is well-recognized, too, that repetition has some effect on the structure and function of a person's brain. This phenomenon, known as *neuroplasticity*, means that a child who is encouraged to impersonate the opposite sex may be less likely to reverse course later in life.

One study showed that the white matter microstructure of specific brain areas in female-to-male transsexuals was more similar to that of heterosexual males than to that of heterosexual females. *See Rametti et al., White Matter Microstructure, supra*, at 199-204. Neuroplasticity explains the results of that study. For instance, if a boy repeatedly behaves as a girl, his brain is likely to develop so that eventual alignment with his biological sex is less likely to occur. Cretella, *supra*, at 53. Under this logic, then, some number of gender-dysphoric children who would naturally come to peacefully accept their sex are prevented from doing so when gender-affirming policies are imposed on them by adults who have bought into gender identity ideology. “[I]f one conceptualizes gender social transition as a type of psychosocial treatment, it should come as no surprise that the rate of gender dysphoria persistence will be much higher as these children are followed into their adolescence and young adulthood. If this is, in fact, the case, one might ask why

would one recommend a first-line treatment that is, in effect, iatrogenic.” Kenneth J. Zucker, *Debate: Different strokes for different folks*, 25 *Child and Adolescent Mental Health* 36 (2019) (citation omitted).

“Iatrogenic” means that a medical therapy actually causes an illness or adverse reaction, which means that if St. Johns schools are obligated to use single-sex communal privacy facilities as a gender affirmation tool, there is a palpable risk that this “therapy” will harm rather than help its students.

Very recent research calls into serious question the efficacy of social affirmation. Some researchers concluded that transgender children with strong parental support had, at worst, only slightly higher levels of anxiety with no differences in self-worth or depression compared to control groups. But “a reanalysis of their findings suggests otherwise, with slightly higher levels of depression but significantly and substantively meaningful differences in anxiety and self-worth, and with results favoring cisgender children, even when the transgender children had high levels of parental support for their gender transitioning.” Walter Schumm & Duane Crawford, *Is Research on*

Transgender Children What It Seems? Comments on Recent Research on Transgender Children with High Levels of Parental Support, 87 *Linacre Q.* 9, 21 (2020) (re-evaluating data collected in Kristina Olson, et al., *Mental Health of Transgender Children Who Are Supported in Their Identities*, 137 *Pediatrics* (2016) and Lily Durwood, et al., *Mental Health and Self-worth in Socially Transitioned Transgender Youth*, 57 *J. Am. Acad. of Child & Adolescent Psych.* 116–23 (2017)).

Likewise, in a study of middle- and upper-class German children under 12 years old who had been clinically referred for gender-dysphoria treatment, the children showed significantly increased psychological impairment (emotional and behavioral problems) relative to the German norm. Elisabeth DC Sievert, et al., *Not social transition status, but peer relations and family functioning predict psychological functioning in a German clinical sample of children with Gender Dysphoria*, 26 *Clinical Child Psych. and Psychiatry* 79-95 (Oct. 2020), <https://doi.org/10.1177%2F1359104520964530>. The study revealed that “the social transition status (living in the preferred gender role in different everyday life areas) was not significantly associated with

psychological functioning” while poorer general family functioning was linked to poorer psychological functioning of dysphoric children. *Id.*

Another recent study compared gender-variant children who were socially transitioned to gender variant-children who were not, relying on data obtained from several previous studies. Wang Ivy Wong, et al., *Childhood Social Gender Transition and Psychosocial Well-Being: A Comparison to Cisgender Gender-Variant Children*, 7 *Clinical Prac. in Pediatric Psych.* 241, 244 (2019). Children in this study ranged from 3 to 12.9 years old. *Id.* at 246. Again, elevated levels of “behavioral and emotional challenges relative to population norm scores” were found in both sample groups. *Id.* at 249. And again, social transition status failed to demonstrate significant relationships to the children’s mental health. Instead, the study concluded that “[i]rrespective of transition status, while parental support of gender variant expression is likely protective, addressing poor peer relations may be particularly important for reducing risk and enhancing well-being.” *Id.* at 251.

