No. 23-477

### IN THE Supreme Court of the United States

UNITED STATES OF AMERICA, Petitioner,

v.

JONATHAN THOMAS SKRMETTI, ATTORNEY GENERAL AND REPORTER FOR TENNESSEE, et al.,

and Respondents,

L.W., BY AND THROUGH HER PARENTS AND NEXT FRIENDS, SAMANTHA WILLIAMS AND BRIAN WILLIAMS, et al., Respondents in Support of Petitioner.

On Writ of Certiorari to the United States Court of Appeals for the Sixth Circuit

BRIEF OF AMICI CURIAE AMERICAN HISTORICAL ASSOCIATION, ORGANIZATION OF AMERICAN HISTORIANS, LGBTQ+ HISTORY ASSOCIATION, AND HISTORIAN SCHOLARS IN SUPPORT OF PETITIONER AND RESPONDENTS IN SUPPORT OF PETITIONER

> KARA N. INGELHART *Counsel of Record* NORTHWESTERN PRITZKER SCHOOL OF LAW, BLUHM LEGAL CLINIC, LGBTQI+ RIGHTS CLINIC 375 E. Chicago Ave. Chicago, IL 60611 (312) 503-3770 kara.ingelhart@law.nortwestern.edu

Counsel for Amici Curiae

September 3, 2024

WILSON-EPES PRINTING CO., INC. - (202) 789-0096 - WASHINGTON, D.C. 20002

### TABLE OF CONTENTS

Page
------

TABLE OF AUTHORITIES	iii
INTEREST OF AMICI CURIAE	1
SUMMARY OF ARGUMENT	2
ARGUMENT	3
I. THE DESIRE TO TRANSITION ONE'S SEX AND THE PRACTICE OF SEX TRANSITION ARE WELL-DOCU- MENTED THROUGHOUT HISTORY	5
II. THE COLLECTION OF SYMPTOMS TODAY USED TO DIAGNOSE GENDER DYSHORIA HAS BEEN UNDERSTOOD AS A DISTINCT EXPERIENCE BY MAINSTREAM MEDICAL PROVIDERS	
<ul> <li>FOR OVER ONE HUNDRED YEARS</li> <li>A. Sex-Transition-Related Medicine Benefitted From the Considerable Medical Advancements of the Nineteenth and Early Twentieth</li> </ul>	8
Centuries B. Twentieth Century Medicine Refined Diagnostic Nomenclature and Included Pediatric Treatment for	8
Gender Dysphoria	11

### TABLE OF CONTENTS—Continued

Page

III. SURGICAL INTERVENTION, CROSS- SEX HORMONE THERAPY, AND PUBERTY BLOCKERS ARE WELL- ESTABLISHED, MAINSTREAM FORMS OF HEALTH CARE AND ARE THUS NOT EXPERIMENTAL OR UNTESTED	16
A. Gender-Affirming Surgical Interven- tions Have Been Practiced for Centuries and Modern Surgeons Established the First Generation of the Current Forms of Surgery Specifically to Alleviate Symptoms of Gender Dysphoria Beginning Around 1900	17
B. Hormone Therapy Has Been Prescribed Since the 1930s	19
C. Puberty Blockers Were Developed in the 1980s	22
D. The Historical Record Offers Additional Testimony Through Lives of Trans- gender Adolescents Thriving After Receiving Gender-affirming Health Care	26
CONCLUSION	28
APPENDIX	

ii

#### iii TABLE OF AUTHORITIES

#### CASES City of Chicago v. Wilson, 75 Ill. 2d 525, 533-34 (Ill. 1978) ..... 10-11 City of Columbus v. Zanders, 25 Ohio Misc. 144 (Mun. 1970)..... 10 Doe v. McConn, 489 F. Supp. 76 (S.D. Tex. 1980)..... 11 Eknes-Tucker v. Governor of Alabama, 80 F.4th 1205 (11th Cir. 2023)..... L.W. v. Skrmetti, 83 F.4th 460 (6th Cir. 2023)..... Poe v. Drummond, 697 F. Supp. 3d 1238 (N.D. Okla. 2023).. State v. Loe, 629 S.W.3d 215 (Tex. 2024).....

#### **OTHER AUTHORITIES**

Alan D. Rogol et al., Celebration of a century of insulin therapy in children with type 1 diabetes, 108 ARCH. DISEASE	
CHILD. 3 (2022)	12
Alicia Bazzano et al., Off-Label Prescribing to Children in the United States Outpatient Setting, 9 ACAD. PEDIATRICS	
81 (2009)	25
ALISON LI, WONDROUS TRANSFORMATIONS: A MAVERICK PHYSICIAN, THE SCIENCE OF HORMONES, AND THE BIRTH OF THE	
TRANSGENDER REVOLUTION (2023)	13

3

3

3

3

Alvaro Morales, <i>The Long and Tortuous</i> <i>History of the Discovery of Testosterone</i> , 10 J. SEXUAL MED. 1178 (2013)	20
Andrew Schally, Aspects of Hypothalamic Regulation of the Pituitary Gland: Its implications for the control of reproduc- tive processes, 202 SCIENCE 18 (1978)	23
ANNA KŁOSOWSKA, Wojciech of Poznań and the Trans Archive, Poland, 1550-1561, in TRANS HISTORICAL (Greta LaFleur et al. eds., 2021)	5
Annelou de Vries et al., Young Adult Psychosocial Outcome After Puberty Suppression and Gender Reassignment, 134 PEDIATRICS 696 (2014)	24
Ashley Austin et al., Suicidality Among Transgender Youth: Elucidating the Role of Interpersonal Risk Factors, 37 J. INTERPERS. VIOLENCE, 1 (2020)	11
Atta Ullah et al., <i>Revolutionizing Cardiac</i> <i>Care: A Comprehensive Narrative Review</i> <i>of Cardiac Rehabilitation and the</i> <i>Evolution of Cardiovascular Medicine</i> , 15 CUREUS 1 (2023)	8
Carl Westphal, Contrary Sexual Feeling: Symptom of a Neuropathic (Psychopathic) Condition, in SODOMITES AND URNINGS (Michael Lombardi-Nash ed. and trans.,	
2006)	9

CELIA ROBERTS, MESSENGERS OF SEX: HORMONES, BIOMEDICINE AND FEMINISM (2007)	19
Chris Mowat, Don't be a Drag, Just be a Priest: The Clothing and Identity of the Galli of Cybele in the Roman Republic and Empire, 33 GENDER AND HIST. 296 (2021)	6
Cole Roblee et al., A History of Gender- Affirming Surgery at the University of Michigan: Lessons for Today, SEMINARS IN PLASTIC SURGERY (2024)	12
Dannie Dai et al., Prevalence of Gender Affirming Surgical Procedures Among Minors and Adults in the US, 7 JAMA NETWORK 1 (2024)	25
Donald Laub & Norman Fisk, A Rehabilitation Program for Gender Dysphoria Syndrome by Surgical Sex Change, 53 PLASTIC & RECONSTRUCTIVE SURGERY 388 (1974)	14
EMILY SKIDMORE, TRUE SEX (2017)	5
EUNUCHS IN ANTIQUITY AND BEYOND (Shaun Tougher ed., 2002)	6

v

Page(s)
---------

Gender incongruence and transgender health in the ICD, WORLD HEALTH ORGANIZATION, https://www.who.int/stan dards/classifications/frequently-asked-qu estions/gender-incongruence-and-transge nder-health-in-the-icd [https://perma.cc/G7 HA-VPPE]	16
Genny Beemyn, Transgender History in the United States, in TRANS BODIES, TRANS SELVES (Laura Erickson-Schroth ed., 2014)	5, 20
Harry Benjamin, Transsexualism and Transvestism as Psychosomatic and Somato-Psychic Syndromes, 8 AM. J. PSYCHOTHERAPY 219 (1954)	13
HBIGDA Board Meeting, Minutes from August 1999 (on file with the Kinsey Institute, Indiana University)	15
HBIGDA Symposium Program, Tenth Int'l Symposium on Diagnosis and treatment of transsexualism (June 9-12, 1987) (on file with The ArQuives, Toronto, Canada)	15
HBIGDA Symposium Program, Eleventh Int'l Symposium on Gender Dysphoria (Sept. 20-23, 1989) (on file with The ArQuives, Toronto, Canada)	15
IFI AMADIUME, MALE DAUGHTERS, FEMALE HUSBANDS: GENDER AND SEX IN AN AFRICAN (1987)	6

