IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF ALABAMA
NORTHERN DIVISION

REV. PAUL A. EKNES-TUCKER; BRIANNA BOE, individually and on behalf of her minor son, MICHAEL BOE; JAMES ZOE, individually and on behalf of his minor son, ZACHARY ZOE; MEGAN POE, individually and on behalf of her minor daughter, ALLISON POE; KATHY NOE, individually and on behalf of her minor son, CHRISTOPHER NOE; JANE MOE, Ph.D.; and RACHEL KOE, M.D.

Plaintiffs,

and

UNITED STATES OF AMERICA,

Plaintiff-Intervenor,

v.

STATE OF ALABAMA; KAY IVEY, in her official capacity as Governor of the State of Alabama; STEVE MARSHALL, in his official capacity as Attorney General of the State of Alabama; DARYL D. BAILEY, in his official capacity as District Attorney for Montgomery County; C. WILSON BAYLOCK, in his official capacity as District Attorney for Cullman County; JESSICA VENTIERE, in her official capacity as District Attorney for Lee County; TOM ANDERSON, in his official capacity as District Attorney for

Case No.
2:22-cv-184-LCB-SRW

Honorable Liles C. Burke

Opposed

the 12th Judicial Circuit; and DANNY CARR, in his official capacity as District Attorney for Jefferson County.

Defendants.

PLAINTIFF-INTERVENOR UNITED STATES' MOTION FOR TEMPORARY RESTRAINING ORDER AND A PRELIMINARY INJUNCTION

Plaintiff-Intervenor the United States of America ("United States"), pursuant to Rule 65 of the Federal Rules of Civil Procedure, hereby moves for a temporary restraining order and preliminary injunction to enjoin Defendants' enforcement of Section 4 of Alabama Senate Bill ("S.B.") 184. Counsel for the United States has spoken to counsel in the Alabama Attorney General's Office, who indicated that the Defendants oppose the relief requested in this motion.

The felony ban on various forms of gender-affirming medical care for transgender minors contained in Section 4 of S.B. 184 discriminates on the basis of sex and transgender status in violation of the Equal Protection Clause of the Fourteenth Amendment of the United States Constitution. The factual and legal bases for the United States' motion are set forth in the accompanying Memorandum in Support of Plaintiff-Intervenor United States' Motion for a Temporary Restraining Order and a Preliminary Injunction. The United States acknowledges that its Motion to Intervene [Dkt. No. 58], and Motion for Leave to

File Excess pages [Dkt. No. 60], are still pending and have not been ruled on by the Court [Dkt. No. 61].

In filing this motion, the United States does not seek to delay the case or the already-scheduled proceedings. The United States recognizes that S.B. 184 will go into effect on May 8, 2022 and that the *Eknes-Tucker* Plaintiffs previously filed a motion for a temporary restraining order and preliminary injunction, and that the Court has set a hearing on that motion, which is scheduled to begin on May 5, 2022. The United States' complaint in intervention and this motion do not raise any new claims and the government is prepared to argue and present evidence in support of this motion at the upcoming hearing, if permitted by the Court. The United States is also willing to forego filing a reply brief to prevent prejudice to the other parties.

Dated: April 29, 2022

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on April 29, 2022, I electronically filed the foregoing with the Clerk of the Court using the CM/ECF system, which will send notification of such filing to counsel of record.

Respectfully submitted,

s/ *Jason R. Cheek*
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Assistant U.S. Attorney

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MEMORANDUM IN SUPPORT OF PLAINTIFF-INTERVENOR UNITED STATES' MOTION FOR A TEMPORARY RESTRAINING ORDER AND A PRELIMINARY INJUNCTION

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INTRODUCTION

This lawsuit challenges a state statute that denies necessary medical care to children based solely on who they are. The "Alabama Vulnerable Child Compassion and Protection Act," No. 2022-289, Senate Bill ("S.B.") 184 (2022), conditions whether a minor can receive certain forms of medical care on the sex that young person was assigned at birth. Section 4 of S.B. 184 makes it a felony for any person to "engage in or cause" medically necessary gender-affirming procedures and treatments for transgender minors, while leaving other minors free to receive the same procedures and treatments.

By denying transgender minors—and only transgender minors—access to gender-affirming care, S.B. 184 violates the Equal Protection Clause of the Fourteenth Amendment. The law unjustifiably prohibits transgender minors from accessing medically necessary and appropriate care, while imposing no such limitation on cisgender minors. S.B. 184 discriminates on the basis of both sex and transgender status, and it fails intermediate scrutiny. The law's ban on medically necessary gender-affirming care for transgender minors is not substantially related to serving an important government objective. To the contrary: the law actually harms the health of transgender youth. And it reflects a bias against transgender individuals that can never provide a legitimate basis for legislation. Indeed, S.B. 184 would not even survive rational-basis review.

Implementation of S.B. 184 will have immediate, drastic, and often traumatic physical and psychological impacts on vulnerable transgender children and will cause irreparable harm to medical professionals, parents and caregivers, transgender minors, and the interests of the United States. The balance of the equities and the public interest also justify preliminary relief. Therefore, the United States respectfully requests that this Court grant this motion.

BACKGROUND

I. Transgender Youth and Their Need for Medically Necessary and Appropriate Gender-Affirming Care

Transgender people are individuals whose gender identity does not conform with the sex they were assigned at birth. A transgender boy is a child or youth who was assigned a female sex at birth but whose gender identity is male; a transgender girl is a child or youth who was assigned a male sex at birth but whose gender identity is female. By contrast, a cisgender child has a gender identity that corresponds with the sex the child was assigned at birth. A person's gender identity is innate.

According to the American Psychiatric Association's Diagnostic & Statistical Manual of Mental Disorders,[1] "gender dysphoria" is the diagnostic term for the condition experienced by some transgender people of clinically significant

[1] American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition, Text Revision (2022), https://perma.cc/FM78-QMZ2.

distress resulting from the lack of congruence between their gender identity and the sex assigned to them at birth. Declaration of Dr. Stephen Rosenthal, MD, in Support of Plaintiffs' Motion for a Temporary Restraining Order & Preliminary Injunction, Dkt. 8-3 ("Rosenthal Decl.") ¶¶ 24-25; Declaration of Dr. Linda A. Hawkins, Ph.D., LPC, in Support of Plaintiffs' Motion for a Temporary Restraining Order & Preliminary Injunction, Dkt. 8-1 ("Hawkins Decl.") ¶ 25.

To be diagnosed with gender dysphoria, the incongruence between sex assigned at birth and gender identity must persist for at least six months and be accompanied by clinically significant distress or impairment in occupational, social, or other important areas of functioning. Rosenthal Decl. ¶ 25. The inability of transgender youth to live consistent with their gender identity due to irreversible physical changes in their bodies has significant negative impacts on their overall health and well-being. *See* Hawkins Decl. ¶¶ 45-46. The delay or denial of medically necessary treatment for gender dysphoria causes many transgender minors to develop serious co-occurring mental health conditions, such as anxiety, depression, and suicidality. Rosenthal Decl. ¶¶ 26, 55; *see also* Hawkins Decl. ¶ 41.

Gender dysphoria is highly treatable with the use of medical treatments that address the clinically significant distress by helping people who are transgender live in alignment with their gender identity. *See* Rosenthal Decl. ¶¶ 23, 26. The

precise treatments for gender dysphoria depend on each person's individualized needs. *Id*. ¶ 23; Hawkins Decl.¶¶ 32-37. The types of treatments provided differ depending on the patient's age. Rosenthal Decl. ¶ 33.

Medical treatment standards for gender dysphoria, including for minors, are well-established. Declaration of Dr. Armand Antommaria in Support of Plaintiff-Intervenor United States' Motion for a Temporary Restraining Order and a Preliminary Injunction ("Antommaria Decl."), attached hereto as Exhibit 1, ¶¶ 17, 23-38. The American Academy of Pediatrics agrees that gender-affirming care is safe, effective, and necessary for the health and wellbeing of minors suffering from gender dysphoria.[2] *Id*. ¶¶ 34-35. Before puberty, treatment for gender dysphoria does not include pharmaceutical or surgical intervention and is limited to "social transition." Hawkins Decl. ¶ 27. Social transition refers to allowing a transgender child to live and express themselves in ways consistent with their gender identity. *See id*. ¶¶ 27-29.

The Endocrine Society's clinical practice guidelines recognize that as transgender youth reach puberty, puberty-delaying hormone therapy may become medically necessary and appropriate. *See* Antommaria Decl. ¶¶ 27, 35. This treatment allows transgender youth to avoid going through endogenous puberty

[2] Jason Rafferty, *Ensuring Comprehensive Care and Support for Transgender and Gender-Diverse Children and Adolescents*, American Academy of Pediatrics Policy Statement (Oct. 1, 2018), https://perma.cc/D4R6-GP6C.

and the heightened gender dysphoria and permanent physical changes that puberty would cause. *See* Rosenthal Decl. ¶¶ 36-37. This treatment is not experimental: medications that delay the onset of puberty have been used for decades to treat early onset or "precocious puberty" for cisgender adolescents. Antommaria Decl. ¶¶ 23, 33.

Interventions such as prescribing puberty-blocking medication and hormone replacement therapy require substantial planning and consultation with medical and mental health providers. *See id*. ¶¶ 16, 42; Rosenthal Decl. ¶ 47. Under the Endocrine Society's clinical guidelines, transgender adolescents may be eligible for puberty-blocking hormone therapy only if the following steps have been taken:

- A qualified mental health professional confirms the adolescent has demonstrated a long-lasting and intense pattern of gender nonconformity or gender dysphoria, gender dysphoria worsened with the onset of puberty, and any coexisting psychological, medical, or social problems that could interfere with treatment have been addressed, such that the patient's situation and functioning are stable enough to start treatment;

- The adolescent has sufficient mental capacity to give informed consent to this treatment, has been informed of the effects and side effects of treatment (including potential loss of fertility) and options to preserve fertility; and has given informed consent and the parents or other caretakers or guardians have consented to the treatment and are involved in supporting the adolescent throughout the treatment process; and

- A pediatric endocrinologist or other clinician experienced in pubertal assessment agrees with the indication for treatment, has confirmed that puberty has started in the adolescent, and has confirmed that there are no medical contraindications to treatment.

See Antommaria Decl. ¶¶ 41-42.[3]

For some transgender adolescents, it may also be medically necessary and appropriate to provide hormone therapy to initiate puberty consistent with their gender identity. *Id*. ¶¶ 28, 35. Evaluation for this treatment generally occurs starting around age 14; transgender adolescents are only eligible for hormone therapy if the steps above are satisfied. *Id*. ¶ 42. Under the World Professional Association for Transgender Health clinical guidelines, adolescents who are transgender may receive chest reconstructive surgery prior to the age of majority if they have severe gender dysphoria, provided they have been living consistent with their gender identity for a significant period of time. *See id*. ¶ 42. Other types of surgical interventions, including genital surgery, are not recommended until a patient has reached the age of majority. *Id*. ¶ 35.

II. The Legislative Debate Regarding Senate Bill 184

The process that produced S.B. 184 is replete with expressions of skepticism about and hostility to the needs of transgender youth. In 2021 statement, for example, Representative Wes Allen, a sponsor of S.B. 184, explained that a motivation behind legislation banning gender-affirming care for transgender youth

[3] Wylie Hembree, Peggy Cohen-Kettenis, & Louis Gooren et al., *Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline*, The Journal of Clinical Endocrinology & Metabolism 3869-3903, Vol. 102, Issue 11 (Nov. 2017), https://perma.cc/8R3P-6NQY.

is to affirm that if children "are born male, that they're a male and if they're born female, they're a female."[4]

During legislative debates, proponents of S.B. 184, including Representative Allen[5] and another bill sponsor, Senator Shay Shelnutt, [6] referred to gender-affirming care, when provided to transgender youths as "child abuse" without explaining why gender-affirming care for all other youth is entirely appropriate.

Furthermore, during a March 2, 2022 House Judiciary Committee hearing held on Alabama House Bill 266 (a companion bill to S.B. 184), Representative Allen compared gender-affirming medical care to "vaping," "dealing with cigarettes," and "dealing with drinking"—each of them a form of voluntary activity that he characterized as antisocial.[7] Representative Allen also compared prescribing medications in the context of gender-affirming care to giving "anabolic steroids" to young boys who believe they are a "Division I athlete" or a "professional athlete."[8] And later, during debate on April 7, 2022, Representative Allen not only analogized gender-affirming care to another often-criticized practice

[4] Tony Perkins, *Wes Allen Discusses Upcoming Alabama Senate Vote on Vulnerable Child Compassion and Protection Act*, YouTube (Feb. 15, 2021), https://www.youtube.com/watch?v=E9Q_b22cUWw.
[5] Alabama House Judiciary Committee, *House Judy Committee – 3/2/2022, 1:34:28 PM*, Vimeo (Mar. 2, 2022), https://vimeo.com/683940881/4edaeefda2.
[6] Kiara Alfonseca, *Alabama Governor Signs 'Don't Say Gay,' Trans Care, and Bathroom Ban Bills*, ABC News (Apr. 8, 2022), https://perma.cc/6ESP-A8E9.
[7] Alabama House Judiciary Committee, *supra* note 5.
[8] *Id*.

but criticized parents who seek it for their children, stating, "We do not allow children to get tattoos even with parental permission. And why not? Because we do not allow parents to permanently alter the bodies of their children."[9] Even on its own terms, this statement is inaccurate; in fact, Alabama law does permit minors to obtain a tattoo with prior written informed consent of the parent or legal guardian. Ala. Code § 22-17A-2(a).

In signing S.B. 184 into law, Governor Kay Ivey also expressed moral disapproval of gender-affirming care for transgender youth: "I believe very strongly that if the Good Lord made you a boy, you are a boy, and if He made you a girl, you are a girl . . . [L]et us all focus on helping them to properly develop into the adults God intended them to be."[10]

III. Senate Bill 184

Governor Ivey signed S.B. 184 into law on April 8, 2022. The law becomes effective on May 8, 2022. *See* S.B. 184, § 11.

Section 3 of the bill defines "sex" as the "biological state of being male or female, based on the individual's sex organs, chromosomes, and endogenous hormone profiles." *Id.* at § 3(3). S.B. 184's legislative findings reject the need for interventions to treat gender dysphoria, describing such treatments as "unproven"

[9] Alabama House of Representatives, *House Part 1 – 4/7/2022, 9:32:05 AM*, Vimeo (April 7, 2022), https://vimeo.com/697000650/59a642f5d4.
[10] Alfonseca, *supra* note 6.

and "experimental" and causing "numerous harmful effects." *Id*. at § 2(11). The findings characterize a "discordance between their sex and identity" as a phase that resolves itself over time in most cases. *Id*. at § 2(4)-(5).

Section 4 of S.B. 184 states that "no person shall engage in or cause" specified types of medical care to be performed on a minor[11] with "the purpose of attempting to alter the appearance of or affirm the minor's perception of his or her gender or sex, if that appearance or perception is inconsistent" with their sex assigned at birth. *Id*. at § 4(a). The practices prohibited by Section 4 of S.B. 184 include administering puberty blockers, administering hormone therapy, and surgical interventions (including the removal of "any healthy or non-diseased body part or tissue, except for a male circumcision"). *Id.* at § 4(a)(1)-(6). Notably, there is an exception for procedures "undertaken to treat a minor born with a medically verifiable disorder of sex development." *Id.* at § 4(b).

A violation of Section 4 of S.B. 184 is a Class C felony, *id.* at § 4(c), which is punishable by up to 10 years of imprisonment and a fine of up to $15,000. *See* Ala. Crim. Code §§ 13-A-5-6(a)(3), 13A-5-11(a)(3).

By its very terms, Section 4 of S.B. 184 means that parents of transgender youth, transgender minors old enough to make their own medial decisions, health

[11] In Alabama, the age of majority is nineteen. Ala Crim. Code § 26-1-1(a).

care professionals, and others are forced to choose between forgoing medically necessary procedures and treatments or facing criminal prosecution.

ARGUMENT

For a court to issue a preliminary injunction, the plaintiff must establish the following: "(1) substantial likelihood of success on the merits; (2) irreparable injury will be suffered unless the injunction issues; (3) the threatened injury to the movant outweighs whatever damage the proposed injunction may cause the opposing party; and (4) if issued, the injunction would not be adverse to the public interest." *United States v. Alabama*, 691 F.3d 1269, 1281 (11th Cir. 2012). Each of these factors is satisfied here.

I. The United States is Likely to Succeed on the Merits of its Equal Protection Claim

The United States is likely to succeed on the merits because Section 4 of S.B. 184 violates the Equal Protection Clause of the Fourteenth Amendment by discriminating against transgender minors on the basis of their sex and their membership in a quasi-suspect class. Not only does Section 4 fail the heightened scrutiny applicable to such laws; it would fail even rationality review.

A. S.B. 184's Ban on Gender-Affirming Medical Care Warrants Heightened Scrutiny Under the Equal Protection Clause

Section 4 of S.B. 184 is subject to heightened scrutiny because, in forbidding transgender youth to obtain medically necessary gender-affirming care while

leaving all other minors eligible for such care, it discriminates on the basis of sex and transgender status.

1. S.B. 184's Ban on Gender-Affirming Care Discriminates on the Basis of Sex and Therefore Triggers Intermediate Scrutiny

S.B. 184 bans gender-affirming care only when that care is being provided to transgender individuals. As the Supreme Court instructed, treating an individual differently because that person is transgender "unavoidably" constitutes sex discrimination because it rests on a person's having "one sex identified at birth" but identifying with a different sex or gender "today." *Bostock v. Clayton County, Ga.*, 140 S. Ct. 1731, 1746 (2020). Similarly, the Eleventh Circuit has held that differential treatment based on "gender-nonconformity is sex discrimination, whether it's described as being on the basis of sex or gender." *Glenn v. Brumby*, 663 F.3d 1312, 1317 (11th Cir. 2011). Other circuits have held the same. *See Grimm v. Gloucester Cnty. Sch. Bd.*, 972 F.3d 586, 608-10 (4th Cir. 2020), *as amended* (Aug. 28, 2020); *Whitaker By Whitaker v. Kenosha Unified Sch. Dist. No. 1 Bd. of Educ.*, 858 F.3d 1034, 1051 (7th Cir. 2017) (school policy requiring students to use bathroom in accordance with the sex on the student's birth certificate "is inherently based upon a sex-classification"); *D.T. v. Christ*, 552 F. Supp. 3d 888, 896 (D. Ariz. 2021); *Flack v. Wisconsin Dep't of Health Servs.*, 328 F. Supp. 3d 931, 948 (W.D. Wis. 2018).

Section 4 of S.B. 184 discriminates against transgender minors by

unjustifiably denying them access to certain forms of medically necessary care. The law prohibits transgender minors from obtaining care that has been well established as medically appropriate and necessary, while imposing no comparable limitation on cisgender minors for obtaining the same forms of care.