Importantly, policies that compel social affirmation of gender-dysphoric children do not exist in an ideological vacuum but are typically nested within a larger ideology about how to treat dysphoric

children. Although school-administered gender-affirming actions do not themselves require pharmaceutical or surgical interventions, puberty suppression, hormone therapy, and surgical interventions are almost invariably in the picture. The more that gender-identity ideology is promoted to children, the more that children can be expected to become unnecessarily confused about sexuality and to accept, and even to pursue, drastic medical courses that they would not have otherwise chosen. Too much early sexual information at a time when children are not developmentally ready to assimilate such information readily leads to the child becoming overwhelmed, confused, and less able to make wise, reasoned decisions about their perceptions of sex.

The gender-dysphoric youth surrounded by adults and peers who encourage his or her self-perception is likely to perceive his natural biological development as a source of distress. Hence, the use of puberty-suppressing hormones to suppress the natural development of unwanted sex characteristics. Henriette A. Delemarre-van de Waal & Peggy T. Cohen-Kettenis, *Clinical Management of Gender Identity Disorder in Adolescents: A Protocol on Psychological and Pediatric Endocrinology Aspects*, 155 Eur. J. of Endocrinology S131, S132 (2006).

This is almost inevitably followed by dosing with cross-sex hormones, inducing faux puberty that develops some superficial aspects of opposite-sex puberty. *Id.* at S133.

In this instance, this means dangerous, high doses of testosterone, causing hirsutism (hair growth of the face, chest, back and abdomen) and masculinizing the voice. This medication also atrophies and chemically degrades the sex organs leading to sexual dysfunction and eventual sterility. Michael K. Laidlaw, *The Gender Identity Phantom*, gdworkinggroup.org (Oct. 24, 2018). And “transgender males taking testosterone have shown up to a nearly 5-fold increased risk of myocardial infarction relative to females not receiving testosterone,” which may also lead to polycythemia (an excess of red blood cells), which is associated with “a significantly increased risk of cardiovascular disease, coronary heart disease, and death due to both” for younger females. Michael K. Laidlaw et al., *Letter to the Editor from Laidlaw et al: “Erythrocytosis in a Large Cohort of Transgender Men Using Testosterone: A Long-Term Follow-Up Study on Prevalence, Determinants, and Exposure Years,”* J. Clinical Endo. & Metab. (July 23, 2021).

Finally, girls may legally obtain a mastectomy at 16, which carries with it its own unique set of future problems, especially because it is irreversible. Lauren Schmidt & Rachel Levine, *Psychological Outcomes and Reproductive Issues Among Gender Dysphoric Individuals*, 44 *Endo. Metab. Clinics of N. Am.* 779 (2015). Should a change of mind later occur, no future procedure can replace functioning mammary glands, so lactation and breast feeding are rendered impossible. *Id.*

Remarkably, these dangerous, high-risk treatments yielding uncertain results have gained traction in the medical community despite decidedly poor scientific support as documented by one of the foremost objective literature reviews in the U.S., performed by the Hayes Corporation (“Hayes”). Hayes regularly reviews the research underlying medical treatments and is nationally authoritative, serving companies that cover 83% of insured Americans. Hayes, Inc., *The Hayes Difference*, <https://www.hayesinc.com/about-hayes/>. Using rigorous systematic evidence reviews, Hayes rates the quality of evidence from “A” (strongest) to “D2” (weakest). Hayes, Inc., *The Hayes Rating*, <https://www.hayesinc.com/about-hayes/>. When it reviewed cross-sex hormone administration for adolescent gender dysphoria in 2014, it

gave it the lowest “D2” rating: the research findings were “too sparse” and “too limited” to even *suggest* conclusions. Hayes, Inc., *Hormone Therapy for the Treatment of Gender Dysphoria*, Hayes Medical Technology Directory (2014). Unsurprisingly, the FDA does *not* approve using cross-sex hormones and blocking agents for gender-affirmation treatments.