vi

J. Wesley Alexander, The Contributions of Infection Control to a Century of Surgical Progress, 201 ANNALS SURGERY 423 (1985)	8
JEN MANION, FEMALE HUSBANDS: A TRANS HISTORY (2020)	5, 17
JOANNE MEYEROWITZ, HOW SEX CHANGED: A HISTORY OF TRANSSEXUALITY IN THE UNITED STATES (2004) 13, 17, 18	12,
Johanna Olson-Kennedy et al., Impact of Early Medical Treatment for Transgender Youth: Protocol for the Longitudinal, Observational Trans Youth Care Study, 8 JMIR RSCH. PROTOCOLS 1 (2019)	22
JULES GILL-PETERSON, HISTORIES OF THE TRANSGENDER CHILD (2017)10, 11, 18, 20, 21, 23,	26, 27
Kadin Henningsen, Calling [herself] Eleanor: Gender Labor and Becoming a Woman in the Rykener Case, 55 MEDIEVAL FEMINIST FORUM 249 (2019)	5
Kathleen Neville et al., Policy Statement: Off-Label Use of Drugs in Children, 133 PEDIATRICS 563 (2014)	25
KATIE SUTTON, SEX BETWEEN BODY AND MIND: PSYCHOANALYSIS AND SEXOLOGY IN THE GERMAN-SPEAKING WORLD, 1890s-	
1930s (2019)	19

### viii

Page(s)
---------

Kristof Chwalisz, Clinical development of the GnRH agonist leuprolide acetate depot, 4 FERTILITY STERILITY REP. 33 (2023)	
LAURIE MARHOEFER, SEX AND THE WEIMAR REPUBLIC: GERMAN HOMOSEXUAL EMAN- CIPATION AND THE RISE OF THE NAZIS (2015)	10
Lawrence J. Bliquez, Surgical Treatment of the Breast from the Hippocratics to the Renaissance, 32 MEDICINA NEI SECOLI: J. HIST. MED. MED. HUMAN. 833 (2020)	6, 7
Lawrence Newman, Transsexualism in Adolescence: Problems in Evaluation and Treatment, 23 ARCHIVES GEN. PSYCHIA- TRY 112 (1970)	21
LEAH DEVUN, THE SHAPE OF SEX: NONBINARY GENDER FROM GENESIS TO THE RENAISSANCE (2021)	7
Leah Schaeffer & Conie Christine Wheeler, Harry Benjamin's First Ten Cases (1938- 1953): A Clinical Historical Note, 24 ARCHIVES SEXUAL BEHAV. 73 (1995)	20
Letter from Elmer Belt to Harry Benjamin (1958) (on file with the Kinsey Institute, Indiana University)	18
Letter from Leona M. Bayer to Alfred Kinsey (Apr. 8, 1954) (on file with the Kinsey Institute, Indiana University)	14

Page(s)
---------

Letter from Louise Lawrence to Leona M. Bayer (Feb. 18, 1956) (on file with the Kinsey Institute, Indiana University) 14
LUDWIG LEVY-LENZ, THE MEMOIRS OF A SEXOLOGIST (1954) 17, 18
MAGNUS HIRSCHFELD, TRANSVESTITES (Michael Lombardi-Nash trans., 1991) 10
Medical Association Statements in Support of Health Care for Transgender People and Youth, GLAAD (June 21, 2023), https://glaad.org/medical-association-sta tements-supporting-trans-youth-healthc are-and-against-discriminatory/
Memorandum from Alice Webb to HBIGDA Prospective Members (1977) (on file with the Kinsey Institute, Indiana University) 13
Nishant Patel et al., <i>The History of Heart</i> <i>Surgery at the Johns Hopkins Hospital</i> , 27 SEMINARS IN THORACIC CARDIOVASCU- LAR SURG. 341 (2015)
Norman Spack et al., Children and Adolescents With Gender Identity Disorder Referred to a Pediatric Medical Center, 129 PEDIATRICS 418 (2012)
PEGGY COHEN-KETTENIS & FRIEDEMANN PFAFFLIN, TRANSGENDERISM AND INTER- SEXUALITY IN CHILDHOOD AND ADOLESCENCE (2003)

Page(s)
---------

RAIMUND WOLFERT, CHARLOTTE CHARLAQUE: TRANSFRAU, LAIENSCHAUSPIELERIN, "KÖNIGIN DER BROOKLYN HEIGHTS PROMENADE" (2021)	18
Report from Wendy Kohler, Rep. of Selected Panels and Papers of the 123rd Ann. Meeting of the Am. Psychiatric Ass'n (1970) (on file with the Kinsey Institute, Indiana University)	14-15
Richard Mühsam, Chirurgische Eingriffe bei Anomalien des Sexuallebens, DIE THERAPIE DER GEGENWART (Oct. 1926)	17
Richard Paulson & Keith Gordon, Gonadotropin-releasing hormone: incred- ible 50 years, 4 FERTILITY STERILITY REP. 1 (2023)	23
Richard Santen & Evan Simpson, History of Estrogen: Its Purification, Structure, Synthesis, Biologic Actions, and Clinical Implications, 160 ENDOCRINOLOGY 605 (2019)	20
Riittakerttu Kaltiala-Heino et al., Gender dysphoria in adolescence: current perspectives, 9 ADOLESCENT HEALTH, MED. AND THERAPEUTICS 31 (2018)	16
Robert M. Goldwyn, <i>History of Attempts to</i> Form a Vagina, 59 PLASTIC &	
RECONSTRUCTIVE SURGERY 319 (1977)	7

Sahar Sadjadi, The Vulnerable Child Protection Act and Transgender Children's Health, 7 TRANSGENDER STUDIES QUARTERLY 510 (2020)	24
Saul Harrison & Albert Cain, The Childhood of a Transsexual, 19 ARCHIVES GEN. PSYCHIATRY 28 (1968)	21
Seamus McAleer, A history of cancer and its treatment, 91 ULSTER MED. J. 124 (2022)	9
Stephen B. Levine et al., 1998 Harry Benjamin Standards of Care, available at https://perma.cc/B85M-GEQS	15
SUSAN STRYKER, TRANSGENDER HISTORY (2008)14,	18, 22
Suyin Haynes, The World Health Organization Will Stop Classifying Transgender People as Having a 'Mental Disorder', TIME, (May 28, 2019, 12:25 PM), https://time.com/5596845/world-health- organization-transgender-identity/	16
Tom Boellstorff, The Gay Archipelago: Sexuality and Nation in Indonesia (2005)	6
Tony Peregrin, Children are at the Heart of New Surgical Practice Recommenda- tions, 109 AM. COLL. SURGEONS (2024)	
Valencia Higuera, <i>Diabetes: Past treatments,</i> <i>new discoveries</i> , MEDICALNEWSTODAY (May 4, 2023), https://www.medicalnews today.com/articles/317484#early-science	8

Page(s)

W.O. Thompson, Uses and Abuses of the	
Male Sex Hormone, 132 J. AM. MED.	
Ass'n 185 (1946)	20
Wylie Hembree et al., Endocrine Treatment	
of Transsexual Persons: An Endocrine	
Society Clinical Practice Guideline, 94 J.	
CLINICAL ENDOCRINAL & METABOLISM	
3132 (2009)	22

xii

#### **INTEREST OF AMICI CURIAE**

*Amici* are well-recognized scholarly historical organizations and academic scholars and historians whose many decades of study and research focus on the history of gender, sexuality, and medicine.<sup>1</sup> A summary of the qualifications and affiliations of the *amici* is provided in the appendix to this brief. The individual *amici* who hold academic appointments file this brief solely as individuals; their university institutional affiliations are given for identification purposes only.

Amici aim to provide the Court with accurate historical perspective as it considers the question of whether Tennessee Senate Bill 1, prohibiting all medical treatments intended to allow "a minor to identify with, or live as, a purported identity inconsistent with the minor's sex" or to treat "purported discomfort or distress from a discordance between the minor's sex and asserted identity," violates the equal protection clause of the 14th Amendment. Amici have examined the opinion of the Sixth Circuit Court of Appeals in this case as well as the opinions of other courts in related cases, in which several jurists contend that gender dysphoria and the primary medical interventions to treat its symptoms are both "novel" and "experimental." Based on their expertise and research, *amici* find this assertion to be unsupported by the historical evidence.