In addition, Section 4 of S.B. 184 expressly discriminates on the basis of sex because the medical treatments available to an Alabama minor under S.B. 184 depend on the sex that minor was assigned at birth based on "the individual's sex organs, chromosomes, and endogenous hormone profiles." S.B. 184, § 3. Under S.B. 184, if a minor was assigned male at birth, that minor cannot receive any of the treatments or procedures identified in Section 4 that would "alter the appearance of" the minor in a way that is "inconsistent" with being male or that would "affirm" the minor's "perception" of being female. *See* S.B. 184, § 4(a). Similarly, if a minor was assigned female at birth, that minor cannot receive any of the treatments or procedures identified in Section 4 that would "alter the appearance of" the minor in a way that is "inconsistent" with being female or that would "affirm" the minor's "perception" of being male. *See id* at § 4(a). By contrast, all other minors can access the covered treatments because those treatments are, for them, consistent with the sex the minor was assigned at birth. *See id.* at § 4(a). S.B. 184 also discriminates on the basis of sex because it conditions the availability of particular medical procedures on a sex stereotype:

that an individual's gender identity should match the sex that individual was assigned at birth. *See Glenn*, 663 F.3d at 1316, 1319-20; *see also United States v. Virginia*, 518 U.S. 515, 549-50 (1996).

Sex-based classifications like S.B. 184 are subject to heightened constitutional scrutiny, specifically intermediate scrutiny. *Virginia*, 518 U.S. at 555; *Glenn*, 663 F.3d at 1315-16 (citations and quotations omitted).

2. S.B. 184's Ban on Gender-Affirming Medical Care Discriminates Against Transgender Individuals, And Therefore Triggers Intermediate Scrutiny

S.B. 184 also warrants heightened scrutiny because it discriminates on the basis of transgender status. Its legislative findings reflect an intent to target transgender minors—and only transgender minors—by expressing a commitment to preventing medical care that addresses youth who experience "discordance between their sex and their internal sense of identity" and "reveal signs of gender nonconformity," including those designated with "gender dysphoria." *Compare* S.B. 184 § 2(2), 2(5), *with* Antommaria Decl. ¶¶ 43-45.[12]

A law that criminalizes access to particular medical treatments based on

[12] It does not matter that S.B. 184 never expressly uses the word "transgender," since it is clear beyond doubt that transgender minors are the focus on the bill. "Some activities may be such an irrational object of disfavor that, if they are targeted, and if they also happen to be engaged in exclusively or predominantly by a particular class of people, an intent to disfavor that class can readily be presumed." *Bray v. Alexandria Women's Health Clinic*, 506 U.S. 263, 270 (1993); *see also Bostock*, 140 S. Ct. at 1741 (noting that it is "it is impossible to discriminate against a person for being . . . transgender without discriminating against that individual based on sex"); *Christ*, 552 F. Supp. 3d at 895-96.

individuals' transgender status demands heightened scrutiny because transgender people are a quasi-suspect class, as the two circuits to have squarely addressed the question have held. *See Grimm*, 972 F.3d at 611; *Karnoski v. Trump*, 926 F.3d 1180, 1200 (9th Cir. 2019). Several district courts have concluded the same.[13]

An analysis of the factors used by the Supreme Court confirms that classifications based on transgender status warrant heightened scrutiny.[14] First, transgender people, as a class, have historically been subject to discrimination and continue to "face discrimination, harassment, and violence because of their gender identity." *Whitaker*, 858 F.3d at 1051; *see also Grimm*, 972 F.3d at 611-12; *Flack*, 328 F. Supp. 3d at 953; *M.A.B.*, 286 F. Supp. 3d at 720; *Evancho*, 237 F. Supp. 3d at 288; *Highland*, 208 F. Supp. 3d at 874; *Adkins*, 143 F. Supp. 3d at 139.[15]

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[13] *See F.V. v. Barron*, 286 F. Supp. 3d 1131, 1145 (D. Idaho 2018), *decision clarified sub nom. F.V. v. Jeppesen*, 477 F. Supp. 3d 1144 (D. Idaho 2020); *Flack*, 328 F. Supp. 3d at 951-53; *M.A.B. v. Bd. of Educ. of Talbot Cnty.*, 286 F. Supp. 3d 704, 719 (D. Md. 2018); *Evancho v. Pine-Richland Sch. Dist.*, 237 F. Supp. 3d 267, 288 (W.D. Pa. 2017); *Bd. of Educ. of the Highland Loc. Sch. Dist. v. United States Dep't of Educ.*, 208 F. Supp. 3d 850, 873-74 (S.D. Ohio 2016); *Adkins v. City of New York*, 143 F. Supp. 3d 134, 139-140 (S.D.N.Y. 2015); *Norsworthy v. Beard*, 87 F. Supp. 3d 1104, 1119 (N.D. Cal. 2015).

[14] Those factors include whether the class (1) has historically been subjected to discrimination, *see Lyng* v. *Castillo*, 477 U.S. 635, 638 (1986); (2) has a defining characteristic that "frequently bears no relation to ability to perform or contribute to society," *City of Cleburne, Tex. v. Cleburne Living Ctr.*, 473 U.S. 432, 440-441 (1985); (3) has "obvious, immutable, or distinguishing characteristics that define them as a discrete group," *Lyng*, 477 U.S. at 638; and (4) is a minority lacking political power, *Bowen v. Gilliard*, 483 U.S. 587, 602 (1987).

[15] Ample evidence indicates that transgender people experience higher levels of physical and sexual violence, harassment, and discrimination in the workplace, housing, healthcare, and school than their non-transgender counterparts. Nearly half (47%) of respondents to the 2015 U.S. Transgender Survey reported being sexually assaulted. Sandy E. James et al., Nat'l Ctr. for Transgender Equal., *The Report of the 2015 U.S. Transgender Survey* (Dec. 2016), https://perma.cc/5CL3-RG9E (hereinafter USTS Report). Over 77% of respondents to the 2015

Second, no "data or argument suggest[s] that a transgender person, simply by virtue of transgender status, is any less productive than any other member of society." *Adkins*, 143 F. Supp. 3d at 139.[16] The American Psychiatric Association has concluded that "[b]eing transgender or gender diverse implies no impairment in judgment, stability, reliability, or general social or vocational capabilities."[17]

Third, transgender individuals share "obvious, immutable, *or* distinguishing characteristics that define them as a discrete group." *Bowen*, 483 U.S. at 602 (quoting *Lyng*, 477 U.S. at 638) (emphasis added). Specifically, transgender individuals' "gender identity does not align with the gender they were assigned at birth." *M.A.B.*, 286 F. Supp. 3d at 721. Multiple courts have held that transgender status is immutable, and "being transgender is not a choice[,] [r]ather, it is as natural and immutable as being cisgender." *Grimm*, 972 F.3d at 612-613.[18]

Fourth, people who are transgender lack political power. *See id*. at 613. While the number of openly transgender elected officials is growing, they still

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U.S. Transgender Survey who were out or perceived as transgender in kindergarten through twelfth grade reported having one or more negative experiences (such as verbal harassment or physical attacks) in K-12 because people thought they were transgender. *Id*. at 132, 133. Another recent study found 61% of employed transgender respondents between the ages of thirteen to twenty-four reported experiencing discrimination in the workplace. The Trevor Project, *Research Brief: LGBTQ Youth in the Workplace* (Mar. 30, 2021), https://perma.cc/TG7W-E4J3.

[16] *Accord Grimm*, 972 F.3d at 612; *M.A.B.*, 286 F. Supp. 3d at 720; *Evancho*, 237 F. Supp. 3d at 288; *Highland*, 208 F. Supp. 3d at 874; *Norsworthy*, 87 F. Supp. 3d at 1119 n.8.

[17] APA Assembly and Board of Trustees, *Position Statement on Discrimination Against Transgender and Gender Diverse Individuals* (2012, 2018), https://perma.cc/ES7D-YVG2.

[18] *See also M.A.B.*, 286 F. Supp. 3d at 720-721; *Evancho*, 237 F. Supp. 3d at 288; *Highland*, 208 F. Supp. 3d at 874; *Norsworthy*, 87 F. Supp. 3d at 1119 n.8; *Adkins*, 143 F. Supp. 3d at 139-40.

represent a fraction of office holders. *Id*. The proliferation of enacted legislation aimed at restricting the rights of transgender individuals, particularly transgender minors, is further evidence of the limited political power of the transgender community.[19]

Because Section 4 of S.B. 184 discriminates against transgender persons and they constitute a quasi-suspect class, the statute is subject to intermediate scrutiny.

B. S.B. 184 Fails Heightened Scrutiny Because it is Not Substantially Related to Achieving Alabama's Articulated Governmental Interests

To survive heightened scrutiny, the State must show that Section 4 of S.B. 184 "serves important governmental objectives" and that the "discriminatory means employed are substantially related to achievement of those objectives." *See Virginia*, 518 U.S. at 524 (quoting *Mississippi Univ. for Women v. Hogan*, 458 U.S. 718, 724 (1982)); *see also Craig v. Boren*, 429 U.S. 190, 197 (1976). "The burden of justification is demanding and it rests entirely on the State." *Virginia*, 518 U.S. at 533 (quoting *Mississippi Univ. for Women*, 458 U.S. at 724). Heightened scrutiny requires that the justification proffered be "exceedingly

[19] The very same day Governor Ivey signed S.B. 184 into law, she also signed H.B. 322 into law. Alfonseca, *supra* note 6. H.B. 322 requires students in public K-12 schools to only use bathrooms and locker rooms that correspond with the sex listed on their original birth certificate; it also bans classroom instruction regarding sexual orientation and gender identity that is not age or developmentally "appropriate." Alabama has also issued Policy Order 63, which requires transgender individuals to undergo "gender reassignment surgery" before they may amend the sex designation on their driver's licenses. *See Corbitt v. Taylor*, 513 F. Supp. 3d 1309 (M.D. Ala. 2021).

persuasive." *Id*. at 531. The required inquiry provides an enhanced measure of protection in circumstances where there is a greater danger that the legal classification results from impermissible prejudice or stereotypes. *See City of Richmond v. J.A. Croson Co.*, 488 U.S. 469, 493 (1989) (plurality opinion).

Moreover, when intermediate scrutiny applies, the "justification must be genuine, not hypothesized or invented post hoc in response to litigation," and "must not rely on overbroad generalizations." *Virginia*, 518 U.S. at 533; *see also Glenn*, 663 F.3d at 1321; *SmithKline Beecham Corp. v. Abbott Labs.*, 740 F.3d 471, 482 (9th Cir. 2014) (noting that the court must examine the law's "actual purposes and carefully consider the resulting inequality to ensure that our most fundamental institutions neither send nor reinforce messages of stigma or second-class status.") (citing *United States v. Windsor*, 570 U.S. 744 (2013)). A classification does not withstand heightened scrutiny when "the alleged objective" of the classification differs from the "actual purpose." *Mississippi Univ. for Women*, 458 U.S. at 730.

S.B. 184's ban on medically necessary gender-affirming care for transgender youth does not survive the rigorous analysis that heightened scrutiny demands for two reasons. First, the State's articulated objectives are pretextual justifications that mask the true purpose of the law: to express moral disapproval of a vulnerable and unpopular group. That desire is not legitimate, let alone important or

exceedingly persuasive. Second, even assuming the State's asserted interest of protecting children is genuine, S.B. 184 is not substantially related to that interest because S.B. 184's ban on various forms of gender-affirming care is harmful, not beneficial, to children.

1. Alabama's Stated Interest of Protecting Children is Pretextual

S.B. 184's stated purpose is to protect youth. The legislation's text and its legislative history, however, belie the State's stated purpose. "[I]f the constitutional conception of 'equal protection of the laws' means anything, it must at the very least mean" that the desire to express moral disapproval of "a politically unpopular group cannot constitute a legitimate governmental interest." *Dep't of Agriculture v. Moreno*, 413 U.S. 528, 534 (1973); *see also Palmore v. Sidoti*, 466 U.S. 429, 433 (1984). Unfortunately, S.B. 184's real purpose is that forbidden desire.

The text and legislative history of S.B. 184 are marbled with expressions of moral disapproval of transgender status. So, too, its suggestion that transgender minors will "outgrow" their gender identity. S.B. 184, § 2(4).

Furthermore, S.B. 184's legislative history, including statements from Governor Ivey and co-sponsor Representative Allen, *see* pp. 7-8, *supra*, reflect profound disapproval of people whose gender identity is inconsistent with the sex they were assigned at birth.

S.B. 184 bans particular treatments and procedures only when they are being

used to affirm a gender identity that is "inconsistent with the minor's sex" as assigned at birth. S.B. 184, § 4. As such, S.B. 184 singles out transgender minors for discriminatory treatment. Those same procedures that S.B. 184 prohibits for transgender minors, remain as permissible as before for all other purposes, including gender-affirming care for anyone who is not transgender. Puberty blockers and surgical treatments can have "life implications," S.B. 184, § 2(15), for cisgender and intersex minors too, and yet Alabama leaves the decisions whether to obtain such treatments to treating physicians, parents, and minors. The law's selective concern undercuts the state's profession of a legitimate purpose. *See Church of the Lukumi Babalu Aye, Inc. v. City of Hialeah*, 508 U.S. 520, 547 (1993) (a state undermines its stated interest "when it leaves appreciable damage to that supposedly vital interest unprohibited.") (cleaned up).

2. S.B. 184 is Not Substantially Related to Protecting Children from "Harmful" Effects of Gender-Affirming Care

But even if the State's asserted interest of protecting children were genuine, S.B. 184's felony ban on certain forms of gender-affirming care would violate the Equal Protection Clause because the ban is not "substantially related" to achieving that objective. *Virginia*, 518 U.S. at 533 (quoting *Mississippi Univ. for Women*, 458 U.S. at 724) (internal quotations omitted). Quite the opposite: banning the forms of gender-affirming care criminalized by S.B. 184 will have devastating effects on many transgender youths while providing no countervailing benefit to

them or anyone else. *See Kirchberg v. Feenstra*, 609 F.2d 727, 734 (5th Cir. 1979) (courts must "weigh[] the state interest sought to be furthered against the character of the discrimination caused by the statutory classification").

The empirical propositions upon which S.B. 184 rests are in fact untrue.

First, gender-affirming care for gender dysphoria is safe and effective. Contrary to the State's assertion that gender-affirming care for transgender youth has "numerous harmful effects," *see* S.B. 184 § 11, the overwhelming weight of medical evidence confirms that the medical care that S.B. 184 forbids is safe, effective, and medically necessary treatment for the health and wellbeing of children and adolescents suffering from gender dysphoria. Antommaria Decl. ¶¶ 34-35; Rosenthal Decl. ¶¶ 23, 27-30; *see generally* pp. 4, 21-22, *supra*.[20] Moreover, delaying or denying gender-affirming care to transgender youth experiencing gender dysphoria can result in numerous harms, including depression, anxiety, and suicidality. *See* Hawkins Decl. ¶¶ 41, 45-46.[21] The medical evidence shows that trying to "cure" a transgender individual with a gender dysphoria diagnosis by forcing them to live in alignment with their sex assigned at birth, and

[20] Rafferty, *supra* note 2.

[21] *See* Dep't of Health & Human Servs., Office of Population Affairs, *Gender Affirming Care and Young People*, at 1, https://go.usa.gov/xuR8E ("Medical and psychosocial gender affirming healthcare practices have been demonstrated to yield lower rates of adverse mental health outcomes, build self-esteem, and improve overall quality of life for transgender and gender diverse youth.").

not their gender identity, is severely harmful and ineffective. *See* Antommaria Decl. ¶ 47; Rosenthal Decl. ¶ 22.

Second, the medical research supporting gender-affirming care is substantial. Alabama is simply mistaken when it asserts that gender-affirming medical treatment for patients experiencing gender dysphoria is new, unproven, and poorly studied. *See* S.B. 184 § 2(11). To the contrary. Antommaria Decl. ¶ 23. Leading medical associations, including the American Psychiatric Association, the World Professional Association for Transgender Health, the American Academy of Pediatrics, and the Endocrine Society, have all recognized that gender-affirming care is safe, effective, and medically necessary treatment for the health and wellbeing of some children and adolescents suffering from gender dysphoria. *Id.* ¶ 35. Hormone treatment for gender dysphoria began soon after estrogen and testosterone became commercially available in the 1930s and puberty blockers have been in use for over 20 years. *Id*. ¶ 23.

The assertions in S.B. 184's legislative findings that the use of puberty blockers for youths experiencing gender dysphoria is "experimental" and not "FDA-approved," *see* S.B. 184 § 2(7), is misleading. Antommaria Decl. ¶¶ 17, 19. There have been ample observational studies, including federally funded trials, supporting the use of puberty blockers and other gender-affirming hormone therapy for adolescents. *Id*. ¶¶ 27-29.

The safety and effectiveness of the treatments and procedures used to treat minors experiencing gender dysphoria is not undermined because there have not been randomized, placebo-based trials for those treatments and procedures. *Id*. ¶¶ 24-30. And the absence of such trials does not render them "experimental." *Id*. ¶¶ 14, 17, 23-30. In fact, such trials would be unethical because insufficient participants are likely to enroll, and investigators and participants cannot be "blind" since they would know if they were receiving the active treatment or a placebo due to changes in their bodies or the absence thereof. *Id*. ¶¶ 30-31. The lack of randomized trials is common for pediatrics. *Id*. ¶¶ 31-32. Relevant here, there is the same absence of randomized trials supporting the use of puberty blockers to treat precocious puberty (the premature initiation of puberty), *id*. ¶ 31, a practice Alabama law continues to permit. There is no medical or research basis for distinguishing the use of puberty blockers to treat precocious puberty from using them to treat gender dysphoria. *Id*. ¶¶ 3, 47.

Likewise, lack of FDA approval for a specific use does not bear on a treatment's efficacy. FDA approval is not required for all uses of a medication and off-label use is in fact common in many areas of medicine, including pediatrics. *Id*. ¶¶ 20, 22. Once the FDA has approved a medication for one indication, thereby agreeing that it is safe (*i.e.*, its benefits outweigh its potential risks) and effective for this intended use, prescribers are generally free to prescribe it for other

indications. *Id*. ¶ 21. For example, nafcillin, an antibiotic commonly used to treat lung or joint infections, lacks a pediatric indication. *Id*. ¶ 22. There are many reasons, wholly unrelated to a drug's safety or efficacy why its manufacturer might not seek FDA approval for an additional use or patient group; it may already be approved for adults but not for minors even though studies indicate it is safe when used by both groups. *Id*. ¶¶ 20 & n.2, 21.

Third, parents and many minors are able to comprehend the risks involved. S.B. 184's legislative findings assert that minors and their parents "are unable to comprehend and fully appreciate the risk and life implications" of the treatments banned by Section 4. S.B. 184 § 2(15). This is incorrect. Antommaria Decl. ¶ 39. To begin, parental consent is required before providing gender-affirming care to minors, as it is before medical providers render treatments with comparable risks, uncertainty, and levels of evidence. *Id*. ¶ 40. For example, the evidence indicates that most adolescents with gender dysphoria "have sufficient medical decision-making capacity to make decisions regarding puberty blockers." *Id*. ¶ 41. And minors must be informed about all potential effects, including implications for fertility and options for fertility preservation, as a predicate step. *Id*. ¶ 42.

Moreover, S.B. 184 operates under the faulty presumption that parents, in consultation with their medical providers, cannot make reasoned, informed decisions about appropriate care for their children. In fact, parents "are frequently

asked to consent to medical treatments for minors with comparable risks, uncertainty, and levels of evidence." *Id*. ¶¶ 40, 47. S.B. 184's legislative findings offer no compelling reason why parents would be unable to do so only when these treatments are being provided to transgender youths.