Importantly, Hayes very recently examined the extant evidence for gender reassignment surgery, concluding that gender-reassignment surgery for minors also merited its lowest “D2” rating: “insufficient published evidence to assess the safety and/or impact on health outcomes or patient management.” Hayes, Inc., *Sex Reassignment Surgery for the Treatment of Gender Dysphoria*, Hayes Medical Technology Directory (2018). Evidence for adult surgeries fared little better, meriting only a “C,” showing “some positive evidence but serious limitations in the evidence of both effectiveness and safety.” *Id.*

Equally telling is Cecilia Dhejne et al., *Long-Term Follow-up of Transsexual Persons Undergoing Sex Reassignment Surgery: Cohort Study in Sweden*, PLOS ONE (Feb. 22, 2011), which supplied some of the most worrisome data, derived from a survey of the entire population

of Sweden. Despite the patients living within a sexually liberal, trans-affirming society, the study found that “[p]ersons with transsexualism, *after sex reassignment*, have considerably higher risks for mortality, suicidal behaviour, and psychiatric morbidity than the general population.” (emphasis added). This includes a startling 1,900% increase in death from suicide, a 490% increase in attempted suicide, and a 280% increase in psychiatric inpatient care compared to the general population of Sweden.

These treatments with exceedingly powerful hormones and permanently disfiguring and risky surgeries are squarely within this case, as Adams has been dosed with testosterone since 2016 and contemplated a bilateral mastectomy. 1st Am. Compl. 9, DE 60. And these treatments are done because of the child’s self-identification—meaning that doctors are in essence treating patients based on their self-diagnosis. So, it comes as little surprise that in too many cases the results are harmful. *See* David Batty, *Mistaken Identity*, *The Guardian*, July 30, 2004 (in an assessment of more than 100 follow-up studies on post-operative transsexuals, concluding that none of the studies proved that sex reassignment is beneficial for patients and that none of those

studies thoroughly investigated “[t]he potential complications of hormones and genital surgery, which include deep vein thrombosis and incontinence”).⁷ “Furthermore, limited long term outcome data fail to demonstrate long term success in suicide prevention.” Laidlaw, *Letter to the Editor: Endocrine Treatment of Gender-Dysphoria/Gender-Incongruent Persons*, *supra*.

Adams demands that the school grant access to male privacy facilities as a part of Adam’s medical treatment. Adams Decl. 7, DE 22-1. Yet such social affirmation treatment bends the normative course of sexual and psychological development in ways that science does not support, and a young student cannot accurately evaluate. Courts and policy are roving far afield from sound science on this issue and reversing the panel decision is a way to allow science and medicine time to progress and offer better solutions.

Indeed, contrary to Adams’ claims of a “scientific consensus” supporting gender affirmation as the ethical, first line treatment for gender dysphoria, practitioners across the globe are abandoning that

⁷ Available at <http://bit.ly/2EGBEYO>.

model in favor of conventional exploratory psychological approaches—so much so that “almost all clinics and professional organizations in the world use . . . the watchful waiting approach. . . .” James Cantor, *American Academy of Pediatrics Policy and Trans-kids: Fact-checking*, *Sexology Today*, Oct. 17, 2018.⁸ (emphasis omitted).

For example, a recent Finnish study cautions: “In such situations [of adolescent gender incongruence,] appropriate treatment for psychiatric comorbidity may be warranted before conclusions regarding gender identity can be drawn.” Riittakerttu Kaltiala-Heino et al., *Gender dysphoria in adolescence: current perspectives*, 9 *Adolescent Health, Med. and Therapeutics* 31, 38 (2018). Similarly, just months ago, Sweden’s largest adolescent gender clinic announced that it would no longer prescribe puberty blockers or cross-sex hormones to youth under 18 years, except as a clinical trial. Soc’y for Evidence Based Gender Med., *Sweden’s Karolinska Ends All Use of Puberty Blockers and Cross-Sex Hormones for Minors Outside of Clinical Studies* (May 5, 2021), https://segm.org/Sweden_ends_use_of_Dutch_protocol.

⁸ Available at <https://bit.ly/2rT7RDR>.