<sup>&</sup>lt;sup>1</sup> Pursuant to Rule 37.6, *amici* affirm that no counsel for a party authored this brief in whole or in part, and that no person other than *amici*, their members, or their counsel made a monetary contribution to fund its preparation or submission. This brief does not purport to convey the position of Northwestern University Pritzker School of Law.

#### SUMMARY OF ARGUMENT

This brief uses historical evidence from ancient history through the twenty-first century to show that the medical diagnosis—gender dysphoria—and primary medical interventions to treat it have been inappropriately characterized as novel or experimental. Gender dysphoria and these treatments have deep roots in the historic record.

I. The historical record shows that the fact of people transitioning their sex identity (sometimes referred to as gender identity) from the one they were designated at birth is not a spontaneous phenomenon of the twentieth or twenty-first century. Despite stigma and discrimination throughout the past towards people who defied such social norms, many texts document desire to transition sex identity to publicly live in accordance with a sex identity different from that designated at birth. And the historical record shows that precursor medical interventions to the refined gender-affirming procedures of today predate the twentieth century.

II. Then, during the explosion of modern medicine in the mid-nineteenth century, including the advent of psychiatry as a specialty, mainstream practice recognized the shared psychophysiological experience underlying sex identity transition as involving what is today termed gender dysphoria. The history of transition and medical interventions prior to this period laid the foundation for further development of medical interventions to alleviate distress from gender dysphoria. Diagnostic criteria and the medical interventions for gender dysphoria developed on a similar timeline to that of other diagnoses and fields of specialty, through applied medicine with adult and minor patients in the twentieth century. III. Improvements in gender-affirming medical interventions were made throughout the twentieth century. With most primary forms of surgical care today having been in practice for over a century, crosssex hormone therapy having been prescribed for nearly a century, and puberty blockers having been prescribed for more than four decades, by medical history standards, these gender-affirming medical interventions are well-established, mainstream forms of health care. And with gender clinics treating adolescent patients since the 1960s, the historical record shows transgender adolescents who thrived after receiving the primary interventions for their age group—puberty blockers and later cross-sex hormones (the treatments at issue in this case).

The historical evidence thus demonstrates that the well-established diagnosis of gender dysphoria and evidence-based health care interventions to alleviate it developed consistently with the rest of modern medicine. Removing legal barriers to these mainstream forms of health care will enable Americans to receive the best practice care as advised by their providers and to thrive with the benefit of a century of expertise.

#### ARGUMENT

Courts considering the lives and well-being of transgender adolescents diagnosed with gender dysphoria have reasoned that the diagnosis and gender-affirming health care interventions are "novel" or "experimental," especially with regard to adolescent patients. See, e.g., L.W. v. Skrmetti, 83 F.4th 460, 471-72, 477 (6th Cir. 2023); see also Eknes-Tucker v. Governor of Alabama, 80 F.4th 1205, 1220-21 (11th Cir. 2023); Poe v. Drummond, 697 F. Supp. 3d 1238, 1259-60 (N.D. Okla. 2023); State v. Loe, 629 S.W.3d 215, 223, 231-33 (Tex. 2024). Both premises are

contradicted by the historical record. The record of human history demonstrates that sex identity transition<sup>2</sup> dates back centuries, with modern medical science, as it developed in the nineteenth century, coming to recognize the experience as concerning a set of symptoms of clinically significant distress. For decades since, Americans experiencing clinically significant distress associated with the desire to live as and transition to a sex different from that which was designated at birth—i.e., gender dysphoria<sup>3</sup>—and

<sup>&</sup>lt;sup>2</sup> This brief employs the terminology of "sex transition," "transitioning sex identity," and other iterations of the same to refer to practices and experiences of people and groups—in the historic record predating the advent of modern medicine in the mid-nineteenth century—who were known to alter their lives and/or bodies to live in accordance with a sex or gender identity distinct from the one designated at birth. *Amici* use this term because it applies to records discussing the fact or facts of a transition process from a time period predating the modern medical conception of aggregated symptoms and diagnostic practices revolving around the clinically significant distress associated with gender dysphoria.

<sup>&</sup>lt;sup>3</sup> This brief employs the term "gender dysphoria" in discussion of the historical record from the mid-nineteenth century to the present when referring to clinically significant distress associated with the desire to live as and transition to a sex different from that which was designated at birth, rather than alternating between the successive diagnostic nomenclature in the field that pathologize gender identity-e.g., "transvestite," "transsexual," or "gender identity disorder." Amici use "gender dysphoria" because-regardless of the term in use throughout the course of medical history discussed herein-as individuals reported seeking relief of distress, and, increasingly as treatment improved, the field developed a core emphasis on the felt distress of the individual who seeks medical interventions for its alleviation, which is the primary element of a "gender dysphoria" diagnosis. See infra at 9-10, 12-15. Adolescents with gender dysphoria have been treated under all the diagnostic rubrics the field has employed over time.

their health care providers have understood the pattern of symptoms that are best treated and relieved through courses of gender-affirming medical interventions.

#### I. THE DESIRE TO TRANSITION ONE'S SEX AND THE PRACTICE OF SEX TRANSITION ARE WELL-DOCUMENTED THROUGH-OUT HISTORY.

Sex transition is not a creation of modern science. Throughout recorded human history, people have transitioned to a different sex than that which was recognized at birth. This has been documented in the U.S. and elsewhere, including for hundreds of years prior to the rise of modern medicine (i.e., modern hormone and surgical science), despite the record being limited due to a person's survival often depending on the concealment of one's transition. See, e.g., Kadin Henningsen, Calling [herself] Eleanor: Gender Labor and Becoming a Woman in the Rykener Case, 55 MEDIEVAL FEMINIST FORUM 249, 250 (2019) (examining a case of sex transition in 1394 London); ANNA KŁOSOWSKA, Wojciech of Poznań and the Trans Archive, Poland, 1550-1561, in TRANS HISTORICAL 114, 114-24 (Greta LaFleur et al. eds., 2021) (same in 1550s Poland); JEN MANION, FEMALE HUSBANDS: A TRANS HISTORY 29-32, 166-71 (2020) (same in 1700s England and 1840s U.S.); Genny Beemyn, Transgender History in the United States, in TRANS BODIES, TRANS SELVES 1, 7-9 (Laura Erickson-Schroth ed., 2014) (same in late 1800s U.S.); EMILY SKIDMORE, TRUE SEX 2 (2017) (describing American newspapers reporting at least sixty-five cases of transgender men living as men between the 1870s-1930s).

Some societies developed public, official social roles in which people were permitted to move away from birth-designated sex, either to the other category in a two-sex system or into a third category, limited to neither a male nor female identity. See, e.g., IFI AMADIUME, MALE DAUGHTERS, FEMALE HUSBANDS: GENDER AND SEX IN AN AFRICAN SOCIETY 15-17, 31-33 (1987) (describing select women who took on male identity roles in eastern Nigeria in the nineteenth century); TOM BOELLSTORFF, THE GAY ARCHIPELAGO: SEXUALITY AND NATION IN INDONESIA 38 (2005) (describing the bissu of the Bugis people of Sulawesi, Indonesia-who designated male at birth, take on an androgenous role with ritual power-about whom Westerns have been writing since 1545 and who are still active today); Chris Mowat, Don't be a Drag, Just be a Priest: The Clothing and Identity of the Galli of Cybele in the Roman Republic and Empire, 33 GENDER & HIST. 296 (2021) (describing religious functionaries in the late Republican and early Imperial Rome period who were designated male at birth, practiced surgical testicular removal, and wore women's clothing and makeup).

And medical interventions shaping the body to impact expression of a person's sex, including early versions of some procedures in use today, find their origins not in the twentieth century, but in the ancient world.<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> See, e.g., EUNUCHS IN ANTIQUITY AND BEYOND (Shaun Tougher ed., 2002) (discussing throughout orchiectomy and penectomy practices even predating the birth of Christ); see also Lawrence J. Bliquez, Surgical Treatment of the Breast from the Hippocratics to the Renaissance, 32 MEDICINA NEI SECOLI: J. HIST. MED. MED. HUMAN. 833, 840-41 (2020) (documenting ancient practices of breast tissue alteration or removal (mastectomy)).