Because the medical evidence demonstrates that S.B. 184's prohibition on transgender youth who experience gender dysphoria receiving the specified forms of care when their physicians and parents agree that such care is appropriate simply does not substantially achieve the interest of protecting children, the statute violates the Equal Protection Clause. *See Feenstra*, 609 F.2d at 734.

3. S.B. 184's Ban on Gender-Affirming Care Fails Even Rational Basis Review

Even if this Court were to apply only rational-basis review, S.B. 184's ban on gender-affirming medical care could not survive. The ban lacks even a "rational relationship between the disparity of treatment and some legitimate governmental purpose." *Heller v. Doe*, 509 U.S. 312, 320 (1993). By requiring that the "classification bear a rational relationship to an independent and legitimate legislative end," courts ensure that "classifications are not drawn for the purpose of disadvantaging the group burdened by the law." *Romer v. Evans*, 517 U.S. 620, 633 (1996).

As explained above, *see* pp. 18-19, *supra*, S.B. 184 in fact reflects a desire to express moral disapproval of transgender status. Given the law's targeting of

transgender minors, its passage indeed "seems inexplicable by anything but animus toward" transgender people. *See id.* S.B. 184 is "a status-based enactment divorced from any factual context from which we could discern a relationship to legitimate state interests . . . ." *Romer*, 517 U.S. at 635. "[I]f the constitutional conception of 'equal protection of the laws' means anything, it must at the very least mean" that the desire to express moral disapproval of "a politically unpopular group cannot constitute a legitimate governmental interest." *Moreno*, 413 U.S. at 534. S.B. 184 is motivated by prejudice toward a particular group, transgender individuals, bearing no rational relationship to the law's stated purpose and thus cannot survive even the lowest level of review. *See Cleburne*, 473 U.S. at 450.

Thus, the United States is likely to succeed on the merits of its equal protection claim regardless of the level of scrutiny applied.

II. S.B. 184 Will Cause Irreparable Harm Absent an Injunction

If Section 4 of S.B. 184 is permitted to go into effect, the provision of certain types of medically necessary gender-affirming care to transgender minors will constitute a felony, punishable by up to 10 years in prison and a fine of up to $15,000. S.B. 184 § 4(c); *see also* Ala. Crim. Code §§ 13-A-5-6(a)(3), 13A-5-11(a)(3). Courts have repeatedly recognized that the risk of criminal penalties constitutes an immediate and irreparable harm. *See, e.g.*, *Georgia Latino All. for Hum. Rts. v. Deal*, 793 F. Supp. 2d 1317, 1340 (N.D. Ga. 2011), *aff'd in relevant*

part, *Georgia Latino All. for Hum. Rts. v. Governor of Georgia*, 691 F.3d 1250 (11th Cir. 2012); *Planned Parenthood Southeast, Inc. v. Bentley*, 951 F. Supp. 2d 1280, 1288-89 (N.D. Ala. 2013); *Cent. Alabama Fair Hous. Ctr. v. Magee*, No. 2:11-cv-982-MHT, 2011 WL 5878363, at *3 (M.D. Ala. Nov. 23, 2011).

That is especially true given the court of action S.B. 184 compels individuals to forgo. S.B. 184 will cause immense and irreparable physical and psychological harm to many transgender minors by terminating their access to necessary medical treatment and impose severe harm on their parents and medical providers. *See* Antommaria Decl. ¶ 47; Hawkins Decl. ¶¶ 45-47; Rosenthal Decl. ¶¶ 56-57. As one district court explained, the following forms of irreparable harm can ensue: (1) transgender youths face "high risk of gender dysphoria and lifelong physical and emotional pain," (2) parents must choose between watching their children suffer or uprooting their familiar to move to another state, and (3) physicians must choose between breaking the law and providing appropriate medical care. *Brandt v. Rutledge*, 551 F. Supp. 3d 882, 892 (E.D. Ark. 2021); *see also Blaine v. North Brevard County Hospital District*, 312 F. Supp. 3d 1295, 1306 (M.D. Fla. 2018).[22]

[22] The Supreme Court and other courts have held that irreparable harm results from the enforcement of a state law that violates the Constitution. *See New Orleans Pub. Serv., Inc. v. Council of City of New Orleans*, 491 U.S. 350, 366-67 (1989) (assuming that irreparable injury may be established "by a showing that the challenged state statute is flagrantly and patently violative of . . . the express constitutional prescription of the Supremacy Clause") (citation and internal quotation marks omitted); *United States v. Arizona*, 641 F.3d 339, 366 (9th Cir. 2011) ("We have 'stated that an alleged constitutional infringement will often alone constitute

III. The Balance of the Equities and the Public Interest Both Weigh in the United States' Favor

The final two factors governing the issuance of preliminary relief—the balance of equities and the public interest—merge where the federal government is a party. *Nken v. Holder*, 556 U.S. 418, 435 (2009); *see also Pursuing Am.'s Greatness v. Fed. Election Comm'n*, 831 F.3d 500, 511 (D.C. Cir. 2016) (Government's "harm and the public interest are one and the same, because the government's interest is the public interest"). Here, these factors manifestly favor the United States. The United States has a strong and legitimate interest in ensuring that states respect their obligations under the Constitution, and in fulfilling the United States' responsibilities under Federal law.[23] If this Court does not grant preliminary relief, the lives of many transgender youth in Alabama and their families will be upended while the court continues to evaluate the lawfulness of S.B. 184 during the pendency of the litigation. *See Planned Parenthood Southeast, Inc.*, 951 F. Supp. 2d at 1290.

By contrast, Alabama will suffer no harm if the preliminary relief sought by the United States is granted; as discussed above, S.B. 184 fails to protect the health of minors notwithstanding its purported motivations. *See* pp. 19-20, *supra*.

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irreparable harm.'"); *see also City of El Cenizo v. Texas*, 264 F. Supp. 3d 744, 809 (W.D. Tex. 2017).

[23] *See* Letter from Kristen Clarke, Assistant Attorney General for Civil Rights, U.S. Dep't of Justice, to State Attorneys General (March 31, 2022), https://go.usa.gov/xuR8w.

Moreover, because the United States has demonstrated that it is likely to prevail on the merits, an injunction preventing the enforcement of the unconstitutional legislation poses no harm. *Alabama*, 691 F.3d at 1301 ("Frustration of federal statutes and prerogatives are not in the public interest, and we discern no harm from the state's nonenforcement of invalid legislation."); *KH Outdoor, LLC v. City of Trussville*, 458 F.3d 1261, 1271-72 (11th Cir. 2006) ("the city has no legitimate interest in enforcing an unconstitutional ordinance."). In sum, the balance of the equities and the public interest weigh in the United States' favor.

CONCLUSION

For the foregoing reasons, the Court should grant the United States' motion for a temporary restraining order and a preliminary injunction.

Dated: April 29, 2022

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on April 29, 2022, I electronically filed the foregoing with the Clerk of the Court using the CM/ECF system, which will send notification of such filing to counsel of record, in accordance with Rules 24(c) and 5(b)(2)(E).

Respectfully submitted,

s/ *Jason R. Cheek*
Jason R. Cheek
Assistant U.S. Attorney

EXHIBIT 1

Declaration of

Armand H. Antommaria, MD, PhD, FAAP, HEC-C

IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF ALABAMA
NORTHERN DIVISION

REV. PAUL A. EKNES-TUCKER, et al., Plaintiffs, and UNITED STATES OF AMERICA, Plaintiff-Intervenor, v. KAY IVEY, in her official capacity as Governor of Alabama, et al. Defendants.	Case No. 2:22-cv-184-LCB-SRW

EXPERT DECLARATION OF ARMAND H. ANTOMMARIA, MD, PhD, FAAP, HEC-C

1. Counsel for the United States have retained me as an expert in connection with the above-captioned litigation.

2. 2022 Alabama Senate Bill 184 (SB 184) singles out for anomalous treatment certain medical interventions when these interventions are used for the purpose of gender transition, which I will refer to as gender-affirming medical care, criminalizing healthcare professionals who provide minors gender-affirming medical care or who refer minors for such care.

3. The legislative findings in SB 184 do not provide a sound medical or ethical basis for criminalizing the provision of gender-affirming medical care to minors with gender dysphoria nor could they because a sound medical or ethical basis for criminalizing such care does not exist.

4. I have actual knowledge of the matters stated in this declaration. In preparing this declaration, I reviewed the materials listed in the attached Bibliography (Exhibit A), as well as SB 184. I may rely on those documents as additional support for my opinions. I have also relied on my years of research and relevant experience, as set out in my curriculum vitae (Exhibit B), and on the materials listed therein. The materials I have relied upon in preparing this declaration are the same types of materials that experts in medicine and bioethics regularly rely upon when forming opinions on the subject. I may wish to supplement these opinions or the bases for them as a result of new scientific research or publications, or in response to statements and issues that may arise in my area of expertise.

BACKGROUND AND QUALIFICATIONS

5. I hold the following positions at Cincinnati Children's Hospital Medical Center: Director of the Ethics Center, Lee Ault Carter Chair of Pediatric Ethics, and Attending Physician in the Division of Hospital Medicine. I am also a

Professor in the Departments of Pediatrics and Surgery at the University of Cincinnati College of Medicine.

6. In 2000, I received both my medical degree from Washington University School of Medicine in St. Louis, Missouri and my PhD in Religious Ethics from The University of Chicago Divinity School. I completed my Pediatrics residency at the University of Utah in 2003.

7. I have been licensed to practice medicine since 2001 and am currently licensed to practice medicine in Ohio. I have been Board Certified in General Pediatrics since 2004 and in Pediatric Hospital Medicine since the inception of this certification in 2019. I have been certified as a Healthcare Ethics Consultant since the inception of this certification in 2019.

8. I have extensive experience as a practicing pediatrician. I have been in clinical practice since 2003 and approximately 30 percent of my current work is dedicated to caring for hospitalized patients.

9. I also have extensive experience as a bioethicist. Bioethicists examine the ethical issues that arise in medicine and the life sciences. I was Chair of the Ethics Committee at Primary Children's Medical Center in Salt Lake City, Utah from 2005 to 2012 and have been Director of the Ethics Center at Cincinnati Children's Hospital Medical Center since 2012. I consult on patients in the Transgender Health Clinic at Cincinnati Children's Hospital Medical Center whose

care presents unique ethical issues and participate in the Clinic's monthly multidisciplinary team meetings. I remain current with the medical and bioethics literature regarding the treatment of minors with gender dysphoria. I am also part of Cincinnati Children's Hospital Medical Center team that cares for patients born with intersex traits, also known as differences or disorders of sex development (DSD). I am also the Chair of Cincinnati Children's Hospital Medical Center Fetal Care Center's Oversight Committee, which provides the Center with recommendations regarding innovation and research.

10. I am a member of the American Academy of Pediatrics (AAP), the American Society for Bioethics and Humanities (ASBH), the Association of Bioethics Program Directors, and the Society for Pediatric Research. I was a member of the AAP's Committee on Bioethics from 2005 to 2011. I served as a member of the ASBH's Clinical Ethics Consultation Affairs Committee from 2009 to 2014 and currently serve on its Healthcare Ethics Consultant Certification Commission.

11. I am the author of 38 peer-reviewed journal articles, 11 non-peer-reviewed journal articles, 6 book chapters, and 26 commentaries. My peer-reviewed journal articles have been published in high-impact journals, including the *Journal of the American Medical Association* and *Annals of Internal Medicine.* I am also an

author of 17 policy statements and technical reports, including 4 as lead author, by the AAP.

12. I am a member of the Executive Editorial Board and the Associate Editor for Ethics Rounds of *Pediatrics*. *Peditrics* is the AAP's flagship journal and Ethics Rounds is a type of article in which commentators analyze cases that raise ethical issues. I am an active peer reviewer for many medical journals, including the *American Journal of Bioethics* and the *Journal of Pediatrics*. I also review abstracts for meetings of professional organizations, including the Pediatric Academic Societies and ABSH. I was previously a member of the editorial boards of the *Journal of Clinical Ethics* and the *Journal of Medical Humanities.*

13. I have prepared declarations as an expert witness in the following cases involving the provision of gender-affirming medical care to adolescents with gender dysphoria: *Brant v. Rutledge*, Case No. 4:21CV450-JM (E.D. Ark.), *Doe v. Abbott*, No. D-1-GN-22-000977, 2022 WL 628912 (Tex. Dist. 353rd Judicial District, March 2, 2022), and *Walker v. Marshall*, No. 2:22-cv-167-ECM-SMD (M.D. Ala.). In *Doe v. Abbott*, I testified in court as an expert witness. I am being compensated at an hourly rate of $250 per hour for preparation of expert declarations and reports, and $400 per hour for time spent preparing for or giving deposition or trial testimony. My compensation does not depend on the outcome of this litigation, the opinions I express, or the testimony I provide.

GENDER-AFFIRMING MEDICAL CARE IS CLINICAL CARE

14. The SB 184 legislative findings claim that the use of gonadotrophin releasing hormone (GnRH) agonists, colloquially known as puberty blockers, to treat gender dysphoria[1] are experimental and not approved by the U.S. Food and Drug Administration (FDA). These claims are inaccurate and irrelevant, respectively.

15. Clinical practice and research are distinguished by their goals and methods. The goal of clinical practice is to benefit individual patients, and its method is individualized decision-making. The goal of research is to contribute to generalizable knowledge, and its method uses formal protocols that describe the research study's objectives and procedures. *See* National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. *The Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects of Research.* The Commission; 1978.

16. The clinical use of puberty blockers to treat gender dysphoria is not research or experimentation. The same is true for gender-affirming hormone treatment and mastectomies on transgender males (individuals assigned female at birth who identify as male) referred to at chest surgery. When administering these

[1] Gender dysphoria is "a marked incongruence between one's experienced/expressed gender and their assigned gender" which is "associated with clinically significant distress or impairment in social, occupational, or other important areas of functioning." American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders.* 5th ed. American Psychiatric Publishing; 2013.

treatments, clinicians seek to benefit individual patients and adjust the treatment based on individual patients' responses.

17. To the extent the legislative findings use the term "experimental" to convey an absence of evidence for gender affirming medical care, that suggestion is baseless. Gender affirming medical care is supported by clinical studies, evidence comparable to many other treatments in pediatrics, as detailed below.

18. SB 184 not only criminalizes gender-affirming medical care as clinical care, but also criminalizes the provision of these interventions as research. Such research is necessary, as it is in every area of medicine, to continue to advance treatment.

19. The suggestion that because puberty blockers and gender-affirming hormone treatment are not approved by the FDA for the treatment of gender dysphoria they are therefore experimental or unsafe is misleading. Off-label use of FDA-approved medications is legal, common, and often evidence-based.

20. FDA approval is not required for all uses of a medication. Once the FDA has approved a medication for one indication,[2] thereby agreeing that it is safe

[2] According to the FDA, an indication includes a number of factors: the particular disease or condition or the manifestion or symptoms of the disease or condition for which the drug is approved; whether the drug is approved for treatment, prevention, mitigation, cure, or diagnosis; and the population, including age group, for which the drug is safe and effective. Center for Drug Evaluation and Research and Center for Biologics Evaluation and Research, Food and Drug Administation,

(*i.e.*, its benefits outweigh its potential risks) and effective for this intended use, as is the case with the medications at issue here, prescribers are generally free to prescribe it for other indications. U.S. Food & Drug Administration. Understanding unapproved use of approved drugs "off label." February 5, 2018. Accessed March 23, 2022. https://www.fda.gov/patients/learn-about-expanded-access-and-other-treatment-options/understanding-unapproved-use-approved-drugs-label. The American Academy of Pediatrics (AAP) Committee on Drugs states, "[i]t is important to note that the term 'off-label' does not imply an improper, illegal, contraindicated, or investigational use" and "[t]he administration of an approved drug for a use that is not approved by the FDA is not considered research and does not warrant special consent or review if it is deemed to be in the individual patient's best interest."

21. The AAP Committee on Drugs further states "in no way does a lack of labeling signify that therapy is unsupported by clinical experience or data in children." Frattarelli DA, Galinkin JL, Green TP, et al. Off-label use of drugs in

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U.S. Department of Health and Human Services. Inidcations and Usage Section of Labeling for Human Prescription Drug and Biological Products—Content and Format: Guidance for Industry. July 2018. Accessed April 29, 2022. Available at https://www.fda.gov/files/drugs/published/Indications-and-Usage-Section-of-Labeling-for-Human-Prescription-Drug-and-Biological-Products-%E2%80%94-Content-and-Format-Guidance-for-Industry.pdf. A medication approved for the treatment of asthma in adults whould, for example, be prescribed off label if used to treat a different disease, like pneumonia, or a different age group, like children.

children. *Pediatrics*. 2014;133(3):563-567. Among the reasons for this is that, even if there is substantial evidence of safety and efficacy for a new indication, a sponsor may not seek FDA approval for it because doing so is not economically beneficial. Wittich CM, Burkle CM, Lanier WL. Ten common questions (and their answers) about off-label drug use. *Mayo Clin Proc*. 2012;87(10):982-990.

22. "Off-label" use of drugs is common in many areas of medicine, including pediatrics. For example, nafcillin, an antibiotic commonly used to treat children with invasive staphylococcal infections, such as lung or joint infections, lacks FDA approval in individuals under 18 years of age. *See* Nafcillin Injection, USP. February 2007. Accessed April 5, 2022. Available at https://www.accessdata.fda.gov/drugsatfda_docs/label/2008/050655s017lbl.pdf. A recent study of children's hospitals found that in 28.1% of encounters, at least one off-label drug was prescribed. *See* Yackey K, Stukus K, Cohen D, Kline D, Zhao S, Stanley R. Off-label medication prescribing patterns in pediatrics: An update. *Hosp Pediatr*. 2019;9(3):186-193. Examples of medications used off-label in this study included: albuterol, which is used to treat asthma; morphine, which is used to treat pain; and lansoprazole (Prevacid®), which is used to treat gastrointestinal reflux. The rate of off-label use may be significantly higher in certain age groups, categories of drugs, and clinical settings.

THE SAFETY AND EFFICACY OF GENDER-AFFIRMING MEDICAL CARE IS SUPPORTED BY EVIDENCE

23. The SB 184 legislative findings also incorrectly characterize gender-affirming medical treatment as new, unproven, and poorly studied. Gender-affirming medical care is not new. Hormone treatment for gender dysphoria began soon after estrogen and testosterone became commercially available in the 1930's. Stryker S. *Transgender History*. 2nd ed. Seal Press; 2017. The use of puberty blockers to treat gender dysphoria in adolescents, while more recent, is not new. The first reference to this treatment in the medical literature was in 1998, over twenty years ago. Cohen-Kettenis PT, van Goozen SH. Pubertal delay as an aid in diagnosis and treatment of a transsexual adolescent. *Eur Child Adolesc Psychiatry*. 1998;7(4):246-248. Prospective observational trials of puberty blockers began recruiting participants in 2000. de Vries AL, Steensma TD, Doreleijers TA, Cohen-Kettenis PT. Puberty suppression in adolescents with gender identity disorder: A prospective follow-up study. *J Sex Med*. 2011;8(8):2276-2283

24. Gender-affirming medical care of adolescents with gender dysphoria is also neither poorly studied nor unproven. The major categories of studies used to evaluate innovative treatments are observational studies, which include cross-sectional and longitudinal studies, and randomized trials. In cross-sectional studies, investigators collect data at a single point in time. Cross-sectional design permits investigators to examine potential associations between factors, but it cannot prove

one factor caused the other. In longitudinal studies, researchers follow individuals over time, making continuous or repeated measures. In a randomized trial, participants are randomly assigned to a treatment or a comparison group. Neither the investigators nor the participants know to which group the participant is assigned. The major benefit of a randomized trial is that it decreases the likelihood that any differences in the outcomes between the groups is the result of baseline differences between the groups rather than the result of the intervention. Guyatt G, Rennie D, Meade MO, et al., eds. *Users' Guide to the Medical Literature: A Manual for Evidence-Based Clinical Practice*. 3rd ed. McGraw Hill Education; 2015; Perry-Parrish C, Dodge R. Research and statistics: Validity hierarchy for study design and study type. *Pediatr Rev*. 2010;31(1):27-29.