This shift away from dogmatic gender affirmation recently coalesced in the United States, when two prominent gender-affirming doctors blew the whistle on sloppy care. Dr. Marci Bowers is a “world-renowned vaginoplasty specialist who operated on reality-television star Jazz Jennings,” and Erica Anderson is a clinical psychologist at the University of California San Francisco’s Child and Adolescent Gender Clinic. Abigail Shrier, *Top Trans Doctors Blow the Whistle on ‘Sloppy’ Care*, Common Sense with Bari Weiss, <https://bariweiss.substack.com/p/top-trans-doctors-blow-the-whistle>. Both doctors are natal males who transitioned to female identities; both sit on the World Professional Association for Transgender Health board. *Id.*

Bowers and Anderson say that this “new [transition] orthodoxy has gone too far,” with Dr. Anderson even saying that “many transgender healthcare providers were treating kids recklessly.” *Id.* *Blow the Whistle* recapped the history of treating gender dysphoria, noting that until about 10 years ago, “psychologists treated it with ‘watchful waiting’ — that is, a method of psychotherapy that seeks to understand the source of a child’s gender dysphoria, lessen its intensity, and ultimately help a child grow more comfortable in her own body.” *Id.*

But watchful waiting was replaced with “affirmative care,” where doctors are urged to “corroborate their patients’ belief that they are trapped in the wrong body” while families are pressured to help the child transition to the claimed identity—with activists sometimes telling parents that the choice is transition or suicide. *Id.* Dr. Bowers’ retrospective on the young patients treated with gender-affirming surgeries comes close to damning: “But honestly, I can’t sit here and tell you that they have better—or even as good—results.” *Id.*

Even the American Psychological Association Handbook on Sexuality and Psychology cautions against a rush to affirm that “runs the risk of neglecting individual problems the child might be experiencing and may involve an early gender role transition that might be challenging to reverse if cross-gender feelings do not persist.” Bockting, *supra*, at 750. Arguably, children are not legally capable of assessing the severity of these risks or weighing the perceived benefits of gender affirmance (if any) against its many harms. Amanda C. Pustilnika & Leslie Meltzer Henry, *Adolescent Medical Decision Making and the Law of the Horse*, 15 J. Health Care L. & Pol’y 1 (2012). Neurologically, the adolescent brain is immature and lacks an adult

capacity for risk assessment before the early to mid-20s. Cretella, *supra*, at 52.

If there is any consensus on the first-line treatment for gender dysphoria youth, it is revealed by this recent research and the repudiation of gender affirmation treatments by our nation and others: Conventional psychotherapy and watchful waiting provide a safe, effective alternative to the dogmatic “affirm-or-else” approach.

CONCLUSION

Gender-affirmation treatments, including what is demanded in this case—using school privacy facilities as psychological, gender-affirmation treatments—assumes that treating gender-dysphoric children to affirm their gender identity is ultimately beneficial to them. Yet social affirmation is supported only by the weakest of evidence, and the “true sex” theory used to justify intermingling the sexes in school privacy facilities has no basis in objective reality.

In contrast, strong evidence shows that affirming the mistaken belief that a child is a prisoner of the wrong body is often ultimately harmful to that child. Amici agree with the American College of Pediatricians’ conclusion that conditioning children to believe that a

lifetime of impersonating someone of the opposite sex, achievable only through adopting sex stereotypes and chemical and surgical interventions, harms youths.

This Court should reverse the panel's decision that gave legal weight to unfounded gender theories and, in so doing, short-circuited the ongoing scientific research and critique which increasingly reveals the folly and danger of gender identity ideology, especially when applied to troubled and vulnerable adolescents.

Respectfully submitted this 26th day of October 2021.

/s/ John J. Bursch

John J. Bursch
Counsel of Record
Gary S. McCaleb
ALLIANCE DEFENDING
FREEDOM
15100 N. 90th Street
Scottsdale, AZ 85260
(480) 444-0020
jbursch@adflegal.org
Counsel for Amici Curiae

CERTIFICATE OF COMPLIANCE

Pursuant to Fed. R. App. P. 32(g), the undersigned certifies that this brief complies with the type-volume limitations of Fed. R. App. P. 29(a)(5). Exclusive of the sections exempted by Fed. R. App. P. 32(f), the brief contains 6,487 words, according to the word count feature of the software (Microsoft Word 365) used to prepare the brief. The brief has been prepared in proportionately spaced typeface using Century Schoolbook 14 point.

/s/ John J. Bursch
John J. Bursch
Counsel for Amici Curiae

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing was filed electronically with the Court's CM-ECF system on October 26, 2021. Service will be effectuated by the Court's electronic notification system upon all parties and counsel of record.

/s/ John J. Bursch
John J. Bursch
Counsel for Amici Curiae