Such practices continued to refine throughout the Middle Ages through the close of the nineteenth century.<sup>5</sup>

Thus, the historic record shows the desire to transition from one sex to another is part of the human condition with ancient interventions developing over centuries toward the acceleration of gender-affirming medicine interventions at the close of the nineteenth century (with surgeries) which grew in the early twentieth century as sex hormones were discovered.

<sup>&</sup>lt;sup>5</sup> See LEAH DEVUN, THE SHAPE OF SEX: NONBINARY GENDER FROM GENESIS TO THE RENAISSANCE 134-62 (2021) (discussing examples of procedures altering intersex people's bodies (people with variations in reproductive or sex anatomy) in thirteenth and fourteenth century surgical manuals); see also Bliquez, supra note 4, at 846 (documenting a seventh-century procedure reducing benign fatty breast development in a patient designated male at birth (known today as gynecomastia) to bring the patient's body more into accord with his sex); Robert M. Goldwyn, *History of Attempts to Form a Vagina*, 59 PLASTIC & RECONSTRUCTIVE SURGERY 319, 326-27 (1977) (documenting a successful vaginoplasty with skin grafting in 1898 America on an intersex patient).

#### II. THE COLLECTION OF SYMPTOMS TODAY USED TO DIAGNOSE GENDER DYSHORIA HAS BEEN UNDERSTOOD AS A DISTINCT EXPERIENCE BY MAINSTREAM MEDICAL PROVIDERS FOR OVER ONE HUNDRED YEARS.

#### A. Sex-Transition-Related Medicine Benefitted From the Considerable Medical Advancements of the Nineteenth and Early Twentieth Centuries.

Medicine benefited tremendously from the scientific developments accompanying the second industrial revolution of the nineteenth century, with advancements spanning the breadth of known medical specialties like surgery,<sup>6</sup> cardiology,<sup>7</sup> nephrology,<sup>8</sup> and

<sup>&</sup>lt;sup>6</sup> Prior to 1867, and the incorporation of antiseptic use, the mortality rate from post-operative infection alone was 50%. J. Wesley Alexander, *The Contributions of Infection Control to a Century of Surgical Progress*, 201 ANNALS SURGERY 423, 423 (1985).

<sup>&</sup>lt;sup>7</sup> "Before the 20th century, therapeutic interventions for heart disease were limited and often ineffective" with "[t]he first successful cardiac surgery ... performed ... in 1896," and surgery "remained experimental and high-risk for many years." Atta Ullah et al., *Revolutionizing Cardiac Care: A Comprehensive Narrative Review of Cardiac Rehabilitation and the Evolution of Cardiovascular Medicine*, 15 CUREUS 1, 4 (2023).

<sup>&</sup>lt;sup>8</sup> Although documented symptom patterns indicated a likely knowledge of Type 1 Diabetes in ancient Egypt, "[b]y the early 19th century, there were no statistics about how common diabetes was, there was no effective treatment, and people usually died within weeks to months of first showing symptoms," and the first manufactured insulin hormone treatment was not identified until the 1920s. Valencia Higuera, *Diabetes: Past treatments, new discoveries*, MEDICALNEWSTODAY (May 4, 2023), https://www.medicalnewstoday.com/articles/317484#early-science. And although those treatments inarguably were groundbreaking, they left patients with ailments later in life. Alan D. Rogol et al.,

oncology<sup>9</sup> and launching entirely new fields like psychiatry. Sex-transition-related medicine that came to be referred to as gender-affirming health care grew in sophistication and prominence with the rest of modern medicine. Advances in laboratory measurement of physical biomarkers like hormonal levels, antibiotics, surgical technique, and operating room sterilization protocol, alongside the development of distinct medical specialties, permitted the development of surgical and hormonal interventions for gender dysphoria.

In the mid-nineteenth century, psychiatry became a distinct branch of medicine, and psychiatrists quickly identified two seemingly related, but distinct patient groups based on symptom presentation—people who felt same-sex desire and people who sought to change their sex assignment. See Carl Westphal, Contrary Sexual Feeling: Symptom of a Neuropathic (Psychopathic) Condition, in SODOMITES AND URNINGS 87, 107, 117-18 (Michael Lombardi-Nash ed. and trans., 2006) (an 1869 essay describing "congenital contrary sexual feeling," as "the man feels like a woman, and a woman like a man," emphasizing that this was distinct from same-sex sexual desire). Soon after in 1889, Johns Hopkins, a research-intensive university hospital, was

Celebration of a century of insulin therapy in children with type 1 diabetes, 108 ARCH. DISEASE CHILD. 3, 6 (2022) (discussing long-term complications from early Type 1 Diabetes treatments in pediatric patients including blindness, gangrene, and amputations).

<sup>&</sup>lt;sup>9</sup> Prior to the mid-nineteenth century, there was a relative dearth in the options for treating cancer, which only incorporated non-surgical interventions as best practice in the 1990s after decades of iterative research. *See* Seamus McAleer, *A history of cancer and its treatment*, 91 ULSTER MED. J. 124, 125 (2022).

founded and was responsible, in its early decades, for major American medical advances in specialties like surgery and heart conditions. See Nishant Patel et al., *The History of Heart Surgery at the Johns Hopkins Hospital*, 27 SEMINARS THORACIC CARDIOVASCULAR SURGERY 341, 341-42 (2015). It became one of the nation's premier medical centers dedicated to sex-related care during the early twentieth century. See JULES GILL-PETERSON, HISTORIES OF THE TRANSGENDER CHILD 63 (2017).

In 1910, a medical doctor Magnus Hirschfeld advanced the first popular medical nomenclature to distinguish so-called "transvestism," from non-heterosexual sexual attraction. See MAGNUS HIRSCHFELD, TRANSVESTITES 124-25 (Michael Lombardi-Nash trans., 1991). Hirschfeld's Berlin-based research—which included American case studies—documented further the consistent desire to live as a sex not designated at birth on a permanent basis and acute distress when prevented from doing so. See id. at 83-95.

Hirschfeld's work was very influential, leading to the initiation of gender-affirming health care, interconnected with legal recognition for German transgender people—a pattern which arose separately in the U.S. In the early 1900s, Germany legally recognized transition through police permitting (following a medical doctor's certification) to present in public as a sex different from designation at birth, and, by the 1920s, through process for legal name changes.<sup>10</sup> See LAURIE

<sup>&</sup>lt;sup>10</sup> Similar legal reasoning ultimately led U.S courts to find "anti-crossdressing" laws criminalizing dressing in clothing stereotypically associated with women, if one was a man, or vice versa, illegal as applied to people with gender dysphoria, as supported by medical evidence. *See, e.g., City of Columbus v. Zanders*, 25 Ohio Misc. 144, 145, 150 (Mun. 1970); *City of Chicago* 

MARHOEFER, SEX AND THE WEIMAR REPUBLIC: GERMAN HOMOSEXUAL EMANCIPATION AND THE RISE OF THE NAZIS 61-62 (2015). And in 1915 in the U.S., Johns Hopkins opened the Brady Urological Institute, the country's first urologic medical clinic (providing the kinds of hormone and surgical therapies at issue in this case); its practice differentiated between same-sex attraction, intersex conditions, and requests for surgically changing sex. See GILL-PETERSON at 69-70, 129-30.

#### B. Twentieth Century Medicine Refined Diagnostic Nomenclature and Included Pediatric Treatment for Gender Dysphoria.

Although gender-affirming care for adolescents is often depicted incorrectly as recently developed in a field previously restricted to adults, adolescents with parental consent have had well-documented access to medical interventions to alleviate distress from gender dysphoria in the U.S. for the past sixty years. Since the mid-twentieth century, adolescents have been pivotal to the development of gender-affirming care and the diagnostic tools for gender dysphoria, rather than its newest constituency.<sup>11</sup>

v. Wilson, 75 Ill. 2d 525, 533-34 (Ill. 1978); Doe v. McConn, 489 F. Supp. 76, 81 (S.D. Tex. 1980).