25. While randomized controlled trials are described in the medical literature as "high quality" evidence and observational studies as "low quality" evidence, randomized controlled trials may not be feasible or ethical, may have intrinsic methodological limitations, or may be unavailable in some contexts. "Low quality" evidence can be sufficient to justify treatment recommendations. *See* Swiglo BA, Murad MH, Schunemann HJ, et al. A case for clarity, consistency, and helpfulness: State-of-the-art clinical practice guidelines in endocrinology using the Grading of Recommendations, Assessment, Development, and Evaluation System. *J Clin Endocrinol Metab*. 2008;93(3):666-673. For example, the Endocrine Society

recommends that "clinicians prescribe and support the reduction of inactivity and also a minimum of 20 minutes of moderate to vigorous physical activity daily, with a goal of 60 minutes, all in the context of a calorie-controlled diet" to treat obesity. This recommendation is based on "low quality" evidence. Styne DM, Arslanian SA, Connor EL, et al. Pediatric obesity-assessment, treatment, and prevention: An Endocrine Society clinical practice guideline. *J Clin Endocrinol Metab*. 2017;102(3):709-757.

26. It may, at times, be unethical to conduct randomized trials. For randomized trials to be ethical, clinical equipoise must exist; that is, there must be uncertainty about whether the efficacy of the intervention or the control is greater. It would be unethical to knowingly expose some trial participants to an inferior intervention. Trials must also be feasible. It would be unethical to expose individuals to the risks of trial participation without the benefit of the trial generating generalizable knowledge. A randomized trial that is unlikely to find enough people to participate because they believe they might be randomized to an inferior intervention would be unethical because it could not generate generalizable knowledge due to an inadequate sample size. *See* Emanuel EJ, Wendler D, Grady C. What makes clinical research ethical? *JAMA*. 2000;283(20):2701-2711.

27. The use of puberty blockers to treat gender dysphoria is supported by prospective observational trials including: Delemarre-van de Waal HA, Cohen-

Kettenis PT. Clinical management of gender identity disorder in adolescents: A protocol on psychological and pediatric endocrinology aspects. *Eur J Endocrinol.* 2006;155(suppl 1):S131–S137; de Vries AL, Steensma TD, Doreleijers TA, Cohen-Kettenis PT. Puberty suppression in adolescents with gender identity disorder: A prospective follow-up study. *J Sex Med*. 2011;8(8):2276-2283; and de Vries AL, McGuire JK, Steensma TD, Wagenaar EC, Doreleijers TA, Cohen-Kettenis PT. Young adult psychological outcome after puberty suppression and gender reassignment. *Pediatrics*. 2014;134(4):696-704.

28. Gender-affirming hormone therapy to treat gender dysphoria is also supported by prospective observational trails. These trials include de Vries AL, McGuire JK, Steensma TD, Wagenaar EC, Doreleijers TA, Cohen-Kettenis PT. Young adult psychological outcome after puberty suppression and gender reassignment. Pediatrics. 2014;134(4):696-704.

29. There are also ongoing federally funded prospective observational trials of gender-affirming healthcare for adolescents with gender dysphoria in the U.S., trials that SB 184 would criminalize in Alabama. *See* National Institutes of Health RePORTER, The impact of early medical treatment in transgender youth. Accessed January 21, 2022. https://reporter.nih.gov/search/lGJnh68uokiic97N2X00kA/project-details/8965408; Olson-Kennedy J, Chan YM, Garofalo R, et al. Impact of early

medical treatment for transgender youth: Protocol for the longitudinal, observational trans youth care study. *JMIR Res Protoc*. 2019;8(7):e14434.

30. Under the applicable ethical standards, randomized, placebo-controlled trials (trials that compare pharmacological treatment to no pharmacological treatment) in gender dysphoria are currently unethical. Potential investigators do not have equipoise between pharmacological treatment and no pharmacological treatment; they believe that pharmacological treatment is superior. It is also highly unlikely that enough participants would enroll in randomized controlled trials for them to be informative. *See* Chew D, Anderson J, Williams K, May T, Pang K. Hormonal treatment in young people with gender dysphoria: A systematic review. *Pediatrics*. 2018;141(4):e20173742; Reisner SL, Deutsch MB, Bhasin S, et al. Advancing methods for US transgender health research. *Curr Opin Endocrinol Diabetes Obes*. 2016;23(2):198-207.

31. Even if randomized, placebo-controlled trials of gender-affirming health care were ethical, they would provide a lower quality of evidence because of intrinsic limitations in their design. For example, it would be impossible to "blind" the investigators or the participants to whether the participants were receiving the active treatment or a placebo. They would know if they were in the intervention or control arm of the study due to the physical changes in their bodies, or the lack thereof, over time. This might bias their perception of the outcomes. Atkins D, Best

D, Briss PA, et al. Grading quality of evidence and strength of recommendations. *BMJ*. 2004;328(7454):1490.

32. In the field of pediatrics, parents and their children often must make decisions about medical care without the benefit of randomized trials. Clinical research focusing on children is less likely to use randomized trials than is clinical research for adults. Reasons for this disparity include the low prevalence of childhood disease or conditions, small market share for therapeutic agents in children, low level of National Institutes of Health funding, and difficulty enrolling children in research. *See* Martinez-Castaldi C, Silverstein M, Baucher H. Child versus adult research: The gap in high-quality study design. *Pediatrics*. 2008;122(1):52-57.

33. One directly relevant example of a widely accepted treatment based on prospective observational trials is the use of puberty blockers to treat central precocious puberty. Central precocious puberty is the premature initiation of puberty, before age 8 in people assigned female at birth and before age 9 in people assigned male, by the central nervous system. Its negative effects include impairment of final adult height as well as antisocial behavior and lower academic achievement. There are no randomized trials evaluating the adult height of treated and untreated individuals. Most studies are observational and compare pretreatment predicted and actual final height. These studies have additional limitations including

small sample sizes. This "low quality" evidence is nonetheless sufficiently strong to support the use of GnRH agonists as the standard of care for treatment of central precocious puberty. *See* Mul D, Hughes IA. The use of GnRH agonists in precocious puberty. *Eur J Endocrinol*. 2008;159(Suppl 1):S3-8.

34. Professional medical organizations develop evidence-based clinical practice guidelines to provide clinicians with helpful, evidence-based recommendations and improve patient care and outcomes. Organizations develop guidelines using systematic processes to select and review scientific evidence. Guidelines typically rate the quality of the evidence and grade the strength of recommendations. American Academy of Pediatrics Steering Committee on Quality Improvement and Management. Classifying recommendations for clinical practice guidelines. *Pediatrics*. 2004;114(3):874-877; Atkins D, Best D, Briss PA, et al. Grading quality of evidence and strength of recommendations, *BMJ*. 2004;328(7454):1490.

35. The Endocrine Society, an international medical organization of over 18,000 endocrinology researchers and clinicians, has published a clinical practice guideline for the treatment of gender-dysphoric (GD)/gender-incongruent persons, which may include pubertal suppression, gender-affirming hormone therapy, and gender-affirming surgery. The guideline both rates the quality of the supporting evidence and grades the strength of its recommendations. It recommends both the

use of puberty blockers and gender-affirming hormone therapy to treat gender dysphoria in adolescents based on the best available evidence. The guideline recommends delaying gender-affirming genital surgery that removes the testicles, ovaries, and/or uterus until adulthood. *See* Hembree WC, Cohen-Kettenis PT, Gooren L, et al. Endocrine treatment of gender-dysphoric/gender-incongruent persons: An Endocrine Society clinical practice guideline. *J Clin Endocrinol Metab*. 2017;102(11):3869-3903; *see also* World Professional Organization for Transgender Health. *Standards of Care for the Health of Transsexual, Transgender, and Gender-Nonconforming People*, Version 7. World Professional Association for Transgender Health (WPATH); 2012.

36. Recommendations for pediatric care made by professional associations in guidelines are seldom based on well-designed and conducted randomized controlled trials due to their rarity and are frequently based on observational studies or, if such studies are unavailable, expert opinion. The medical use of the term "expert opinion" in this context differs from what I understand to be the use of this term in legal contexts. It refers to the consensus of experts in the field when studies are not available.

37. For example, none of the Endocrine Society's 84 recommendations in two of its other guidelines that focus on the pediatric population—guidelines on pediatric obesity and congenital adrenal hyperplasia—is based on "high quality"

evidence. Twenty-four (29%) of the recommendations are based on "moderate," and 49 (58%) on "low" or "very low quality" evidence. The remaining recommendations (11, 13%) are Ungraded Good Practice Statements. Table 1 (Exhibit C). See Speiser PW, Arlt W, Auchus RJ, et al. Congenital adrenal hyperplasia due to steroid 21-hydroxylase deficiency: An Endocrine Society clinical practice guideline. *J Clin Endocrinol Metab*. 2018;103(11):4043-88; Styne DM, Arslanian SA, Connor EL, et al. Pediatric obesity-assessment, treatment, and prevention: An Endocrine Society clinical practice guideline. *J Clin Endocrinol Metab*. 2017;102(3):709-757.

38. Guidelines issued by other professional associations concerning pediatric medical care are similar. For example, of the 130 recommendations in the American Heart Association's guideline for Pediatric Basic and Advanced Life Support, only 1 (1%) is based on "high-quality evidence from more than 1 [randomized clinical trial]" and 3 (3%) on "moderate-quality evidence from 1 or more [randomized clinical trials]." The remainder of the recommendations were based on lower quality evidence. Topjian AA, Raymond TT, Atkins D, et al. Part 4: Pediatric basic and advanced life support: 2020 American Heart Association guidelines for cardiopulmonary resuscitation and emergency cardiovascular care. *Circulation*. 2020;142(16_suppl_2):S469-S523. As reflected in medical professional associations' guidelines, medical treatment in pediatrics is infrequently

based on "high" quality evidence and commonly based on lower quality evidence, including observational studies.

PARENTS AND LEGAL GUARDIANS ARE CAPABLE OF PROVIDING INFORMED CONSENT FOR GENDER-AFFIRMING MEDICAL CARE

39. SB 184 also incorrectly asserts that minors and their parents are unable to comprehend and fully appreciate the risks and life implications of gender-affirming health care.

40. First and foremost, parents or legal guardians generally must provide informed consent for medical treatment for minors, including gender-affirming medical care. There is no evidence cited in support of the assertion that parents of adolescents with gender dysphoria are unable to comprehend and fully appreciate the implications of gender-affirming medical care. Parents or legal guardians are frequently asked to consent to medical treatments for minors with comparable risks, uncertainty, or levels of evidence. Limitations in adults' ability to predict what will contribute to satisfaction in the future, called affective forecasting, is not unique to decisions regarding gender-affirming medical care. And there are approaches healthcare providers use to improve affective forecasting. Wilson TD, Gilbert DT. Affective forecasting: Knowing what to want. *Curr Dir Psychol Sci.* 2005;14(3):131-134; Halpern J, Arnold RM. Affective forecasting: An unrecognized challenge in making serious health decisions. *J Gen Intern Med*. 2008;23(10):1708-1712.

41. Adolescents generally possess comparable medical decision-making capacity to adults. Louis A. Weithorn and Susan B. Campbell, for example, found that 14-year-olds performed similarly to adults with respect to their ability to understand and reason about treatment information. Weithorn LA, Campbell SB. The competency of children and adolescents to make informed treatment decisions. *Child Dev*. 1982;53(6):1589-1598. There is evidence that most adolescents with gender dysphoria have sufficient medical decision-making capacity to make decisions regarding puberty blockers. Vrouenraets L, de Vries ALC, de Vries MC, van der Miesen AIR, Hein IM. Assessing medical decision-making competence in transgender youth. *Pediatrics*. 2021;148(6): e2020049643. Similar to the aforementioned approaches to improve adult's affective forecasting, there are steps that healthcare providers take to promote adolescents' decision-making capacity. Katz AL, Webb SA, Committee on Bioethics. Informed consent in decision-making in pediatric practice. *Pediatrics*. 2016;138(2):e20161485.

42. The current standard of care for treating gender dysphoria in minors is consistent with general ethical principles instantiated in the practices of informed consent and shared decision-making. The Endocrine Society clinical practice guideline extensively discusses the potential benefits, risks, and alternatives to gender-affirming medical care, and its recommendations regarding the timing of interventions are based in part on the treatment's potential risks and the adolescent's

decision-making capacity. The guideline recommends that informed consent for pubertal blockers and gender-affirming hormones include a discussion of the implications for fertility and options for fertility preservation. The Endocrine Society clinical guideline also advises delaying gender-affirming hormone treatment, which results in partly irreversible physical changes until an adolescent has has developed sufficient medical decision-making capacity. The guideline states clinicians should individualize decision-making for breast or chest surgery in transgender males and that chest surgery may be considered in individuals under 18 years old. *See* Hembree WC, Cohen-Kettenis PT, Gooren L, et al. Endocrine treatment of gender-dysphoric/gender-incongruent persons: An Endocrine Society clinical practice guideline. *J Clin Endocrinol Metab*. 2017;102(11):3869-3903.

SB 184 SINGLES OUT GENDER-AFFIRMING MEDICAL CARE FOR ANOMALOUS TREATMENT

43. SB 184's legislative findings do not provide a sufficient basis for criminalizing and singling out for anamolous treatment the provision of gender-affirming healthcare to adolescents with gender dysphoria. For example, as previously mentioned, SB 184 permits the use of puberty blockers to treat central precocious puberty, but criminalizes the use of puberty blockers to treat gender dysphoria, even though using puberty blockers in connection with both conditions has comparable risks and is supported by comparable types of evidence.

44. Additionally, while SB 184 would prohibit chest surgery on transgender males, minors are permitted to undergo many comparable surgeries, such as those for gynecomastia, pectus excavatum or carinatum, and breast reconstruction. Gynecomastia is the proliferation of ductal or glandular breast tissue, as opposed to adipose tissue or fat, in individuals whose sex assigned at birth is male. Pectus excavatum and carinatum are chest wall anomalies in which the sternum is depressed or protrudes, respectively. While surgeries to treat these conditions, as well as breast reduction and augmentation for individuals whose sex assigned at birth and gender identity are female, may at times be performed to lessen physical symptoms, such as pain or exercise intolerance, they are commonly performed to reduce psychosocial distress. Gynecomastia and breast augmentation surgery affirm patients' gender identity, that is, to respectively help someone assigned male at birth feel more typically masculine and someone assigned female at birth feel more typically feminine. Risks of these procedures include bleeding, infection, scarring and poor cosmetic outcome, loss of sensation, and impaired breast/chest feeding. Some surgeries have unique risks such as catastrophic perforations of the heart or lungs in some forms of pectus repair, or capsule formation around a breast implant causing hardening and pain. *See* Buziashvili D, Gopman JM, Weissler H, et al. An evidence-based approach to management of pectus excavatum and carinatum. *Ann Plast Surg.* 2019;82(3):352-358; Nordt CA,

DiVasta AD. Gynecomastia in adolescents. *Curr Opin Pediatr*. 2008;20(4):375-382; Zuckerman D, Abraham A. Teenagers and cosmetic surgery: Focus on breast augmentation and liposuction. *J Adolesc Health*. 2008;43(4):318-324.

45. As these examples of chest surgeries in adolescents illustrate, surgeries for minors can require weighing short- and long-term effects, benefits, and risks in the face of uncertainty. Individual needs shape these evaluations and, therefore, the adolescents' participation is essential. There is nothing unique about chest surgery for gender dysphoria that justifies singling out this and other medical treatments for gender dysphoria for a criminal prohibition based on a concern for adolescents' inability to assent or parents or guardians' inability to consent. As with other medical decisions for adolescents, medical decisions regarding treatment for gender dysphoria should continue to be left to the discretion of transgender adolescents, their parents or guardians, and their healthcare providers.

46. Ironically, while SB 184 criminalizes gender-affirming medical care for youth with gender dysphoria in the name of protecting vulnerable children, the statute expressly allows doctors to perform irreversible surgeries on infants and children with intersex conditions or differences or disorders of sex development (DSD) at ages when they are unable to meaningfully participate in medical decision making. Such surgeries are highly controversial when performed at such an early age and can result in life-long complications and side effects. *See* Frader J, Alderson

P, Asch A, et al. Health care professionals and intersex conditions, *Arch Pediatr Adolesc Med*. 2004;158(5):426-428.

CONCLUSIONS

47. The Endocrine Society's recommendations for treating adolescents with gender dysphoria with pubertal suppression, gender-affirming hormones, and chest surgery are well within the range of other decisions that adolescents and their parents or guardians in Alabama have the discretion to make. Based on my research and experience as a pediatrician and bioethicist, there is no sound medical or ethical basis to criminalize this care. Doing so puts clinicians in the untenable position of having to either follow state law and knowingly harm their patients, or face penalties including imprisonment and loss of their medical licenses.