<sup>&</sup>lt;sup>11</sup> Where medical diagnoses in pediatric patients can present life-threatening consequences without intervention, like gender dysphoria, see Ashley Austin et al., Suicidality Among Transgender Youth: Elucidating the Role of Interpersonal Risk Factors, 37 J. INTERPERS. VIOLENCE NP2696, NP2696 (2020) ("[56%] of [transgender] youth reported a previous suicide attempt and 86% reported suicidality"), medical practice "recommendations' rather than the more strict 'guidelines' that are required for standards" have often been developed based on available practical data from real-world care, not just on empirical studies, Tony Peregrin,

The first U.S. clinic devoted specifically to providing gender-affirming treatment for people diagnosed with gender dysphoria officially opened at the Johns Hopkins Hospital in 1966. JOANNE MEYEROWITZ, HOW SEX CHANGED: A HISTORY OF TRANSSEXUALITY IN THE UNITED STATES 219-20 (2004). From the 1960s to the 1980s, medical care for transgender adolescents was provided at clinics and physicians' practices that also saw adults, allowing specialists to work with patients of all ages. A generation of university "gender clinics," beginning with the University of California, Los Angeles (1962), Johns Hopkins University (1966), the University of Minnesota (1966), the University of Washington (1968), Stanford University (1968), and the University of Michigan (1968) developed a comprehensive assessment and medical intervention program anchored in a multidisciplinary outpatient setting. MEYEROWITZ at 213, 218, 222-23; Cole Roblee et al., A History of Gender-Affirming Surgery at the University of Michigan: Lessons for Today, SEMINARS PLASTIC SURGERY 1, 2 (2024).

From the 1950s through the 1970s, employing longitudinal and outcome data, clinicians collaborated to standardize prior medical practice into uniform principles and set research priorities for treating gender dysphoria. At a 1953 medical symposium in

Children are at the Heart of New Surgical Practice Recommendations, 109 AM. COLL. SURGEONS (2024) (discussing collaborative development of updated heart surgery recommendations for pediatric patients for the first time in 20 years). See e.g., Rogol et al., supra note 8, at 6 (discussing that until the introduction of subcutaneous insulin hormone for Type 1 Diabetes patients (who were primarily children and adolescents) in the early 1990s, patients and their parents had worried for 70 years about the tradeoff between life-prolonging medicine and its associated risks of blindness, infection, and amputation).

New York City, Dr. Harry Benjamin, who received his medical degree in Germany, updated Hirschfeld's diagnosis of "transvestism" based on clinical experience treating patients experiencing gender dysphoria since 1938, referring to "the intense and often obsessive desire to change the entire sexual status including the anatomical structure." Harry Benjamin, *Transsexualism and Transvestism as Psychosomatic and Somato-Psychic Syndromes*, 8 AM. J. PSYCHOTHERAPY 219, 219-20 (1954); see also ALISON LI, WONDROUS TRANSFORMATIONS: A MAVERICK PHYSICIAN, THE SCIENCE OF HORMONES, AND THE BIRTH OF THE TRANSGENDER REVOLUTION 160-62 (2023). The diagnosis emphasized the distress felt about body parts, which were "sources of disgust" to be addressed by hormones and surgery. Benjamin at 220.

In 1964, The Harry Benjamin Foundation was established permitting clinicians to work across endocrine, surgical, and psychiatric specialties to provide the highest quality treatment possible to their patients. LI at 170. Collaborative efforts quickly grew international, leading to the First International Symposium on Gender Identity in London in 1969. MEYEROWITZ at 224. Subsequent symposia spurred the formation of the Harry Benjamin International Gender Dysphoria Association (HBIGDA) as the field's primary professional and research organization, the organization today named the World Professional Association for Transgender Health (WPATH). Id. at 255. At its 1977 symposium in Norfolk, Virginia, the Association's members voted to codify the field's medical practice as the HBIGDA's "Standards of Care," the first edition of which was released in 1979. Memorandum from Alice Webb to HBIGDA Prospective Members (1977) (on file with the Kinsey Institute, Indiana University). Reflecting both the standing of the field in the wider medical profession and its well-developed standards, in 1980, diagnostic entries for working specifically with transgender patients were added to the American Psychiatric Association's (APA) *Diagnostic and Statistical Manual–III* ("DSM"), including 302.50, "Transsexualism," and a diagnosis specifically for adolescents, 302.60, "Gender Identity Disorder of Childhood." SUSAN STRYKER, TRANSGENDER HISTORY 111-12 (2008).

In a 1973 symposium, the head psychiatrist of Stanford University's gender clinic, Dr. Norman Fisk, proposed a diagnostic update to reflect the substantial data sets generated by clinics like his own. Fisk's "gender dysphoria syndrome," which was widely adopted, maintained the core of prior diagnoses: "Dysphoria carries an appropriate dictionary definition—'an emotional state characterized by anxiety, depression, and restlessness," in the case of transgender people, regarding "the sex of their genital anatomy, the chromosomes, and the endocrine secretions." Donald Laub & Norman Fisk, A Rehabilitation Program for Gender Dysphoria Syndrome by Surgical Sex Change, 53 PLASTIC & RECONSTRUCTIVE SURGERY 388, 390-91 (1974) (internal citations omitted).

Research on gender-affirming medicine for adolescents grew alongside these developments, permitting the natural emergence of a formal pediatric specialty. In 1954, Dr. Leona M. Bayer, a leading figure in the field of pediatrics, consulted with colleagues about the specificity of childhood gender dysphoria while treating an eight-year-old patient. Letter from Leona M. Bayer to Alfred Kinsey (Apr. 8, 1954) (on file with the Kinsey Institute, Indiana University); Letter from Louise Lawrence to Leona M. Bayer (Feb. 18, 1956) (on file with the Kinsey Institute, Indiana University). At the annual meeting of the APA in 1970, clinicians presented research on the childhood onset of gender

dysphoria. Report from Wendy Kohler, Rep. of Selected Panels and Papers of the 123rd Ann. Meeting of the Am. Psychiatric Ass'n (1970) (on file with the Kinsey Institute, Indiana University). The 1987 HBIGDA Symposium included a session on the medical care of adolescents. Program, Tenth Int'l Symposium on Diagnosis and treatment of transsexualism (June 9-12, 1987) (on file with The ArQuives, Toronto, Canada). The subsequent symposium in 1989 featured "Developmental and Childhood Issues in Gender Identity" as one of the conference's nine core focal areas. Program, *Eleventh Int'l Symposium on Gender Dysphoria* (Sept. 20-23, 1989) (on file with The ArQuives, Toronto, Canada). The Association's Standards of Care were revised to enumerate the assessment and treatment of adolescents in a separate section of the 5th Edition published in 1998. Stephen B. Levine et al., 1998 Harry Benjamin Standards of Care, available at https://perma.cc/B85M-GEQS. The formal codification of care for children and adolescents reflected not just its prominence but its longevity and, to ensure continued research and improvements in care, the HBIGDA also created a standing committee dedicated to children and adolescents in 1999. Minutes from August 1999 HBIGDA Board Meeting, 4 (on file with the Kinsey Institute, Indiana University).

As scientific and medical research continued apace, and social attitudes towards transgender people improved markedly, diagnostic concepts and nomenclature likewise evolved. When the first modern medical diagnoses were developed, a wide range of normal human behavior and experience was classified by psychiatry, medicine, and the law as mental illness, including homosexuality. What has principally changed in nomenclature over time is the stigmatizing and unscientific labeling of transgender people as mentally ill. The DSM-V(2013) updated its diagnoses to "gender" dysphoria" to harmonize with the prevailing norm in the field. Riittakerttu Kaltiala-Heino et al., Gender dysphoria in adolescence: current perspectives, 9 Adolescent Health, Med. & Therapeutics 31, 31-32 (2018). In 2019, the World Health Organization updated the 11th Edition of the International Classification of Diseases to the synonymous "gender incongruence." Suyin Haynes, The World Health Organization Will Stop Classifying Transgender People as Having a 'Mental Disorder', TIME, (May 28, 2019, 12:25 PM), https://time.com/5596845/world-healthorganization-transgender-identity/; see also Gender incongruence and transgender health in the ICD, WORLD HEALTH ORGANIZATION, https://www.who.int/ standards/classifications/frequently-asked-questions/ gender-incongruence-and-transgender-health-in-the-icd [https://perma.cc/G7HA-VPPE]. Throughout the decades. adolescents with gender dysphoria have been treated under all the diagnostic rubrics the field has employed.

#### III. SURGICAL INTERVENTION, CROSS-SEX HORMONE THERAPY, AND PUBERTY BLOCKERS ARE WELL-ESTABLISHED, MAINSTREAM FORMS OF HEALTH CARE AND ARE THUS NOT EXPERIMENTAL OR UNTESTED.

Surgical interventions, cross-sex hormone therapy, and puberty blockers to alleviate symptoms of gender dysphoria are well-established, mainstream forms of health care after nearly a century of use. Although surgery was the first type of intervention developed, it has been reserved for appropriate candidates in late adolescence or adulthood, which unfortunately left many adolescents without treatment for gender dysphoria. The development of the treatments at issue here—hormones and puberty blockers—in the twentieth century greatly expanded options for safe, effective treatment for adolescents and adults. Improvements in all three medical interventions have refined the quality of gender-affirming care and specific histories of each follow.

> A. Gender-Affirming Surgical Interventions Have Been Practiced for Centuries and Modern Surgeons Established the First Generation of the Current Forms of Surgery Specifically to Alleviate Symptoms of Gender Dysphoria Beginning Around 1900.

Prior to the discovery of hormones, surgery was the primary medical intervention for sex-identity transition. Early modern medicine era reports of patients receiving surgical intervention to treat the recognized symptoms of gender dysphoria are from the first decade of the twentieth century. *See, e.g.*, MEYEROWITZ at 17 (discussing an American surgery in 1902); Richard Mühsam, *Chirurgische Eingriffe bei Anomalien des Sexuallebens*, DIE THERAPIE DER GEGENWART, 451-55 (Oct. 1926) (reporting a German surgeon's operations on men and women, the earliest in 1912); MANION at 268 (on Alan Hart's surgery in 1917 in the U.S.).

At this time, the First World War triggered a boom in plastic surgery, as surgeons rushed to treat huge numbers of wounded soldiers. Immediately after the war, surgeons found transgender people to be an enthusiastic patient population, at a time when any surgery was dangerous. *See, e.g.*, LUDWIG LEVY-LENZ, THE MEMOIRS OF A SEXOLOGIST 463 (1954). In 1919, Hirschfeld founded the world's first institute for the scientific study of sex in Berlin, and it became an international center for gender-affirming medicine. STRYKER at 39-40. Among the best-remembered patients today is the American actress Charlotte Charlaque. See RAIMUND WOLFERT, CHARLOTTE CHARLAQUE: TRANSFRAU, LAIENSCHAUSPIELERIN, "KÖNIGIN DER BROOKLYN HEIGHTS PROMENADE" (2021). Trans women and men underwent gender-affirming surgeries either at the institute's clinic or at hospitals in Berlin. See, e.g., STRYKER at 39-40; LEVY-LENZ at 463. By the 1950s, surgeries had expanded along with public awareness, culminating in extensive media coverage of the American Christine Jorgensen's treatment, leading to a marked increase in requests for genderaffirming surgeries. See MEYEROWITZ at 92-94.

Unsurprisingly, since surgical intervention in adolescents bears the added nuance of the individual's physical maturation, the development of gender-affirming surgeries began with adult patients. Although parental support was rarer during this period than today, teenagers were among those to approach medical professionals, but such care was generally delayed until age of legal majority. See Letter from Elmer Belt to Harry Benjamin (1958) (on file with the Kinsey Institute, Indiana University) (describing Dr. Elmer Belt, a Los Angeles plastic surgeon providing surgeries for transgender adults, consulting with an eighteen-year-old transgender girl who "earnestly desire[d] an operative procedure," but was instructed to wait until age twenty-one). As the university gender clinic system grew in the 1960s, adolescents with parental support and consent were approved for and received gender-affirming surgeries through several programs and affiliated surgeons, typically several years after initiating cross-gender hormones, and at the developmentally appropriate moment in late adolescence. GILL-PETERSON at 176-79, 192-93

(discussing individual care plans in the U.S. in the 1970s-1980s).

The formal development of a pediatric clinic delivery model from the 1980s to early 2000s added to the decades of expertise in providing gender-affirming health care. As today, surgical interventions were the least common form of gender-affirming care for adolescents because surgeries are physically and developmentally irrelevant until very late in adolescence in most cases. Yet, the long history of expertise in surgical interventions has resulted in their endorsement by major medical associations in the U.S. today where individually assessed as necessary. Medical Association Statements in Support of Health Care for Transgender People and Youth, GLAAD (June 21, 2023), https://glaad.org/medicalassociation-statements-supporting-trans-youthhealthcare-and-against-discriminatory/ [hereinafter "GLAAD 2023 Press Release"].

# B. Hormone Therapy Has Been Prescribed Since the 1930s.

Research on what were initially termed "internal secretions" that governed sex and gender characteristics began in the late nineteenth century. CELIA ROBERTS, MESSENGERS OF SEX: HORMONES, BIOMEDICINE AND FEMINISM 33-37 (2007). The Austrian scientist Eugen Steinach took a leading role in the 1910s-1920s, delivering proof of the existence and functions of the sex hormones. KATIE SUTTON, SEX BETWEEN BODY AND MIND: PSYCHOANALYSIS AND SEXOLOGY IN THE GERMAN-SPEAKING WORLD, 1890s-1930s 122, 127-28 (2019). Steinach's findings were immediately understood to have medical applications for sex, sexuality, and gender. *Id.* at 122-23. Once isolated and synthesized in the 1920s and 1930s, sex hormones were used to treat a variety of issues, including gender and sex-related problems in cisgender people. W.O. Thompson, Uses and Abuses of the Male Sex Hormone, 132 J. AM. MED. ASS'N 185, 185-88 (1946); Alvaro Morales, The Long and Tortuous History of the Discovery of Testosterone, 10 J. SEXUAL MED. 1178, 1180 (2013); Richard Santen & Evan Simpson, History of Estrogen: Its Purification, Structure, Synthesis, Biologic Actions, and Clinical Implications, 160 ENDOCRINOLOGY 605, 608 (2019). Estrogen was first isolated in the late 1920s. Santen & Simpson at 608. Testosterone was first synthesized in 1935. Morales at 1180.

Physicians and endocrinologists working in private practice prescribed cross-gender hormones to transgender adults as early as the 1930s in the UK and from the 1940s in the U.S. Beemyn at 11; Leah Schaeffer & Conie Christine Wheeler, *Harry Benjamin's First Ten Cases (1938-1953): A Clinical Historical Note*, 24 ARCHIVES SEXUAL BEHAV. 73, 76 (1995). It is possible that family physicians and specialists in private practice treating transgender adolescents with their parents' consent prescribed cross-gender hormones during this period, as they prescribed the same hormone medications to treat other medical conditions. *See* GILL-PETERSON at 104-09. However, the diffuse nature of those medical records makes the evidence difficult to ascertain.

The university gender clinic system's large-scale record-keeping shows that transgender adolescents were prescribed cross-gender hormones to alleviate gender dysphoria in the 1960s. *Id.* at 131. Hormones were not initiated unless puberty had already begun. *Id.* at 149. At UCLA, for example, medical intervention consisted of psychotherapy at younger ages and when adolescents were first establishing care. Id. at 148. Adolescents with established diagnoses and assessments first transitioned socially, as "Georgina," a patient of psychiatrist Dr. Lawrence Newman, did in the mid-1960s at age fifteen. Id. at 148-49. Working with Georgina's parents, Newman arranged for her to transfer to a new school as a girl while legally changing her name and beginning cross-gender hormone therapy. *Id.* She went on to obtain gender-affirming surgery as an adult. Id. UCLA clinicians published research on the treatment of gender dysphoria in adolescents based on their clinical work during this period. Lawrence Newman, Transsexualism in Adolescence: Problems in Evaluation and Treatment, 23 ARCHIVES GEN. PSYCHIATRY 112 (1970). So too did clinicians at the University of Michigan. Saul Harrison & Albert Cain, The Childhood of a Transsexual, 19 ARCHIVES GEN. PSYCHIATRY 28 (1968).

Transgender adolescents and their parents also worked with clinicians in private practice who prescribed cross-gender hormones consistent with the field's standards. In 1970, "Vicki," a sixteen-year-old transgender girl from Columbus, Ohio, began estrogen under the supervision of a physician, and with her father's consent, following diagnostic assessment by psychiatrists. GILL-PETERSON at 158. In New York, psychiatrist Dr. Jeanne Hoff worked with a stream of transgender adolescents and their parents in the 1970s and 1980s, some who had already begun crossgender hormones with prior clinicians and others at the beginning of the assessment process. *Id.* at 192-93. Several public health clinics also provided crossgender hormones by affiliating with experts in the field. The first was San Francisco's innovative Center for Special Problems partnering in 1967 with local psychiatrists and physicians experienced with gender dysphoria to provide cross-gender hormones when indicated to the city's transgender population, which included many adolescents. STRYKER at 75-76.