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

Executed: April 29, 2022 

ARMAND H. MATHENY ANTOMMARIA, MD, PhD

EXHIBIT A

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EXHIBIT B

Curriculum Vitae

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1983-1987	BS	Valparaiso University (Chemistry), with High Distinction Valparaiso, IN
1987-1989	MD	Washington University School of Medicine
1998-2000		Saint Louis, MO
1989-2000	PhD	The University of Chicago Divinity School (Religious Ethics) Chicago, IL
2000-2003	Resident	University of Utah (Pediatrics) Salt Lake City, UT
2005-2006	Certificate	Conflict Resolution Certificate Program, University of Utah Salt Lake City, UT

BOARD CERTIFICATION

2019 Pediatric Hospital Medicine, American Board of Pediatrics
2019 Healthcare Ethics Consultant-Certified, Healthcare Ethics Consultation Certification Commission
2004 General Pediatrics, American Board of Pediatrics

PROFESSIONAL LICENSES

2012-Present	Doctor of Medicine, Ohio
2006-2010	Alternative Dispute Resolution Provider—Mediator, Utah
2001-2014	Physician and Surgeon, Utah
2001-2014	Physician and Surgeon Controlled Substance, Utah

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2019-Present	*Professor* Cincinnati Children's Hospital Medical Center, Cincinnati, OH Department of Surgery
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2012-Present	*Lee Ault Carter Chair in Pediatric Ethics*
	Cincinnati Children's Hospital Medical Center
2012-2016	*Associate Professor-Affiliated*
	University of Cincinnati, Cincinnati, OH
	Department of Pediatrics
2010-2012	*Associate Professor of Pediatrics* (with Tenure)
	University of Utah School of Medicine, Salt Lake City, UT
	Divisions of Inpatient Medicine and Medical Ethics
2010-2012	*Adjunct Associate Professor of Medicine*
	University of Utah School of Medicine, Salt Lake City, UT
	Division of Medical Ethics and Humanities
2004-2010	*Assistant Professor of Pediatrics* (Tenure Track)
	University of Utah School of Medicine, Salt Lake City, UT
	Divisions of Inpatient Medicine and Medical Ethics
2004-2010	*Adjunct Assistant Professor of Medicine*
	University of Utah School of Medicine, Salt Lake City, UT
	Division of Medical Ethics and Humanities
2003-2004	*Instructor of Pediatrics* (Clinical Track)
	University of Utah School of Medicine, Salt Lake City, UT
	Divisions of Inpatient Medicine and Medical Ethics
2003-2004	*Adjunct Instructor of Medicine*
	University of Utah School of Medicine, Salt Lake City, UT
	Division of Medical Ethics

Part Time Positions

2021	*Consultant*
	Proctor & Gamble, Cincinnati, OH
2019	*Consultant*
	Sanofi Genzyme, Cambridge, MA
2018-Present	*Consultant*
	Center for Conflict Resolution in Healthcare, Memphis, TN
2017-2020	*Consultant*
	Amicus Therapeutics, Cranbury, NJ

2017	*Expert Witness* Robert J. Klickovich, MD, PLLC v. Tristate Arthritis & Rheumatology, PSC, *et al.,* Commonwealth of Kentucky, Boone Circuit Court, Division III, Civil Action No. 16-CI-01690
2017	*Consultant* Sarepta Therapeutics, Cambridge, MA
2014	*Consultant* Genzyme, A Sanofi Company, Cambridge, MA

Editorial Experience

Editorial Board

2020-Present	*Pediatrics,* Associate Editor for Ethics Rounds and Member of the Executive Editorial Board
2015-2020	*Journal of Clinical Ethics*
2009-2020	*Journal of Medical Humanities*

Guest Academic Editor

2017	*PLOS|ONE*

Ad Hoc Reviewer: *Academic Medicine, Academic Pediatrics, AJOB Primary Research, American Journal of Bioethics, American Journal of Law & Medicine, American Journal of Medical Genetics, American Journal of Transplantation, BMC Medical Ethics, BMJ Open, Canadian Journal of Bioethics, CHEST, Clinical Transplantation, European Journal of Human Genetics, Frontiers in Genetics, Hospital Medicine, International Journal of Health Policy and Management, International Journal of Nursing Studies, Journal of Adolescent and Young Adult Oncology, Journal of Clinical Ethics, Journal of Empirical Research on Human Research Ethics, Journal of General Internal Medicine, Journal of Healthcare Leadership, Journal of Hospital Medicine, Journal of the Kennedy Institute of Ethics, Journal of Law, Medicine & Ethics, Journal of Medical Ethics, Journal of Medical Humanities, Journal of Medicine and Life, Journal of Palliative Care, Journal of Pediatrics, Journal of Pediatric Surgery, Mayo Clinic Proceedings, Medicine, Healthcare and Philosophy, Molecular Diagnosis & Therapy, New England Journal of Medicine, Patient Preference and Adherence, Pediatrics, Pediatrics in Review, Personalized Medicine, PLOS\|ONE, Risk Management and Healthcare Policy, Saudi Medical Journal, SSM - Qualitative Research in Health,* and *Theoretical Medicine and Bioethics*

SCHOLASTIC AND PROFESSIONAL HONORS

2021	*Hidden Gem Award,* Cincinnati Children's Hospital Medical Center, Cincinnati, OH
2019-2021	*Presidential Citation,* American Society for Bioethics and Humanities, Chicago, IL
2016	*Laura Mirkinson, MD, FAAP Lecturer,* Section on Hospital Medicine, American Academy of Pediatrics, Elk Grove Village, IL
2016, 2018	*Certificate of Excellence*, American Society for Bioethics and Humanities, Glenview, IL
2013, 2016	*Senior Resident Division Teaching Award,* Cincinnati Children's Hospital Medical Center, Cincinnati, OH
2012	*Role Model*, Quality Review Committee, Primary Children's Medical Center, Salt Lake City, UT
2011	*Member*, Society for Pediatric Research, The Woodlands, TX
2011	*Presidential Citation*, American Society for Bioethics and Humanities, Glenview, IL
2009	*Role Model*, Quality Review Committee, Primary Children's Medical Center, Salt Lake City, UT
2008	*Nominee,* Physician of the Year, Primary Children's Medical Center, Salt Lake City, UT
2005-2006	*Fellow,* Medical Scholars Program, University of Utah School of Medicine, Salt Lake City, UT

1995-1997 *Doctoral Scholar*, Crossroads, A Program of Evangelicals for Social Action, Philadelphia PA
1989-1992 *Fellow*, The Pew Program in Medicine, Arts, and the Social Sciences, University of Chicago, Chicago, IL

ADMINISTRATIVE EXPERIENCE

Administrative Duties

2019-Present *Chair,* Oversight Committee, Cincinnati Fetal Center, Cincinnati, OH
2014-Present *Chair*, Ethics Committee, Cincinnati Children's Hospital Medical Center, Cincinnati, OH
2012-Present *Director*, Ethics Center, Cincinnati Children's Hospital Medical Center, Cincinnati, OH
2012-Present *Chair,* Ethics Consultation Subcommittee, Cincinnati Children's Hospital Medical Center, Cincinnati, OH
2010 *Co-Chair,* Ethics Subcommittee, Work Group for Emergency Mass Critical Care in Pediatrics, Centers for Disease Control and Prevention, Atlanta, GA
2009 *Chair*, Ethics Working Group, H1N1 and Winter Surge, Primary Children's Medical Center, Salt Lake City, UT
2005-2012 *Chair*, Ethics Committee, Primary Children's Medical Center, Salt Lake City, UT
2005-2012 *Chair*, Ethics Consultation Subcommittee, Primary Children's Medical Center, Salt Lake City, UT
2003-4 *Chair*, Clinical Pertinence Committee, Primary Children's Medical Center, Salt Lake City, UT

Professional & Scientific Committees

Committees

2021 *Member*, EMCO Capacity Collaboration, Ohio Hospital Association, Columbus, OH
2020-2021 *Member*, Allocation of Scarce Resources Work Group, Ohio Hospital Association, Columbus, OH
2020-Present *Member,* Literature Selection Technical Review Committee, National Library of Medicine, Bethesda, MD
2020 *Member*, Crisis Standards of Care Workgroup, The Health Collaborative, Cincinnati, OH
2019-Present *Member,* Healthcare Ethics Consultant Certification Commission, Oak Park, IL
2019 *Member,* Expert Panel, Pediatric Oncology End-of-Life Care Quality Markers, Institute for Cancer Outcomes & Survivorship, University of Alabama at Birmingham, Birmingham, AL
2018 *Member,* Resource Planning and Allocation Team Implementation Task Force, Ohio Department of Health, Columbus, OH
2012-Present *Member*, Gaucher Initiative Medical Expert Committee, Project HOPE, Millwood, VA
2009-2014 *Member,* Clinical Ethics Consultation Affairs Committee, American Society for Bioethics and Humanities, Glenview, IL
2005-2011 *Member,* Committee on Bioethics, American Academy of Pediatrics, Oak Park, IL

Data Safety and Monitoring Boards

2019-Present *Member,* Data and Safety Monitoring Board, Sickle Cell Domestic Trials, National Heart, Lung, and Blood Institute, Bethesda, MD
2018-2019 *Member,* Standing Safety Committee for P-188-NF (Carmeseal-MD™) in Duchenne Muscular Dystrophy, Phrixus Pharmaceuticals, Inc., Ann Arbor, MI
2017-Present *Member*, Observational Study Monitoring Board, Sickle Cell Disease Observational Monitoring Board, National Heart, Lung, and Blood Institute, Bethesda, MD
2016-2018 *Member,* Observational Study Monitoring Board, Long Term Effects of Hydroxyurea in Children with Sickle Cell Anemia, National Heart, Lung, and Blood Institute, Bethesda, MD

Reviewer

2020-Present	*Abstract Reviewer*, American Society for Bioethics and Humanities Annual Meeting
2020	*Grant Reviewer,* The Croatian Science Foundation, Hvatska zaklada za znanost (HRZZ)
2018	*Book Proposal Reviewer*, Elsevier
2018-2019	*Category Leader,* Religion, Culture, and Social Sciences, American Society for Bioethics and Humanities Annual Meeting
2017	*Timekeeper,* American Society for Bioethics and Humanities Annual Meeting
2017-Present	*Abstract Reviewer,* Pediatric Academic Societies Annual Meeting
2016-2021	*Workshop Reviewer*, Pediatric Academic Societies Annual Meeting
2016	*Grant Reviewer*, Innovation Research Incentives Scheme, The Netherlands Organisation for Health Research and Development
2016-2017	*Abstract Reviewer*, American Society for Bioethics and Humanities Annual Meeting
2014, 2016	*External Peer Reviewer*, PSI Foundation, Toronto, Ontario, Canada
2014	*Member,* Scientific Committee, International Conference on Clinical Ethics and Consultation
2013	*Abstract Reviewer*, American Society for Bioethics and Humanities Annual Meeting
2013	*Reviewer*, Open Research Area Plus, Agence Nationale de la Research, Deutsche Forschungsgemeinschaft, Economic and Social Research Council, National Science Foundation, and Organization for Scientific Research
2011-2012	*Abstract Reviewer,* Pediatric Academic Societies Annual Meeting
2011-2013	*Workshop Reviewer*, Pediatric Academic Societies Annual Meeting
2011-2014	*Abstract Reviewer*, Pediatric Hospital Medicine Annual Meeting
2011-2012	*Religious Studies Subcommittee Leader,* Program Committee, American Society for Bioethics and Humanities Annual Meeting
2010	*Abstract Reviewer*, American Society for Bioethics and Humanities Annual Meeting

Other

2021	*Timekeeper,* American Society for Bioethics and Humanities Annual Meeting
2021	*Mentor,* Early Career Advisor Professional Development Track, American Society for Bioethics and Humanities.
2021	*Mentor,* Early Career Advisor Paper or Project Track, American Society for Bioethics and Humanities.
2109	*Mentor*, Early Career Advising Program, American Society for Bioethics and Humanities
2018	*Passing Point Determination*, Healthcare Ethics Consultant-Certified Examination, Healthcare Ethics Consultant Certification Commission
2018	*Member*, Examination Committee, Healthcare Ethics Consultant-Certified Examination, Healthcare Ethics Consultant Certification Commission
2018	*Item Writer*, Healthcare Ethics Consultant-Certified Examination, Healthcare Ethics Consultant Certification Commission

UNIVERSITY COMMUNITY ACTIVITIES

Cincinnati Children's Hospital Medical Center

2020-Present *Member*, Faculty Diversity and Inclusion Steering Committee
2020-Present *Member*, Medical Management of COVID-19 Committee
2020-2021 *Member,* Caregiver Refusal Team
2020-2021 *Member,* COVID-19 Vaccine Allocation Committee
2020 *Member*, Personal Protective Equipment Subcommittee of the COVID-19 Steering. Committee
2018-2019 *Member,* Planning Committee, Center for Clinical & Translational Science & Training Research Ethics Conference
2017-Present *Member*, Donor Selection Committee
2017-2020 *Member,* Employee Emergency Fund Review Committee
2017 *Member,* Root Cause Analysis Team
2016-2017 *Member,* Planning Committee, Center for Clinical & Translational Science & Training Research Ethics Conference
2015-2019 *Member,* Destination Excellence Medical Advisory Committee
2015-Present *Member,* Disorders of Sexual Development Case Review Committee
2015-2019 *Member,* Destination Excellence Case Review Committee
2014-2018 *Member,* Genomics Review Group, Institutional Review Board
2014-2017 *Member,* Center for Pediatric Genomics Leadership Committee
2013-2017 *Member,* Genetic Testing Subcommittee, Health Network
2013-2016 *Member,* Schwartz Center Rounds Planning Committee
2013-2014 *Member*, Genomics Ad Hoc Subcommittee, Board of Directors
2012-Present *Member,* Cincinnati Fetal Center Oversight Committee
2012-Present *Member,* Ethics Committee
2012-Present *Member,* G-23
2012-2016 *Member,* Integrated Solid Organ Transplant Steering Committee

University of Utah

2009-2012 *Member,* Consolidated Hearing Committee

University of Utah School of Medicine

2010-2012 *Member,* Medical Ethics, Humanities, and Cultural Competence Thread Committee
2008-2010 *Member,* Fourth Year Curriculum Committee

University of Utah Department of Pediatrics

2010-2011 *Member,* Planning Committee, 25th Annual Biological Basis of Children's Health Conference, "Sex, Gender, and Sexuality"
2009-2012 *Member,* Medical Executive Committee
2005-2012 *Member,* Retention, Promotion, and Tenure Committee
2004-2012 *Interviewer,* Residency Program
2003-2012 *Member,* Education Committee

Intermountain Healthcare

2009-2012 *Member,* System-Wide Bioethics Resource Service
2009-2012 *Member,* Pediatric Guidance Council

Primary Children's Medical Center

2012-2012 *Member,* Shared Accountability Organization Steering Committee
2009 *Member*, H1N1 and Winter Surge Executive Planning Team
2005-2010 *Member,* Continuing Medical Education Committee
2005-2010 *Member*, Grand Rounds Planning Committee
2003-2012 *Member*, Ethics Committee

ACTIVE MEMBERSHIPS IN PROFESSIONAL SOCIETIES

2012-Present Association of Bioethics Program Directors
2011-Present Society for Pediatric Research
2000-Present American Academy of Pediatrics
1999-Present American Society of Bioethics and Humanities

FUNDING

Past Grants

2015-2019 "Better Outcomes for Children: Promoting Excellence in Healthcare Genomics to Inform Policy."
Percent Effort: 9%
National Human Genome Research Institute
Grant Number: 1U01 HG008666-01
Role: Investigator

2015-2016 "Ethics of Informed Consent for Youth in Foster Care"
Direct Costs: $10,000
Ethics Grant, Center for Clinical and Translational Science and Training
University of Cincinnati Academic Health Center
Role: Co-Investigator

2014-2015 "Extreme Personal Exposure Biomarker Levels: Engaging Community Physicians and Ethicists for Guidance"
Direct Costs: $11,640
Center for Environmental Genetics
University of Cincinnati College of Medicine
Role: Investigator

2014-2015 "Child, Adolescent, and Parent Opinions on Disclosure Policies for Incidental Findings in Clinical Whole Exome Sequencing"
Direct Costs: $4,434
Ethics Grant, Center for Clinical and Translational Science and Training, University of Cincinnati Academic Health Center
Role: Principal Investigator

2013-2014 "Better Outcomes for Children: GWAS & PheWAS in eMERGEII
Percent Effort: 5%
National Human Genome Research Institute
Grant Number: 3U01HG006828-0251
Role: Investigator

2004-2005 "Potential Patients' Knowledge, Attitudes, and Beliefs Regarding Participating in Medical Education: Can They be Interpreted in Terms of Presumed Consent?"
Direct Costs: $8,000

Interdisciplinary Research in Applied Ethics and Human Values, University Research Committee, University of Utah
Role: Principal Investigator

TEACHING RESPONSIBILITIES/ASSIGNMENTS

Course and Curriculum Development

2003-2012 Medical Ethics, Internal Medicine 7560, University of Utah School of Medicine, Taught 1 time per year, Taken by medical students, Enrollment 100

Course Lectures

2018, 2021 Introduction to Biotechnology, "Ethics and Biotechnology" and "Clinical Ethics," BIOL 3027, University of Cincinnati, Taught 1 time per year, Taken by undergraduate students, Enrollment 25.

2018-Present Biomedical Ethics, "Conscientious Objection in Healthcare" and "Ethical Issues in the Care of Transgender Adolescents," MEDS 4035 & MEDS 4036, University of Cincinnati College of Medicine, Taught 1 time per year, Taken by senior undergraduate students, Enrollment 52.

2016 Foundations of Healthcare Ethics and Law, "Clinical Ethics," HESA 390, Xavier University.

2014-Present Physicians and Society, "Transfusion and the Jehovah's Witness Faith," "Obesity Management: Ethics, Policy, and Physician Implicit Bias," "Embryos and Ethics: The Ethics of Designer Babies," "Ethics and Genetic Testing," and "Ethics and Direct to Consumer Genetic Testing," 26950112 and 26950116, University of Cincinnati School of Medicine, Taken by first and second year medical students, Enrollment 100.

2014-Present Ethical Issues in Health Care, "Ethical Issues in Managing Drug Shortages: The Macro, Meso, and Micro Levels," HESA 583, College of Social Sciences, Health, and Education Health Services Administration, Xavier University, Taken by health services administration students, Enrollment 25.

2009 Physical Diagnosis II, Internal Medicine 7160, University of Utah School of Medicine, Taught 1 time per year, Taken by medical students, Enrollment 100

2003-2012 Medical Ethics, Internal Medicine 7560, University of Utah School of Medicine, Taught 1 time per year, Taken by fourth year medical students, Enrollment 100

Small Group Teaching

2018-Present Ethics in Research, GNTD 7003-001, University of Cincinnati School of Medicine, Taught 1 time per year, Taken by fellows, MS, and PhD students, Enrollment 110.

2007 Physical Diagnosis I, Internal Medicine 7150, University of Utah School of Medicine, Taught 1 time per year, Taken by medical students, Enrollment 100

2003-2012 Medical Ethics, Internal Medicine 7560, University of Utah School of Medicine, Taught 1 time per year, Taken by fourth medical students, Enrollment 100

2003 Pediatric Organ System, Pediatrics 7020, University of Utah School of Medicine, Taught 1 time per year, Taken by medical students, Enrollment 100

Graduate Student Committees

2018-Present *Chair,* Scholarship Oversight Committee, William Sveen, Pediatric Critical Care Fellowship, Cincinnati Children's Hospital Medical Center, Cincinnati, OH

2018-2020 *Member*, Scholarship Oversight Committee, Anne Heueman, Genetic Counseling, University of Cincinnati, Cincinnati, OH

2017-2019 *Chair*, Scholarship Oversight Committee, Bryana Rivers, Genetic Counseling, University of Cincinnati, Cincinnati, OH

2013-2015 *Mentor*, Sophia Hufnagel, Combined Pediatrics/Genetics Residency, Cincinnati Children's Hospital Medical Center, Cincinnati, OH
2013-2015 *Co-Chair,* Scholarship Oversight Committee, Andrea Murad, Genetic Counseling, University of Cincinnati, Cincinnati, OH
2013-2014 *Member*, Scholarship Oversight Committee, Grace Tran, Genetic Counseling, University of Cincinnati, Cincinnati, OH
2011-2012 *Chair,* Scholarship Oversight Committee, Kevin E. Nelson, MD, PhD, Pediatric Inpatient Medicine Fellowship, University of Utah, Salt Lake City, UT

Continuing Education Lectures

2008 Choosing Healthplans All Together (CHAT) Exercise Facilitator, 18th Annual Intermountain Medical Ethics Conference, "Setting Priorities for Healthcare in Utah: What Choices are We Ready to Make?," Salt Lake City, Utah, October 3.
2007 *Speaker*, Infant Medical Surgical Unit, Primary Children's Medical Center, "Withholding and Withdrawing Artificial Nutrition and Hydration: Can It Be Consistent With Care?," Salt Lake City, Utah, September 6.
2007 *Faculty Scholar-in Residence,* Summer Seminar, "The Role of Religion in Bioethics," Utah Valley State College, Orem, Utah, May 1.
2006 *Workshop Leader,* Faculty Education Retreat, "Publications and Publishing in Medical Education," University of Utah School of Medicine, Salt Lake City, Utah, September 15.
2006 *Breakout Session,* 16th Annual Intermountain Medical Ethics Conference, "Donation after Cardiac Death: Evolution of a Policy," Salt Lake City, Utah, March 28.

Other Educational Activities

2008 *Instructor*, Contemporary Ethical Issues in Medicine and Medical Research, Osher Lifelong Learning Institute, University of Utah, "Religion and Bioethics: Religiously Based Demands for and Refusals of Treatment," Salt Lake City, Utah, February 7.
2007 *Speaker*, Biology Seminar, Utah Valley State College, "Is He Dead?: Criteria of the Determination of Death and Their Implications for Withdrawing Treatment and Recovering Organs for Transplant," Orem, Utah, September 21.

PEER-REVIEWED JOURNAL ARTICLES

1. Anne C Heuerman, Danielle Bessett, Armand H. Matheny Antommaria, Leandra. K. Tolusso, Nicki Smith, Alison H. Norris and Michelle L. McGowan (2021). "Experiences of reproductive genetic counselors with abortion regulations in Ohio." *Journal of Genetic Counseling*. Online ahead of print. PMID: 34755409.
2. Armand H. Matheny Antommaria and Ndidi I. Unaka. (2021) "Counterpoint: Prioritizing Health Care Workers for Scarce Critical Care Resources is Impractical and Unjust. *Journal of Hospital Medicine.* 16: 182-3. PMID 33617445.
3. Gregory A. Grabowski, Armand H. Matheny Antommaria, Edwin H. Kolodny, and Pramod K. Mistry. (2021) "Gaucher Disease: Basic and Translational Science Needs for More Complete Therapy and Management." *Molecular Genetics and Metabolism*. 132: 59-75. PMID: 33419694.
4. Armand H. Matheny Antommaria, Laura Monhollen, and Joshua K. Schaffzin. (2021) "An Ethical Analysis of Hospital Visitor Restrictions and Masking Requirements During the COVID-19." *Journal of Clinical Ethics.* 32(1): 35-44. PMID 33416516.
5. Armand H. Matheny Antommaria (2020) "The Pediatric Hospital Medicine Core Competencies: 4.05 Ethics." *Journal of Hospital Medicine.* 15(S1): 120-121.
6. Armand H. Matheny Antommaria, Tyler S. Gibb, Amy L. McGuire, Paul Root Wolpe, Matthew K. Wynia, Megan K. Applewhite, Arthur Caplan, Douglas S. Diekema, D. Micah Hester, Lisa Soleymani Lehmann, Renee McLeod-Sordjan, Tamar Schiff, Holly K. Tabor, Sarah E. Wieten, and Jason T. Eberl for a Task Force of the Association of Bioethics Program Directors (2020) "Ventilator

Triage Policies During the COVID-19 Pandemic at U.S. Hospitals Associated With Members of the Association of Bioethics Program Directors." *Annals of Internal Medicine.* 173(3): 188-194. PMID: 32330224.

7. Armand H. Matheny Antommaria (2020) "Conflicting Duties and Reciprocal Obligations During a Pandemic." *Journal of Hospital Medicine.* 5:284-286. PMID: 32379030.
8. Mary V. Greiner, Sarah J. Beal, and Armand H. Matheny Antommaria (2020) "Perspectives on Informed Consent Practices for Minimal-Risk Research Involving Foster Youth." *Pediatrics*. 45:e20192845. PMID: 32156772.
9. Jennifer deSante-Bertkau, Michelle McGowan, and Armand H. Matheny Antommaria (2018) "Systematic Review of Typologies Used to Characterize Clinical Ethics Consultations." *Journal of Clinical Ethics.* 29:291-304. PMID: 30605439.
10. Andrew J. Redmann, Melissa Schopper, Armand H. Matheny Antommaria, Judith Ragsdale, Alessandro de Alarcon, Michael J. Jutter, Catherine K. Hart, and Charles M. Myer. (2018) "To Transfuse or Not to Transfuse? Jehovah's Witnesses and PostOperative Hemorrhage in Pediatric Otolaryngology." *International Journal of Pediatric Otorhinolaryngology*. 115:188-192. PMID: 30368384.
11. Armand H. Matheny Antommaria, Kyle B. Brothers, John A. Myers, Yana B Feygin, Sharon A. Aufox, Murray H. Brilliant, Pat Conway, Stephanie M. Fullerton, Nanibaa' A. Garrison, Carol R. Horowitz, Gail P. Jarvik, Rongling Li, Evette J. Ludman, Catherine A. McCarty, Jennifer B. McCormick, Nathaniel D. Mercaldo, Melanie F. Myers, Saskia C. Sanderson, Martha J. Shrubsole, Jonathan S. Schildcrout, Janet L. Williams, Maureen E. Smith, Ellen Wright Clayton, Ingrid A. Holm. (2018) "Parents' Attitudes toward Consent and Data Sharing in Biobanks: A Multi-Site Experimental Survey." *AJOB Empirical Research.* 21:1-15. PMID: 30240342.
12. Armand H. Matheny Antommaria and Cynthia A. Prows. (2018) "Content Analysis of Requests for Religious Exemptions from a Mandatory Influenza Vaccination Program for Healthcare Personnel" *Journal of Medical Ethics.* 44: 389-391. PMID: 29463693.
13. Armand H. Matheny Antommaria (2017) "May Medical Centers Give Nonresident Patients Priority in Scheduling Outpatient Follow-Up Appointments?" *Journal of Clinical Ethics.* 28: 217-221. PMID: 28930708.
14. Andrea M. Murad, Melanie F. Myers, Susan D. Thompson, Rachel Fisher, and Armand H. Matheny Antommaria (2017) "A Qualitative Study of Adolescents' Understanding of Biobanks and Their Attitudes Toward Participation, Re-contact, and Data Sharing." *American Journal of Medical Genetics: Part A.* 173: 930-937. PMID: 28328120.
15. Saskia Sanderson, Kyle Borthers, Nathaniel Mercaldo, Ellen Wright Clayton, Armand Antommaria, Sharon Aufox, Murray Brillant, Diego Campos, David Carrell, John Connolly, Pat Conway, Stephanie Fullerton, Nanibaa Garrison, Carol Horowitz, Gail Jarvik, David Kaufman, Terrie Kitchner, Rongling Li, Evette Ludman, Cahterine McCarty, Jennifer McCormick, Valerie McManus, Melanie Myers, Aaron Scrol, Janet Williams, Martha Shrubsole, Jonathan Schildcrout, Maureen Smith, and Ingrid Holm (2017) "Public Attitudes Towards Consent and Data Sharing in Biobank Research: A Large Multisite Experimental Survey in the US." *The American Journal of Human Genetics*. 100: 414-427. PMID: 28190457.
16. Maureen E. Smith, Saskia C Sanderson, Kyle B Brothers, Melanie F Myers, Jennifer McCormick, Sharon A Aufox, Martha J Shrubsole, Nanibaa' A Garrison, Nathaniel D Mercaldo, Jonathan S Schildcrout, Ellen Wright Clayton, Armand H. Matheny Antommaria, Melissa Basford, Murray Brilliant, John J Connolly, Stephanie M Fullerton, Carol R Horowitz, Gail P Jarvik, Dave Kaufman, Terrie Kitchner, Rongling Li, Evette J Ludman, Catherine McCarty, Valerie McManus, Sarah C Stallings, Janet L Williams, and Ingrid A Holm (2016) "Conducting a Large, Multi-Site Survey about Patients' Views on Broad Consent: Challenges and Solutions." *BMC Medical Research Methodology.* 16: 162. PMID: 27881091.
17. Angela Lorts, Thomas D. Ryan, Armand H. Matheny Antommaria, Michael Lake, and John Bucuvalas (2016) "Obtaining Consensus Regarding International Transplantation Continues to be

Difficult for Pediatric Centers in the United States." *Pediatric Transplant.* 20: 774-777. PMID: 27477950.

18. Sophia B. Hufnagel, Lisa J. Martin, Amy Cassedy, Robert J. Hopkin, and Armand H. Matheny Antommaria (2016) "Adolescents' Preferences Regarding Disclosure of Incidental Findings in Genomic Sequencing That Are Not Medically Actionable in Childhood." *American Journal of Medical Genetics Part A*. 170: 2083-2088. PMID: 27149544.
19. Nanibaa' A. Garrison, Nila A. Sathe, Armand H. Matheny Antommaria, Ingrid A. Holm, Saskia Sanderson, Maureen E. Smith, Melissa McPheeters, and Ellen Wright Clayton (2016) "A Systematic Literature Review of Individuals' Perspectives on Broad Consent and Data Sharing in the United States." *Genetics in Medicine.* 18: 663-71. PMID: 26583683.
20. Kyle B. Brothers, Ingrid A. Holm Janet E. Childerhose, Armand H. Matheny Antommaria, Barbara A. Bernhardt, Ellen Wright Clayton, Bruce D. Gelb, Steven Joffe, John A. Lynch, Jennifer B. McCormick, Laurence B. McCullough, D. William Parsons, Agnes S. Sundaresan, Wendy A. Wolf, Joon-Ho Yu, and Benjamin S. Wilfond (2016) "When Genomic Research Participants Grow Up: Contact and Consent at the Age of Majority." *The Journal of Pediatrics* 168: 226-31. PMID: 26477867.
21. Erin E. Bennett, Jill Sweney, Cecile Aguayo, Criag Myrick, Armand H. Matheny Antommaria, and Susan L. Bratton (2015) "Pediatric Organ Donation Potential at a Children's Hospital." *Pediatric Critical Care Medicine.* 16: 814-820. PMID: 26237656.
22. Anita J. Tarzian, Lucia D. Wocial, and the ASBH Clinical Ethics Consultation Affairs Committee (2015) "A Code of Ethics for Health Care Ethics Consultants: Journey to the Present and Implications for the Field." *American Journal of Bioethics*. 15: 38-51. PMID: 25970392.
23. Armand H. Matheny Antommaria, Christopher A. Collura, Ryan M. Antiel, and John D. Lantos (2015) "Two Infants, Same Prognosis, Different Parental Preferences." *Pediatrics*, 135: 918-923. PMID: 25847802.
24. Stefanie Benoit, Armand H. Matheny Antommaria, Norbert Weidner, and Angela Lorts (2015) "Difficult Decision: What should we do when a VAD supported child experiences a severe stroke?" *Pediatric Transplantation* 19: 139-43. PMID: 25557132.
25. Kyle B. Brothers, John A. Lynch, Sharon A. Aufox, John J. Connolly, Bruce D. Gelb, Ingrid A. Holm, Saskia C. Sanderson, Jennifer B. McCormick, Janet L. Williams, Wendy A. Wolf, Armand H. Matheny Antommaria, and Ellen W. Clayton (2014) "Practical Guidance on Informed Consent for Pediatric Participants in a Biorepository." *Mayo Clinic Proceedings,* 89: 1471-80. PMID: 25264176.
26. Sophia M. Bous Hufnagel and Armand H. Matheny Antommaria (2014) "Laboratory Policies on Reporting Secondary Findings in Clinical Whole Exome Sequencing: Initial Uptake of the ACMG's Recommendations." *American Journal of Medical Genetics Part A*, 164: 1328-31. PMID: 24458369.
27. Wylie Burke, Armand H. Matheny Antommaria, Robin Bennett, Jeffrey Botkin, Ellen Wright Clayton, Gail E. Henderson, Ingrid A. Holm, Gail P. Jarvik, Muin J. Khoury, Bartha Maria Knoppers, Nancy A. Press, Lainie Friedman Ross, Mark A. Rothstein, Howard Saal, Wendy R. Uhlmann, Benjamin Wilfond, Susan M. Wold, and Ron Zimmern (2013) "Recommendations for Returning Genomic Incidental Findings? We Need to Talk!" *Genetics in Medicine*, 15: 854-859. PMID: 23907645.
28. Armand H. Matheny Antommaria (2013) "An Ethical Analysis of Mandatory Influenza Vaccination of Health Care Personnel: Implementing Fairly and Balancing Benefits and Burdens," *American Journal of Bioethics*, 13: 30-37. PMID: 23952830.
29. Joseph A. Carrese and the Members of the American Society for Bioethics and Humanities Clinical Ethics Consultation Affairs Standing Committee (2012) "HCEC Pearls and Pitfalls: Suggested Do's and Don't's for Healthcare Ethics Consultants," *Journal of Clinical Ethics*, 23: 234-240. PMID: 23256404.
30. Christopher G Maloney, Armand H Matheny Antommaria, James F Bale Jr., Jian Ying, Tom Greene and Rajendu Srivastiva (2012) "Factors Associated with Intern Noncompliance with the 2003

Accreditation Council for Graduate Medical Education's 30-hour Duty Period Requirement," *BMC Medical Education* 12: 33. PMID: 22621439.

31. Armand H. Matheny Antommaria, Jill Sweney, and W. Bradley Poss (2010) "Critical Appraisal of: Triaging Pediatric Critical Care Resources During a Pandemic: Ethical and Medical Considerations," *Pediatric Critical Care Medicine,* 11:396-400. PMID: 20453611.
32. Armand H. Matheny Antommaria, Karen Trotochaud, Kathy Kinlaw, Paul N. Hopkins, and Joel Frader (2009) "Policies on Donation After Cardiac Death at Children's Hospitals: A Mixed-Methods Analysis of Variation," *Journal of the American Medical Association,* 301: 1902-8. PMID: 19436017.
33. Kristine M. Pleacher, Elizabeth S. Roach, Willem Van der Werf, Armand H. Matheny Antommaria, and Susan L. Bratton (2009) "Impact of a Pediatric Donation after Cardiac Death Program," *Pediatric Critical Care Medicine,* 10: 166-70. PMID: 19188881.
34. Flory L. Nkoy, Sarah Petersen, Armand H Matheny Antommaria, and Christopher G. Maloney (2008) "Validation of an Electronic System for Recording Medical Student Patient Encounters," *AMIA [American Medical Informatics Association] Annual Symposium Proceedings*, 6: 510-14. PMID: 18999155. Nominated for the Distinguished Paper Award
35. Armand H. Matheny Antommaria, Sean D. Firth, and Christopher G. Maloney (2007) "The Evaluation of an Innovative Pediatric Clerkship Structure Using Multiple Outcome Variables including Career Choice" *Journal of Hospital Medicine*, 2: 401-408. PMID: 18081170.
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NON PEER-REVIEWED JOURNAL ARTICLES

1. Katherine Wade and Armand H. Matheny Antommaria (2016) "Inducing HIV Remission in Neonates: Children's Rights and Research Ethics." *Journal of Medicine and Biology*, 58(3): 348-54. PMID 27157354.
2. Armand H. Matheny Antommaria (2014) "Response to Open Peer Commentaries on 'An Ethical Analysis of Mandatory Influenza." *American Journal of Bioethics,* 14(7): W1-4. PMID: 24978422.
3. Armand H. Matheny Antommaria and Brent D. Kaziny (2012) "Ethical Issues in Pediatric Emergency Medicine's Preparation for and Response to Disasters." *Virtual* Mentor, 14: 801-4. PMID: 23351860.
4. Armand H. Matheny Antommaria, Tia Powell, Jennifer E. Miller, and Michael D. Christian (2011) "Ethical Issues in Pediatric Emergency Mass Critical Care," *Pediatric Critical Care Medicine*, 12(6 Suppl): S163-8. PMID: 22067926.
5. Armand H. Matheny Antommaria and Emily A. Thorell (2011) "Non-Pharmaceutical Interventions to Limit Transmission of a Pandemic Virus: The Need for Complementary Programs to Address Children's Diverse Needs." *Journal of Clinical Ethics,* 22: 25-32. PMID: 21595352.
6. Armand H. Matheny Antommaria (2010) "Conscientious Objection in Clinical Practice: Notice, Informed Consent, Referral, and Emergency Treatment." *Ave Maria Law Review*, 9: 81-99.
7. Armand H. Matheny Antommaria (2008) "Defending Positions or Identifying Interests: The Uses of Ethical Argumentation in the Debate over Conscience in Clinical Practice," *Theoretical Medicine and Bioethics,* 29: 201-12. PMID: 18821078.
8. Armand H. Matheny Antommaria (2008) "How can I give her IV antibiotics at home when I have three other children to care for?: Using Dispute System Design to Address Patient-Provider Conflicts in Health Care." *Hamline Journal of Public Law & Policy*, 29: 273-86.

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10. Armand H. Matheny Antommaria (2006) "Jehovah's Witnesses, Roman Catholicism, and Calvinism: Religion and State Intervention in Parental, Medical Decision-Making," *Journal of Law and Family Studies,* 8: 293-316.
11. Armand H. Matheny Antommaria and James F. Bale, Jr. (2002) "Ethical Issues in Clinical Practice: Cases and Analyses," *Seminars in Pediatric Neurology* 9: 67-76. PMID: 11931129.

REVIEW ARTICLES

Armand H. Matheny Antommaria (2010) "Conceptual and Ethical Issues in the Declaration of Death: Current Consensus and Controversies." *Pediatrics in Review* 31: 427-430. PMID: 20889737.

BOOKS

Armand H. Matheny Antommaria (1998) *A Retrospective, Political and Ethical Analysis of State Intervention into Parental Healthcare Decisions for Infants with Disabilities*. Wynnewood, Pennsylvania: Evangelicals for Social Action.

BOOK CHAPTERS

1. Armand H. Matheny Antommaria (2018) "Against Medical Advice Discharges: Pediatric Considerations." In *Against-Medical-Advice Discharges from the Hospital: Optimizing Prevention and Management to Promote High-Quality, Patient-Centered Care.* David Alfandre. New York, Springer: 143-157.
2. Armand H. Matheny Antommaria (2016) "Conscientious Objection in Reproductive Medicine." In *The Oxford Handbook of Reproductive Ethics.* Leslie Francis. Oxford, Oxford University Press: 209-225.
3. Armand H. Matheny Antommaria (2011) "Patient Participation in Medical Education." In *Clinical Ethics in Pediatrics: A Case-based Approach.* Douglas Diekema, Mark Mercurio, and Mary Beth Adam. Cambridge, Cambridge University Press: 221-225.
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OTHER

Policy Statements and Technical Reports

1. American Academy of Pediatrics Committee on Bioethics. Armand H. Matheny Antommaria Lead Author. (2013) "Conflicts between Religious or Spiritual Beliefs and Pediatric Care: Informed Refusal, Exemptions, and Public Funding." *Pediatrics.* 132: 962-965. PMID: 24167167.
2. American Academy of Pediatrics Committee on Bioethics. Armand H. Matheny Antommaria Lead Author. (2013) "Ethical Controversies in Organ Donation After Circulatory Death." *Pediatrics.* 131: 1021-1026. PMID: 23629612.
3. American Academy of Pediatrics Committee on Bioethics and Committee on Genetics and the American College of Medical Genetics and Genomics Social, Ethical, and Legal Issues Committee (2013) "Policy Statement: Ethical and Policy Issues in Genetic Testing and Screening of Children." *Pediatrics.* 131: 620-622. PMID: 23428972.