In the 1990s, the Center for Transyouth Health and Development at Children's Hospital in Los Angeles became one of the first pediatric institutions to designate its work with transgender adolescents as a formal specialty, including cross-gender hormone therapy for adolescents. Johanna Olson-Kennedy et al., Impact of Early Medical Treatment for Transgender Youth: Protocol for the Longitudinal, Observational Trans Youth Care Study, 8 JMIR RSCH. PROTOCOLS 1, 1-7 (2019). The pediatric clinic model developed into a new standard with the opening of the Gender Management Service at Children's Hospital Boston in 2007. See Norman Spack et al., Children and Adolescents With Gender Identity Disorder Referred to a Pediatric Medical Center, 129 PEDIATRICS 418, 419 (2012). After decades of successful use, cross-gender hormones were formally recognized by major medical associations as standard interventions for alleviating gender dysphoria in adolescents, beginning with the Endocrine Society in 2009. Wylie Hembree et al., Endocrine Treatment of Transsexual Persons: An Endocrine Society Clinical Practice Guideline, 94 J. CLINICAL ENDOCRINAL & METABOLISM 3132, 3132-50 (2009).

# C. Puberty Blockers Were Developed in the 1980s.

As discussed above, prior to the development of puberty blockers, medical intervention for transgender adolescents involved initiating cross-gender hormone therapy at the developmentally appropriate moment measured by pubertal development. *Supra* 20-22. Clinicians determined that puberty was the most consequential period for intervention, because it tended to cause significant dysphoria with the unwanted development of secondary sex characteristics and was an especially effective moment developmentally in which to begin cross-gender hormones if indicated. GILL-PETERSON at 176-84. However, it was impractical to hope that transgender adolescents and their parents would time their affiliation with a clinic and complete all pre-hormonal assessment processes to coincide perfectly with the onset of puberty, which is unique in every individual. *See* Spack et al. at 419.

At Johns Hopkins, the Harriet Lane Home's pediatric endocrine ward developed hormonal treatment protocols to slow onset of puberty and development of secondary sex characteristics in children and adolescents from the 1930s to the 1960s. GILL-PETERSON at 104-09. The isolation of the precise gonadotropinreleasing hormone (GnRH) responsible for the onset of puberty came from concurrent research in neuroendocrinology. Neuroscientist Roger Guillemin and endocrinologist Andrew Schally isolated the compounds and pathways responsible, first synthesizing analogues to induce or accelerate the biological processes involved in puberty and fertility. Andrew Schally, Aspects of Hypothalamic Regulation of the Pituitary Gland: Its implications for the control of reproductive processes, 202 SCIENCE 18, 22-23 (1978). Guillemin and Schally then proposed the concept of an antagonist, or suppressive compound, in 1971, id. at 25, and their research was recognized with a Nobel Prize in 1977, Richard Paulson & Keith Gordon, Gonadotropinreleasing hormone: incredible 50 years, 4 FERTILITY STERILITY REP. 1, 1 (2023). Pharmaceutical companies developed the first GnRH antagonists in 1973. Kristof Chwalisz, Clinical development of the GnRH agonist leuprolide acetate depot, 4 FERTILITY STERILITY REP.

33, 33 (2023). Leuprolide acetate (Lupron) was the first medication to enter clinical trials in the U.S. for suppressive treatment of endocrine conditions, including endometriosis, prostate cancer, and, most relevant to this case, precocious puberty; it was approved by the Food and Drug Administration (FDA) in 1985 and remains in use today. *Id.* at 37.

The addition of GnRH antagonists to existing interventions allowed adolescents, their clinical teams, and their parents to temporarily and reversibly pause puberty while discussing future plans, all while minimizing the intense distress brought on by puberty. *See* Spack et al. at 419-22. The rationale for puberty blockers was therefore deliberately time-bound: either an adolescent would decide to proceed with crossgender hormones, or would not, but either way puberty blockers would be discontinued, and development would resume. *Id*.

The Department of Child and Adolescent Psychiatry at Utrecht University Hospital in the Netherlands was the first clinic to add puberty suppressing medication, based on this rationale, to its interventions in the 1990s, and reported positive psychosocial outcomes. See, e.g., Peggy Cohen-Kettenis & Friedemann PFAFFLIN, TRANSGENDERISM AND INTERSEXUALITY IN CHILDHOOD AND ADOLESCENCE 63-64, 132-33, 169 (2003); Annelou de Vries et al., Young Adult Psychosocial Outcome After Puberty Suppression and Gender Reassignment, 134 PEDIATRICS 696, 696 (2014). Based on those results and the established usage of the medications in precocious puberty, GnRH antagonists were added to the roster of medical interventions at clinics in the U.S. in the 2000s. Sahar Sadjadi, The Vulnerable Child Protection Act and Transgender Children's Health, 7 TRANSGENDER STUD. Q. 510, 511-12 (2020). Puberty blockers were also incorporated into the Standards of Care set by the WPATH and have since been endorsed as appropriate medical care for alleviating gender dysphoria by every major medical association in the U.S. *See* GLAAD 2023 Press Release.

Because the medical interventions involved in alleviating dysphoria are also used in cisgender people, and transgender people comprise a small percentage of the overall population, most genderaffirming care is provided to cisgender people, and without politicization. Dannie Dai et al., Prevalence of Gender Affirming Surgical Procedures Among Minors and Adults in the US, 7 JAMA NETWORK 1, 3 (2024). Puberty blockers for the treatment of gender dysphoria are categorized as "off-label" prescriptions like many other common medical treatments, not because their reliability or effects are unknown, but because the small number of transgender adolescents receiving them has practically disincentivized the FDA, as well as pharmaceutical companies, from undertaking the intensive process of adding gender dysphoria to the label. As the American Academy of Pediatrics notes, "the term 'off-label' does not imply an improper, illegal, contraindicated, or investigational use." Kathleen Neville et al., Policy Statement: Off-Label Use of Drugs in Children, 133 PEDIATRICS 563, 563 (2014). In fact, the time and resources required to label pediatric uses of medications has meant labeling for adults occurs sooner. See, e.g., Alicia Bazzano et al., *Off-Label Prescribing to Children in the United States* Outpatient Setting, 9 ACAD. PEDIATRICS 81, 84 (2009). Puberty blockers prescribed off-label to alleviate gender dysphoria are not exceptional in this regard. Ongoing research on their efficacy and potential risks are part of the normal clinical and scientific process for improving medical care.

## D. The Historical Record Offers Additional Testimony Through Lives of Transgender Adolescents Thriving After Receiving Gender-affirming Health Care.

Medical and scientific research conducted for over a century shows the impact of these medical interventions to alleviate gender dysphoria. Transgender adolescents who thrived thanks to gender-affirming care provide additional testimony. See, e.g., GILL-PETERSON at 193 (discussing the story of one of Hoff's first transgender adolescent patients, a high school senior when he initiated care in 1980, who, thanks to the standard of care cross-gender hormones and gender-affirming surgery, thrived and later attended medical school in hopes of embarking on a career in Hoff's footsteps to serve others as she had helped him). Contrary to media depictions of transgender identification among adolescents and medical interventions as twenty-first century phenomena, young people have consistently and articulately expressed their need for medical interventions to alleviate gender dysphoria since they became widely available.

In the 1960s and 1970s, when gender-affirming medicine was the subject of extensive press coverage, clinicians whose names appeared in newspapers received letters from transgender adolescents asking for help. A series of letters to Dr. Benjamin articulate these adolescents' deep certainty of their gender and demonstrate an impressive understanding of the risks and rewards of medical intervention-including the risks of doing nothing. *See, e.g., id.* at 151 (describing a seventeen-year-old transgender girl's 1969 letter expressing distress that puberty was causing rapidly accelerating height, "I understand that growth can be stopped with hormones. . . In that case, my treatment and growth can be controlled simultaneously. *This can* only be done if I start now." And describing a sixteenyear-old's 1971 letter that shared her excruciating pain enduring puberty in which she said she was "humiliated by the hair . . . getting thicker and darker on my body, by my voice that's getting deeper with every word I say....With every new day that androgen runs through my veins, I get more miserable. It has to stop! Androgen just isn't me; estrogen is!"). Still others wrote candidly about the bullying they experienced at school for being different and the pain of familial rejection. *Id.* at 151-52.