4. Lainie Friedman Ross, Howard M. Saal, Karen L. David, Rebecca R. Anderson and the American Academy of Pediatrics Committee on Bioethics and Committee on Genetics and the American College of Medical Genetics and Genomics Social, Ethical, and Legal Issues Committee (2013) "Technical Report: Ethical and Policy Issues in Genetic Testing and Screening of Children." *Genetics in Medicine.* 15: 234-245. PMID: 23429433.
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1. Ian D. Wolfe, Don Brunnquell, Rena Sorensen, Armand H. Matheny Antommaria. (2022) "Should Tactctile Defensiveness Exclude a Life-Sustaining Intervention in an Adolescent With Autism?" *Pediatrics.* 149: e2021054469. PMID: 35229117.
2. Jennifer E. deSante-Bertkau, Timothy K. Knilans, Govind Persad, Patricia J. Zettler, Holly Fernandez Lynch, and Armand H. Matheny Antommaria. (2021) "Off-Label Prescription of COVID-19 Vaccines in Children: Clinical, Ethical, and Legal Issues." *Pediatrics.* 149: e2021054578. PMID: 34615694.
3. Jamilah M. Hackworth, Meera Kotagal, O. N. Ray Bignal, 2nd, Ndidi Unaka, and Armand H. Matheny Antommaria. (2021) "Microaggressions: Privileged Observers' Duty to Act and What They Can Do." *Pediatrics*. 148: e2021052758. PMID: 34417286.

4. Elizabeth Lanphier, Luke Mosley, and Armand H. Matheny Antommaria. (2021) "Assessing Visitor Policy Exemption Requests During the COVID-19 Pandemic." *Pediatrics.* 148: e2021051254. PMID: 33990461.
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6. Timothy Crisci, Zeynep N. Inanc Salih, Ndidi Unaka, Jehanna Peerzada, and Armand H. Matheny Antommaria. (2021) "What Should an Intern Do When She Disagrees With the Attending?" *Pediatrics.* 147: e2020049646. PMID 33627371.
7. Liza-Marie Johnson, Erica C. Kaye, Kimberly Sawyer, Alex M. Brenner, Stefan J. Friedrichsdorf, Abby R. Rosenberg, Armand H. Mathey Antommaria. (2021) "Opioid Management in the Dying Child With Addiction." *Pediatrics* 147: e2020046219. PMID 33446508.

Continuing Medical Education

1. Armand H. Matheny Antommaria (2014) Authored 4 questions. NEJM Knowledge+ Family Medicine Board Review. NEJM Group.
2. Armand H. Matheny Antommaria (2009) "Hot Topics: Ethics and Donation After Cardiac Death [online course]. PediaLink. American Academy of Pediatrics. October 24. http://ethics.ht.courses.aap.org/. Accessed December 14. 2009.

Editorials

1. Armand H. Matheny Antommaria, Chris Feudtner, Mary Beth Benner, and Felicia Cohn on Behalf of the Healthcare Ethics Consultant-Certified Certification Commission (2020) "The Healthcare Ethics Consultant-Certified Program: Fair, Feasible, and Defensible, But Neither Definite Nor Finished," *American Journal of Bioethics* 20:1-5. PMID: 32105202.
2. Armand H. Matheny Antommaria and Pamela W. Popp (2020) "The Potential Roles of Surrogacy Ladders, Standby Guardians, and Medicolegal Partnerships, in Surrogate Decision Making for Parents of Minor Children," *Journal of Pediatrics* 220:11-13. PMID 31952849.

Commentaries

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2. Armand H. Matheny Antommaria, William Sveen, and Erika L. Stalets (2020) "Informed Consent Should Not Be Required for Apnea Testing and Arguing It Should Misses the Point," *American Journal of Bioethics.* 20: 25-27. PMID: 32441602.
3. Armand H. Matheny Antommaria (2019) "Relational Potential versus the Parent-Child Relationship," *Hastings Center Report*. 49(3): 26-27. PMID: 31269255.
4. Armand H. Matheny Antommaria, Robert A. Shapiro, and Lee Ann E. Conard (2019) "Psychological Maltreatment and Medical Neglect of Transgender Adolescents: The Need for Recognition and Individualized Assessment." *American Journal of Bioethics.* 19: 72-74. PMID: 31543011.
5. Armand H. Matheny Antommaria (2018) "Accepting Things at Face Value: Insurance Coverage for Transgender Healthcare." *American Journal of Bioethics.* 18: 21-23. PMID: 31159689.
6. Armand H. Matheny Antommaria and Judith R. Ragsdale (2018) "Shaken, not Stirred: What are Ethicists Licensed to Do?" *American Journal of Bioethics* 18: 56-58. PMID: 29697345.
7. Armand H. Matheny Antommaria (2017) "Issues of Fidelity and Trust Are Intrinsic to Uncontrolled Donation after Circulatory Determination of Death and Arise Again with Each New Resuscitation Method," *American Journal of Bioethics* 17: 20-22. PMID: 28430053.
8. Armand H. Matheny Antommaria (2016) "Conscientious Objection: Widening the Temporal and Organizational Horizons," *The Journal of Clinical Ethics* 27: 248-250. PMID: 27658282.

9. Armand H. Matheny Antommaria and Ron King. (2016) "Moral Hazard and Transparency in Pediatrics: A Different Problem Requiring a Different Solution." *American Journal of Bioethics* 16: 39-40. PMID: 27292846.
10. Armand H. Matheny Antommaria and Richard F. Ittenabch (2016) "Quality Attestation's Portfolio Evaluation Is Feasible, But Is It Reliable and Valid?" *American Journal of Bioethics* 16: 35-38. PMID: 26913658.
11. Armand H. Matheny Antommaria and Kristin Stanley Bramlage (2015) "Enrolling Research Participants in Private Practice: Conflicts of Interest, Consistency, Therapeutic Misconception, and Informed Consent." *AMA Journal of Ethics*. 17:1122-1126. PMID: 26698585.
12. Armand H. Matheny Antommaria (2015) "Characterizing Clinical Ethics Consultations: The Need for a Standardized Typology of Cases." *American Journal of Bioethics* 15: 18-20. PMID: 25970383.
13. Armand H. Matheny Antommaria (2015) "Intensified Conflict Instead of Closure: Clinical Ethics Consultants' Recommendations' Potential to Exacerbate Ethical Conflicts." *American Journal of Bioethics* 15: 52-4. PMID: 25562231.
14. Lainie Friedman Ross and Armand H. Matheny Antommaria (2014) "The need to promote all pediatric stem cell donors' understanding and interests." *Pediatrics* 133: e1356-e1357. PMID: 24777208.
15. Armand H. Matheny Antommaria (2014) "Pubertal Suppression and Professional Obligations: May a Pediatric Endocrinologist Refuse to Treat an Adolescent with Gender Dysphoria." *American Journal of Bioethics* 13: 43-46. PMID: 24422933.
16. Armand H. Matheny Antommaria (2012) "Empowering, Teaching, and Occasionally Advocating: Clinical Ethics Consultants' Duties to All of the Participants in the Process." *American Journal of Bioethics* 12 11-3. PMID: 22852533.
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18. Armand H. Matheny Antommaria and Julie Melini (2010) "Is it Reasonable to Refuse to be Seen by a Nurse Practitioner in the Emergency Department?" *American Journal of Bioethics* 10: 15-17. PMID: 20694899.
19. William Meadow, Chris Feudtner, Armand H. Matheny Antommaria, Dane Sommer, John Lantos (2010) "A Premature Baby with Necrotizing Enterocolitis Whose Parents Are Jehovah's Witnesses." *Pediatrics.* 216: 151-155. PMID: 20566607.
20. C. C. Weitzman, S. Schlegel, Nancy Murphy, Armand H. Matheny Antommaria, J. P. Brosco, Martin T. Stein (2009) "When Clinicians and a Parent Disagree on the Extent of Medical Care." *Journal of Developmental and Behavioral Pediatrics.* 30: 242-3. PMID: 19525718. Reprinted as (2010) *Journal of Developmental and Behavioral Pediatrics.* 31: S92-5. PMID: 20414087
21. Armand H. Matheny Antommaria and Susan Bratton (2008) "Nurses' Attitudes toward Donation after Cardiac Death: Implications for Nurses' Roles and Moral Distress." *Pediatric Critical Care Medicine,* 9: 339-40. PMID: 18446100.
22. Armand H. Matheny Antommaria and Nannette C. Dudley (2007) "Should Families Be Present During CPR?" *AAP Grand Rounds,* 17: 4-5.
23. Armand H. Matheny Antommaria (2006) "The Proper Scope of Analysis of Conscientious Objection in Healthcare: Individual Rights or Professional Obligations" *Teaching Ethics*, 7: 127-31.
24. Armand H. Matheny Antommaria and Rajendu Srivastava (2006) "If Cardiologists Take Care of Patients with Heart Disease, What do Hospitalists Treat?: Hospitalists and the Doctor-Patient Relationship." *American Journal of Bioethics*, 6: 47-9. PMID: 16423793.
25. Armand H. Matheny Antommaria (2003) "I Paid Out-of-Pocket for My Son's Circumcision at Happy Valley Tattoo and Piercing: Alternative Framings of the Debate over Routine Neonatal Male Circumcision," *American Journal of Bioethics* 3: 51-3. PMID: 12859817.

Letters

1. Benjamin S. Wilfond, David Magnus, Armand H Matheny Antommaria, Paul Appelbaum, Judy Aschner, Keith J. Barrington, Tom Beauchamp, Renee D. Boss, Wylie Burke, Arthur L. Caplan, Alexander M. Capron, Mildred Cho, Ellen Wright Clayton, F. Sessions Cole, Brian A. Darlow, Douglas Diekema, Ruth R. Faden, Chris Feudtner, Joseph J. Fins, Norman C. Fost, Joel Frader, D. Micah Hester, Annie Janvier, Steven Joffe, Jeffrey Kahn, Nancy E. Kass, Eric Kodish, John D. Lantos, Laurence McCullough, Ross McKinney, Jr., William Deadow, P. Pearl O'Rourke, Kathleen E. Powderly, DeWayne M. Pursley, Lainie Friedman Ross, Sadath Sayeed, Richard R. Sharp, Jeremy Sugarman, William O. Tarnow-Mordi, Holly Taylor, Tom Tomlison, Robert D. Truog, Yoram T. Unguru, Kathryn L. Weise, David Woodrum, Stuart Youngner (2013) "The OHRP and SUPPORT," *New England Journal of Medicine,* 368: e36. PMID: 23738513.
2. Lainie Friedman Ross and Armand H. Matheny Antommaria (2011) "In Further Defense of the American Academy of Pediatrics Committee on Bioethics 'Children as Hematopoietic Stem Cell Donors' Statement." *Pediatric Blood & Cancer*. 57: 1088-9.
3. Armand H. Matheny Antommaria (2011) "Growth Attenuation: Health Outcomes and Social Services." *Hastings Center Report*, 41(5): 4. PMID: 21980886.
4. Susan Bratton and Armand H. Matheny Antommaria (2010) "Dead Donor Rule and Organ Procurement: The Authors Reply." *Pediatric Critical Care Medicine*, 11: 314-5.
5. Armand H. Matheny Antommaria and Joel Frader (2009) "Policies of Children's Hospitals on Donation After Cardiac Death—Reply." *Journal of the American Medical Association*, 302: 845.

Case Reports

Armand H. Matheny Antommaria (2002) "Case 4.9: Inappropriate Access to a Celebrity's Medical Records." In *Ethics and Information Technology: A Case-Based Approach to a Health Care System in Transition*, James G. Anderson and Kenneth W. Goodman, 79-80. New York: Springer-Verlag.

Book Reviews

1. Armand H. Matheny Antommaria (2021) Review of *When Harry Became Sally: Responding to the Transgender Moment,* by Ryan T. Anderson. *Journal of Medical Humanities* 42: 195-9. PMID 31808021.
2. Armand H. Matheny Antommaria (2012) Review of *The Ethics of Organ Transplantation*, by Steven J. Jensen, ed., *Journal of the American Medical Association* 308: 1482-3.
3. Armand H Matheny Antommaria (2012) Review of *The Soul of Medicine: Spiritual Perspectives and Clinical Practice*, by John R. Peteet and Michael N. D'Ambra, ed., *Journal of the American Medical Association* 308: 87.
4. Armand H. Matheny Antommaria (2009) Review of *Conflicts of Conscience in Health Care: An Institutional Compromise,* by Holly Fernandez Lynch. *American Journal of Bioethics* 9: 63-4.
5. Armand H. Matheny Antommaria (2008) Review of *A Practical Guide to Clinical Ethics Consulting: Expertise, Ethos, and Power*, by Christopher Meyers. *American Journal of Bioethics* 8: 72-3.
6. Armand H. Matheny Antommaria (2004) Review of *Children, Ethics, and Modern Medicine*, by Richard B. Miller. *American Journal of Bioethics* 4: 127-8.
7. Armand H. Matheny Antommaria (2002) Review of *Ward Ethics: Dilemmas for Medical Students and Doctors in Training*, by Thomasine Kushner and David Thomasma, ed. *American Journal of Bioethics* 2: 70-1. PMID: 22494193.
8. Armand H. Matheny Antommaria (1999) Review of *Human Cloning: Religious Responses*, by Ronald Cole-Turner, ed. *Prism* 6 (March/April): 21.
9. Armand H. Matheny Antommaria (1999) Review of *Christian Theology and Medical Ethics: Four Contemporary Approaches*, by James B. Tubbs, Jr. *Journal of Religion* 79 (April): 333-5.
10. Armand H. Matheny Antommaria (1997) Review of *Body, Soul, and Bioethics*, by Gilbert C. Meilaender. *Prism* 4 (May/June): 28.

Newspaper Articles

1. W. Bradley Poss and Armand H. Matheny Antommaria (2010) "Mass casualty planning must incorporate needs of children." *AAP News* 31 (July): 38.
2. Robert Murray and Armand H. Matheny Antommaria (2010) "Pediatricians should work with school nurses to develop action plans for children with DNAR orders." *AAP News* 31 (May): 30..
3. Armand H. Matheny Antommaria (2009) "Addressing physicians' conscientious objections in health care." *AAP News* 30 (December): 32.

UNPUBLISHED POSTER PRESENTATIONS

1. Armand H. Matheny Antommaria. (2018) "Ethical Issues in the Care of International Patients: A Case Study." International Conference on Clinical Ethics and Consultation, Oxford, United Kingdom.
1. Jill S Sweney, Brad Poss, Colin Grissom, Brent Wallace, and Armand H Matheny Antommaria, (2010) "Development of a Statewide Pediatric Pandemic Triage Plan in Utah." Pediatric Academic Societies Annual Meeting, Vancouver, Canada. E-PAS20103713.147.
2. Christopher G. Maloney, Armand H. Matheny Antommaria, James F. Bale, Thomas Greene, Jian Ying, Gena Fletcher, and Rajendu Srivastava (2010) "Why Do Pediatric Interns Violate the 30 Hour Work Rule?" Pediatric Academic Societies Annual Meeting, Vancouver, Canada. E-PAS20101500.596
3. Armand H. Matheny Antommaria and Edward B. Clark (2007) "Resolving Conflict through Bioethics Mediation." 3rd International Conference on Ethics Consultation and Clinical Ethics, Toronto, Canada.
4. Elizabeth Tyson, Tracy Hill, Armand Antommaria, Gena Fletcher, and Flory Nkoy (2007) "Physician Practice Patterns Regarding Nasogastric Feeding Supplementation and Intravenous Fluids in Bronchiolitis Patients." Pediatrics Academic Societies Annual Meeting, Toronto, Canada. E-PAS2007:61300.

ORAL PRESENTATIONS

Keynote/Plenary Lectures

International

1. 2021, *Panelist*, Partnership for Quality Medical Donations, Charitable Access Programming for Rare Diseases, "Ethical Issues," Webinar, April 6.
2. 2017, *Invited Speaker*, Spina Bifida Fetoscopic Repair Study Group and Consortium, "Ethics of Innovation and Research in Fetal Surgery," Cincinnati, Ohio, October 26.
3. 2014, *Invited Speaker,* CIC 2013 CCI: Canadian Immunization Conference, "Condition-of-Service Influenza Prevention in Health Care Settings," Ottawa, Canada, December 2.
4. 2014, *Invited Speaker*, National Conference of the Chinese Pediatric Society, "A Brief Introduction to Pediatric Research and Clinical Ethics," Chongqing, China, September 12.

National

1. 2020, *Panelist*, Children's Mercy Bioethics Center, "Ethical Issues in the COVID Pandemic at Children's Hospitals," Webinar, March 2.
2. 2019, *Invited Speaker*, North American Fetal Therapy Network (NAFTnet), "Ethics of Innovation," Chicago, Illinois, October 12.
3. 2019, *Panelist,* National Society of Genetic Counselors Prenatal Special Interest Group, "Fetal Intervention Ethics," Webinar, September 12.
4. 2017, *Invited Participant,* American College of Epidemiology Annual Meeting, Preconference Workshop, "Extreme Personal Exposure Biomarker Levels: Guidance for Study Investigators," New Orleans, Louisiana, September 24.
5. 2016, *Invited Speaker,* American Academy of Pediatrics National Conference & Exhibition, Joint Program: Section on Hospital Medicine and Section on Bioethics, "Resource Allocation: Do We Spend Money to Save One Patient with Ebola or Over a 1,000?" San Francisco, California, October 23.
6. 2016, *Invited Speaker*, 26th Annual Specialist Education in Extracorporeal Membrane Oxygenation (SEECHMO) Conference, "Ethical Issues in ECMO: The Bridge to Nowhere," Cincinnati, Ohio, June 5.
7. 2015, *Invited Speaker,* Extracorporeal Life Support Organization (ELSO) 26th Annual Conference, "ECMO-Supported Donation after Circulatory Death: An Ethical Analysis," Atlanta, Georgia, September 20.
8. 2014, *Invited Speaker*, Pediatric Evidence-Based Practice 2014 Conference: Evidence Implementation for Changing Models of Pediatric Health Care, "Ethical Issues in Evidence-Based Practice," Cincinnati, Ohio, September 19.
9. 2014, *Invited Speaker,* 6th Annual David Kline Symposium on Public Philosophy: Exploring the Synergy Between Pediatric Bioethics and Child Rights, "Does Predictive Genetic Testing for Adult Onset Conditions that Are Not Medically Actionable in Childhood Violate Children's Rights?" Jacksonville, Florida, March 6.
10. 2010, *Invited Speaker,* Quest for Research Excellence: The Intersection of Standards, Culture and Ethics in Childhood Obesity, "Research Integrity and Religious Issues in Childhood Obesity Research," Denver, Colorado, April 21.
11. 2010, *Invited Speaker*, Symposium on the Future of Rights of Conscience in Health Care: Legal and Ethical Perspectives, J. Reuben Clark Law School at Brigham Young University and the Ave Maria School of Law, "Conscientious Objection in Clinical Practice: Disclosure, Consent, Referral, and Emergency Treatment," Provo, Utah, February 26.
12. 2009, *Invited Speaker*, Pediatric Organ Donation Summit, "Research Findings Regarding Variations in Pediatric Hospital Donation after Cardiac Death Policies," Chicago, Illinois, August 18.
13. 2008, *Meet-the-Experts*, American Academy of Pediatrics National Conference & Exhibition, "Physician Refusal to Provide Treatment: What are the ethical issues?" Boston, Massachusetts, October 11.