Long before any journalist or state legislator publicly discussed transgender children, these letters illustrate that adolescents understood and could deftly address adult concerns about medical interventions. State laws banning gender-affirming medical interventions for gender dysphoria legislate an entire generation of transgender adolescents today to the fate that these adolescents dreaded over a half-century ago.

## CONCLUSION

For the foregoing reasons, the decision of the court of appeals should be reversed.

Respectfully submitted,

KARA N. INGELHART *Counsel of Record* NORTHWESTERN PRITZKER SCHOOL OF LAW, BLUHM LEGAL CLINIC, LGBTQI+ RIGHTS CLINIC 375 E. Chicago Ave. Chicago, IL 60611 (312)503-3770 kara.ingelhart@law.nortwestern.edu

Counsel for Amici Curiae

September 3, 2024

APPENDIX

## APPENDIX TABLE OF CONTENTS

Page

## APPENDIX: LIST OF AMICI CURIAE

The American Historical Association (AHA) is the largest professional organization (10,500 members) in the world devoted to the study and promotion of history and historical thinking. AHA is a non-profit membership organization, founded in 1884 and incorporated by Congress in 1889. It provides leadership to the discipline on such issues as academic freedom, access to archives, professional standards, and the centrality of history to public culture.

The Organization of American Historians (OAH) is the largest scholarly organization devoted to the history of the U.S. and to promoting excellence in the scholarship, teaching, and presentation of that history. It is an international non-profit membership organization, including historians employed in a variety of academic and institutional settings. The OAH is committed to the principle that the past is a key to understanding the present and has an interest—as a steward of history, not as an advocate of a particular legal standard to ensure that the Court is presented with an accurate portrayal of American history and traditions.

The LGBTQ+ History Association was founded in 1979 as the Committee on Lesbian and Gay History. Since 1982, the Association has been officially recognized as an affiliate of the AHA and meets annually in conjunction with the AHA conference, where it sponsors sessions on LGBTQ+ history. It holds a biannual Queer History Conference, continuing its tradition of facilitating communication among scholars in a variety of disciplines who together shape and share the latest advances in research. The Association's expertise ranges from local and global LGBTQ+ history and spans from ancient times to the near present. Today it has nearly 400 active members.

Genny Beemyn is Director of the Stonewall Center at the University of Massachusetts Amherst. Their research focuses on the history of trans and nonbinary people in the U.S. in the 20th and 21st centuries, particularly the experiences of trans and nonbinary college students. They authored THE LIVES OF TRANSGENDER PEOPLE (2011), which, at the time, was the largest study of trans people by a U.S. researcher. Their other books include A QUEER CAPITAL: A HISTORY OF GAY LIFE IN WASHINGTON, D.C. (2014), Trans People in Higher Education (2019), THE SAGE ENCYCLOPEDIA OF TRANS STUDIES (2021), and THE SAGE ENCYCLOPEDIA OF LGBTQ+ STUDIES (2024). They have had work published in, among others, the Journal of Diversity in Higher Education, Journal of LGBT Youth, Journal of Lesbian Studies, Journal of Homosexuality, and Psychology of Sexual Orientation and Gender Diversity.

Jules Gill-Peterson is Associate Professor of History at Johns Hopkins University. She authored two books: HISTORIES OF THE TRANSGENDER CHILD (2018) and A SHORT HISTORY OF TRANS MISOGYNY (2024). Gill-Peterson is the editor of THE CONVERSATION ON GENDER DIVERSITY (2023) and was an editor of TSQ: Transgender Studies Quarterly from 2020-2024. Gill-Peterson received fellowships from the American Council of Learned Societies and the Radcliffe Institute for Advanced Study at Harvard University. She was the inaugural Mellon Foundation Public Scholar in Residence at the University of Southern California's Department of Gender and Sexuality Studies in 2021 and is a recipient of the Chancellor's Distinguished Research Award from the University of Pittsburgh.

Alison Li is an historian of science and medicine who writes about medical research, hormones, and the

culture in which they were shaped. Her book, WONDROUS TRANSFORMATIONS (2023), is the story of Dr. Harry Benjamin. Her current project is MOLECULES OF INFLUENCE: HORMONES AND OUR LIVES for Reaktion Books. She has a BSc in biochemistry (McGill University) and an MA and PhD in the history and philosophy of science and technology (Toronto University).

Laurie Marhoefer is Professor of History at the University of Washington, formerly John Bridgman Endowed Professor of History (2020-23). He is a legal and political historian of gender and sexuality in the modern world, particularly in Germany and the U.S. He authored RACISM AND THE MAKING OF GAY RIGHTS (2022) and SEX AND THE WEIMAR REPUBLIC (2015). His essays appeared in the American Historical Review, Central European History, The Washington Post, Der Spiegel, and elsewhere. He held visiting positions at the University of Oxford, the University of Toronto, and the University of Michigan, and won fellowships from the Andrew W. Mellon Foundation and the U.S. Holocaust Memorial Museum, among others.

Joanne Meyerowitz is the Arthur Unobskey Professor of History and American Studies at Yale University. She is a past president of the OAH and past editor of the Journal of American History. At Yale, she chaired the American Studies Program (2012–15) and the Department of History (2018, 2020-21) and currently serves as co-director of the Yale Research Initiative on the History of Sexualities. Her books How SEX CHANGED: Α HISTORY include OF TRANSSEXUALITY IN THE UNITED STATES (2002) and A WAR ON GLOBAL POVERTY: THE LOST PROMISE OF REDISTRIBUTION AND THE RISE OF MICROCREDIT (2021). Her articles have been published in the American Historical Review, Journal of American History, Modern American History, Gender and History, and the Bulletin of the History of Medicine.

stef m. shuster is Associate Professor in Lyman Briggs College and Department of Sociology and with the Consortium for Sexual and Gender Minority Health at Michigan State University. They authored TRANS MEDICINE: THE EMERGENCE AND PRACTICE OF TREATING GENDER (2021). Their research includes studying the social, cultural, and historical contexts of medical professionals who work with sexual and gender minority (SGM) communities. They currently serve as a deputy editor for Gender & Society.

**Amy L. Stone** is Professor of Sociology and Anthropology at Trinity University. They authored and edited books about U.S. LGBTQ history, including OUT OF THE CLOSET, INTO THE ARCHIVES: RESEARCHING SEXUAL HISTORIES (2015), GAY RIGHTS AT THE BALLOT BOX (2012), and CORNYATION: SAN ANTONIO'S OUTRAGEOUS FIESTA TRADITION (2017). They authored works on contemporary LGBTQ life, including QUEER CARNIVAL: FESTIVALS & MARDI GRAS IN THE SOUTH (2022).

**Susan Stryker** (Ph.D. United States History, UC Berkeley 1992) is Professor Emerita of Gender and Women's Studies at University of Arizona, where she directed the Institute for LGBTQ Studies. She currently holds a Distinguished Visiting Faculty appointment at Stanford University's Clayman Institute for Gender Research and directs the TEN:TACLES Initiative (Transgender Educational Network: Theory in Action for Creativity, Liberation, Empowerment and Service), funded through a \$1.5 million grant from the Mellon Foundation. She has previously held visiting professorships and research fellowships at Harvard, Yale, Johns Hopkins, Northwestern, Mills College, Simon Fraser University, and Macquarie University. She was founding co-editor and former executive editor of TSQ: Transgender Studies Quarterly, co-editor of the multivolume, award-winning Transgender Studies Reader, and currently co-edits the Duke University Press book series ASTERISK: GENDER, TRANS-, AND ALL THAT COMES AFTER. Dr. Stryker also co-directed the Emmywinning documentary film *Screaming Queens: The Riot at Compton's Cafeteria* (2005) and authored TRANSGENDER HISTORY: THE ROOTS OF TODAY'S REVOLUTION (2008, 2017, and forthcoming). Her book CHANGING GENDER, an intellectual history of the gender concept, is at press with Farrar Straus Giroux.