14. 2008, *Invited Conference Faulty*, Conscience and Clinical Practice: Medical Ethics in the Face of Moral Controversy, The MacLean Center for Clinical Medical Ethics at the University of Chicago, "Defending Positions or Identifying Interests: The Uses of Ethical Argumentation in the Debate over Conscience in Clinical Practice," Chicago, IL, March 18.
15. 2007, *Symposium Speaker*, Alternative Dispute Resolution Strategies in End-of-Life Decisions, The Ohio State University Mortiz College of Law, "The Representation of Children in Disputes at the End-of-Life," Columbus, Ohio, January 18.
16. 2005, *Keynote Speaker*, Decisions and Families, *Journal of Law and Family Studies* and The University of Utah S.J. Quinney College of Law, "Jehovah's Witnesses, Roman Catholicism, and Calvinism: Religion and State Intervention in Parental, Medical Decision-Making," Salt Lake City, Utah, September 23.

Regional/Local

1. 2021, *Panelist*, Pediatric Residency Noon Conference, University of Tennessee Health Science Center, "Bioethics Rounds—Ethical Issues in the Care of Transgender Adolescents," Memphis, Tennessee, September 21.
2. 2020, *Keynote Speaker*, 53rd Annual Clinical Advances in Pediatrics, "Referral to a Fetal Care Center: How You Can Help Patients' Mothers Address the Ethical Issues," Kansas City, Kansas, September 16.
3. 2019, *Speaker,* Patient and Family Support Services, Primary Children's Hospital, "Ethical Issues in the Care of Trans Adolescents," Salt Lake City, Utah, December 5.
4. 2019, *Speaker,* Evening Ethics, Program in Medical Ethics and Humanities, University of Utah School of Medicine, "Patients, Parents, and Professionals: Ethical Issues in the Treatment of Trans Adolescents," Salt Lake City, Utah, December 4.
5. 2019, *Speaker,* Pediatric Hospital Medicine Board Review Course, "Ethics, Legal Issues, and Human Rights including Ethics in Research," Cincinnati, Ohio, September 8.
6. 2019, *Speaker,* Advances in Fetology, "Evolving Attitudes Toward the Treatment of Children with Trisomies," Cincinnati, Ohio, September 6.
7. 2019, *Speaker,* Half-Day Ethics Training: Ethics Consultation & Ethics Committees, "Navigating the Rapids of Clinical Ethics Consultation: Intake, Recommendations, and Documentation," Salt Lake City, Utah, June 1.
8. 2019, *Speaker*, Scientific and Ethical Underpinnings of Gene Transfer/Therapy in Vulnerable Populations: Considerations Supporting Novel Treatments, BioNJ, "What Next? An Ethical analysis of Prioritizing Conditions and Populations for Developing Novel Therapies," Cranbury, New Jersey, March 7.
9. 2018, *Panelist*, Periviability, 17th Annual Regional Perinatal Summit, Cincinnati, Ohio, October 12.
10. 2018, *Speaker,* Regional Advance Practice Registered Nurse (APRN) Conference, "Adults are Not Large Children: Ethical Issues in Caring for Adults in Children's Hospitals," Cincinnati, Ohio, April 26.
11. 2018, *Speaker*, Southern Ohio/Northern Kentucky Sigma Theta Tau International Annual Conference, "Between Hope and Hype: Ethical Issues in Precision Medicine," Sharonville, Ohio, March 2.
12. 2017, *Speaker*, Advances in Fetology 2017, "Ethics of Innovation and Research: Special Considerations in Fetal Therapy Centers," Cincinnati, Ohio, October 27.
13. 2016, *Speaker*, End-of-Life Pediatric Palliative Care Regional Conference, "Ethical/Legal Issues in Pediatric Palliative Care," Cincinnati, Ohio, September 15.
14. 2016, *Speaker*, 26th Annual Bioethics Network of Ohio (BENO) Conference, "When Does Parental Refusal of Medical Treatment for Religious Reasons Constitute Neglect?" Dublin, Ohio, May 29.
15. 2014, *Speaker,* Cincinnati Comprehensive Sickle Cell Center Symposium: Research Ethics of Hydroxyurea Therapy for Sickle Cell Disease During Pregnancy and Lactation, "Ethical Issues in Research with Pregnant and Lactating Women," Cincinnati, Ohio, October 30.

16. 2014, *Speaker,* Advances in Fetology 2014, "The 'Miracle Baby' and Other Cases for Discussion," Cincinnati, Ohio, September 26.
17. 2014, *Speaker,* Advances in Fetology 2014, "'Can you tell me …?': Achieving Informed Consent Given the Prevalence of Low Health Literacy," Cincinnati, Ohio, September 26.
18. 2014, *Panelist*, Center for Clinical & Translational Science & Training, Secrets of the Dead: The Ethics of Sharing their Data, Cincinnati, Ohio, August 28.
19. 2014, *Speaker,* Office for Human Research Protections Research Community Forum: Clinical Research … and All That Regulatory Jazz, "Research Results and Incidental Findings: Do Investigators Have a Duty to Return Results to Participants," Cincinnati, Ohio, May 21.
20. 2013, *Opening Presentation*, Empirical Bioethics: Emerging Trends for the 21st Century, University of Cincinnati Center for Clinical & Translational Science & Training, "Empirical vs. Normative Ethics: A Comparison of Methods," Cincinnati, Ohio, February 21.
21. 2012, *Videoconference,* New York State Task Force on Life and the Law, "Pediatric Critical Care Triage," New York, New York, March 1.
22. 2011, *Presenter,* Fall Faculty Development Workshop, College of Social Work, University of Utah, "Teaching Ethics to Students in the Professions, " Salt Lake City, Utah, November 14.
23. 2011, *Speaker,* 15th Annual Conference, Utah Chapter of the National Association of Pediatric Nurse Practitioners, "Ethical Issues in Pediatric Practice," Salt Lake City, Utah, September 22.
24. 2011, *Speaker*, Code Silver! Active Shooter in the Hospital, Utah Hospitals & Health Systems Association, Salt Lake City, Utah, March 21.
25. 2009, *Speaker,* Medical Staff Leadership Conference, Intermountain Healthcare, "The Ethics of Leadership," Park City, Utah, October 30.
26. 2008, *Speaker*, The Art and Medicine of Caring: Supporting Hope for Children and Families, Primary Children's Medical Center, "Medically Provided Hydration and Nutrition: Ethical Considerations," Salt Lake City, Utah, February 25.
27. 2005, *Speaker*, Utah NAPNAP (National Association of Pediatric Nurse Practitioners) Chapter Pharmacology and Pediatric Conference, "Immunization Update," Salt Lake City, Utah, August 18.
28. 2005, *Keynote Speaker,* 17th Annual Conference, Utah Society for Social Work Leadership in Health Care, "Brain Death: Accommodation and Consultation," Salt Lake City, March 18.
29. 2004, *Continuing Education Presentation*, Utah NAPNAP (National Association of Pediatric Nurse Practitioners), "Febrile Seizures," Salt Lake City, Utah, April 22.
30. 2004, *Speaker,* Advocacy Workshop for Primary Care Providers, "Ethics of Advocacy," Park City, Utah, April 3.
31. 2002, *Speaker,* 16th Annual Biologic Basis of Pediatric Practice Symposium, "Stem Cells: Religious Perspectives," Deer Valley, Utah, September 14.

Meeting Presentations

International

1. 2018, *Speaker*, International Conference on Clinical Ethics and Consultation, "A Systematic Review of Typologies Used to Characterize Clinical Ethics Consultations," Oxford, United Kingdom, June 21.

National

1. 2021, *Panelist,* Pediatric Endocrine Society Annual Meeting, Difference of Sex Development Special Interest Group, Virtual Conference, April 29.
2. 2020, *Speaker,* American Society for Bioethics and Humanities Annual Meeting, "Is This Child Dead? Controversies Regarding the Neurological Criteria for Death," Virtual Conference, October 17.
3. 2020, *Speaker,* American Society for Bioethics and Humanities Annual Meeting, "Contemporary Ethical Controversy in Fetal Therapy: Innovation, Research, Access, and Justice," Virtual Conference, October 15.
4. 2020, *Speaker,* American Society for Bioethics and Humanities Annual Meeting, "K-12 Schools and Mandatory Public Health Programs During the COVID-19 Pandemic," Virtual Conference, October 15.
5. 2019, *Speaker,* American Society for Bioethics and Humanities Annual Meeting, "Ethical Issues in Translating Gene Transfer Studies Involving Children with Neurodegenerative Disorders," Pittsburgh, Pennsylvania, October 26.
6. 2019, *Moderator,* Pediatric Academic Societies Annual Meeting, Clinical Bioethics, Baltimore, Maryland, April 28.
7. 2018, *Presenter,* American Society for Bioethics and Humanities Annual Meeting, "Looking to the Past, Understanding the Present, and Imaging the Future of Bioethics and Medical Humanities' Engagement with Transgender Health," Anaheim, California, October 19.
8. 2018, *Speaker,* American Society for Bioethics and Humanities Annual Meeting, "Should Vaccination Be a Prerequisite for Sold Organ Transplantation?" Anaheim, California, October 18.
9. 2018, Lindsey Douglas, Armand H. Matheny Antommaria, Derek Williams. *Workshop Presenter*, Pediatric Hospital Medicine Annual Meeting, "IRB Approved! Tips and Tricks to Smooth Sailing through the Institutional Review Board (IRB)." Atlanta, Georgia, July 20.
10. 2018, Alan Schroeder, Armand H. Matheny Antommaria, Hannah Bassett, Kevin Chi, Shawn Ralston, Rebecca Blankenburg. *Workshop Speaker,* Pediatric Hospital Medicine Annual Meeting, "When You Don't Agree with the Plan: Balancing Diplomacy, Value, and Moral Distress," Atlanta, Georgia, July 20.
11. 2018, Alan Schroeder, Hannah Bassett, Rebecca Blankenburg, Kevin Chi, Shawn Ralston, Armand H. Matheny Antommaria. *Workshop Speaker,* Pediatric Academic Societies Annual Meeting, "When You Don't Agree with the Plan: Balancing Diplomacy, Value, and Moral Distress," Toronto, Ontario, Canada, May 7.
12. 2017, *Speaker,* American Society for Bioethics and Humanities Annual Meeting, "Tensions in Informed Consent for Gender Affirming Hormone Therapy and Fertility Preservation in Transgender Adolescents," Kansas City, Missouri, October 19.
13. Lindsey Douglas, Armand H. Matheny Antommaria, and Derek Williams. 2017, *Workshop Leader,* PHM[Pediatric Hospital Medicine]2017, "IRB Approved! Tips and Tricks to Smooth Sailing through the Institutional Review Board (IRB) Process," Nashville, Tennessee, July 21.
14. 2016, *Speaker*, American Society for Bioethics and Humanities Annual Meeting, "Ethical Challenges in the Care of International Patients: Organization, Justice, and Cultural Considerations," Washington, DC, October 9.
15. 2015, *Coauthor,* The American Society of Human Genetics Annual Meeting, "Adolescents' Opinions on Disclosure of Non-Actionable Secondary Findings in Whole Exome Sequencing," Baltimore, Maryland, October 9.
16. 2012, *Speaker*, American Society for Bioethics and Humanities Annual Meeting, "A Public Health Ethics Analysis of the Mandatory Immunization of Healthcare Personnel: Minimizing Burdens and Increasing Fairness," Washington, DC, October 21.
17. Armand H. Matheny Antommaria, Valerie Gutmann Koch, Susie A. Han, Carrie S. Zoubul. 2012, *Moderator*, American Society for Bioethics and Humanities Annual Meeting, "Representing the

Underrepresented in Allocating Scarce Resources in a Public Health Emergency: Ethical and Legal Considerations," Washington, DC, October 21.

18. 2012, *Platform Presentation,* Pediatric Academic Societies Annual Meeting, "Qualitative Analysis of International Variation in Donation after Circulatory Death Policies and Rates," Boston, Massachusetts, April 30. Publication 3150.4.
19. 2011, *Speaker*, American Society for Bioethics and Humanities Annual Meeting, "The Intersection of Policy, Medicine, and Ethics during a Public Health Disaster: Special Considerations for Children and Families," Minneapolis, Minnesota, October 13.
20. Armand H. Matheny Antommaria and Joel Frader. 2010, *Workshop Leader,* Pediatric Academic Societies Annual Meeting, "Conscientious Objection in Health Care: Respecting Conscience and Providing Access," Vancouver, British Columbia, Canada. May 1. Session 1710.
21. 2009, *Workshop Leader,* American Society for Bioethics and Humanities Annual Meeting, "Advanced Clinical Ethics Consultation Skills Workshop: Process and Interpersonal Skills," Washington, DC, October 15.
22. 2009, *Platform Presentation*, Pediatric Academic Societies Annual Meeting, "Qualitative Analysis of Donation after Cardiac Death Policies at Children's Hospitals," Baltimore, Maryland, May 2. Publication 2120.6.
23. 2008, *Speaker*, American Society for Bioethics and Humanities Annual Meeting, "Qualitative Analysis of Donation After Cardiac Death (DCD) Policies at Children's Hospitals," Cleveland, Ohio, October 26.
24. 2007, *Participant,* Hamline University School of Law Biennial Symposium on Advanced Issues in Dispute Resolution, "An Intentional Conversation About Conflict Resolution in Health Care," Saint Paul, Minnesota, November 8-10.
25. *2007*, *Speaker,* American Society of Bioethics and Humanities Annual Meeting, "Bioethics Consultation and Alternative Dispute Resolution: Opportunities for Collaboration," Washington, DC, October 21.
26. 2007, *Speaker,* American Society of Bioethics and Humanities Annual Meeting, "DNAR Orders in Schools: Collaborations Beyond the Hospital," Washington, DC, October 18.
27. Armand H. Matheny Antommaria and Jeannie DePaulis. 2007, *Speaker,* National Association of Children's Hospitals and Related Institutions Annual Meeting, "Using Mediation to Address Conflict and Form Stronger Therapeutic Alliances," San Antonio, Texas, October 9.
28. 2006, *Speaker,* American Society of Bioethics and Humanities Annual Meeting, "Bioethics Mediation: A Critique," Denver, Colorado, October 28.
29. 2005, *Panelist,* American Society of Bioethics and Humanities Annual Meeting, "How I See This Case: 'He Is Not His Brain,'" Washington, DC, October 20.
30. 2005, *Paper Presentation,* Pediatric Ethics: Setting an Agenda for the Future, The Cleveland Clinic, "'He Is Not His Brain:' Accommodating Objections to 'Brain Death,'" Cleveland, Ohio, September 9.
31. 2004, *Speaker,* American Society for Bioethics and Humanities Spring Meeting, "Verification and Balance: Reporting Within the Constraints of Patient Confidentiality," San Antonio, Texas, March 13.
32. 2002, *Panelist*, American Society for Bioethics and Humanities Annual Meeting, "'Who Should Survive?:' Mental Retardation and the History of Bioethics," Baltimore, Maryland, October 24.

Invited/Visiting Professor Presentations

1. 2013, Visiting Professor, "How to Listen, Speak and Think Ethically: A Multidisciplinary Approach," Norton Suburban Hospital and Kosair Children's Hospital, Louisville, Kentucky, May 22.
2. 2010, Visiting Professor, Program in Bioethics and Humanities and Department of Pediatrics, "What to Do When Parents Want Everything Done: 'Futility' and Ethics Facilitation," University of Iowa Carver College of Medicine, Iowa City, Iowa, September 10.

Grand Round Presentations

1. 2019, David Green Lectureship, "Establishing Goals of Care and Ethically Limiting Treatment," Primary Children's Hospital, Salt Lake City, Utah, December 5.
2. 2018, "The Ethics of Medical Intervention for Transgender Youth," El Rio Health, Tucson, Arizona, September 29.
3. 2018, Pediatrics, "Patient Selection, Justice, and Cultural Difference: Ethical Issues in the Care of International Patients," Cleveland Clinic, Cleveland, Ohio, April 10.
4. 2018, Bioethics, "Reversibility, Fertility, and Conflict: Ethical Issues in the Care of Transgender and Gender Nonconforming Children and Adolescents," Cleveland Clinic, Cleveland, Ohio, April 9.
5. 2017, Heart Institute, "'Have you ever thought about what you would want—if god forbid—you became sicker?': Talking with adult patients about advance directives," Cincinnati Children's Hospital Medical Center, Cincinnati, Ohio, October 16.
6. 2017, Pediatrics, "Respectful, Effective Treatment of Jehovah's Witnesses," with Judith R. Ragsdale, PhD, MDiv and David Morales, MD, Cincinnati Children's Hospital Medical Center, Cincinnati, Ohio, March 14.
7. 2017, Pediatrics, "Ethical Dilemmas about Discharging Patients When There Are Disagreements Concerning Safety," Seattle Children's Hospital, Seattle, Washington, January 19.
8. 2015, Pediatrics, "'Nonbeneficial' Treatment: What must providers offer and what can they withhold?," Greenville Health System, Greenville, South Carolina, May 10.
9. 2014, Advance Practice Providers, "Common Ethical Issues," Cincinnati Children's Hospital Medical Center, Cincinnati, Ohio, August 13.
10. 2014, Respiratory Therapy, "Do-Not-Resuscitate (DNR) Orders," Cincinnati Children's Hospital Medical Center, Cincinnati, Ohio, July 15.
11. 2013, Heart Institute, "No Not Months. Twenty-Two *Years*-Old: Transiting Patients to an Adult Model of Care." Cincinnati Children's Hospital Medical Center, Cincinnati, Ohio, October 21.
12. 2013, Division of Neonatology, "This Premature Infant Has a *BRCA1* Mutation!?: Ethical Issues in Clinical Whole Exome Sequencing for Neonatologists." Cincinnati Children's Hospital Medical Center, Cincinnati, Ohio, October 11.
13. 2013, Department of Pediatrics, "Adults are Not Large Children: Ethical Issues in Caring for Adults in Children's Hospitals," Cincinnati Children's Hospital Medical Center, Cincinnati, Ohio, February 26.
14. 2012, "Mandate or Moratorium?: Persisting Ethical Controversies in Donation after Circulatory Death," Cedars-Sinai Medical Center, Los Angeles, California, May 16.
15. 2011, Division of Pediatric Neurology Friday Lecture Series, "Inducing or Treating 'Seizures' with Placebos: Is It Ever Ethical?," University of Utah, Salt Lake City, Utah, October 7.
16. 2011, Department of Surgery, "DNR Orders in the OR and other Ethical Issues in Pediatric Surgery: Case Discussions," Primary Children's Medical Center, Salt Lake City, Utah, October 3.
17. 2009, Department of Pediatrics, "What to Do When Parents Want Everything Done: 'Futility' and Bioethical Mediation," Primary Children's Medical Center, Salt Lake City, Utah, September 17.
18. 2008, Division of Pulmonology and Critical Care, "Futility: May Clinicians Ever Unilaterally Withhold or Withdraw Medical Treatment?" Utah Valley Regional Medical Center, Provo, Utah, April 17.
19. 2007, Division of Otolaryngology-Head and Neck Surgery, "Advance Directives, Durable Powers of Attorney for Healthcare, and Do Not Attempt Resuscitation Orders: Oh My!," University of Utah School of Medicine, Salt Lake City, Utah, June 20.

Outreach Presentations

1. 2019, *Panelist*, Cincinnati Edition, WVXU, "The Ethics of Human Gene Editing," Cincinnati, Ohio, June 13.
2. 2019, *Speaker,* Adult Forum, Indian Hill Church, "Medical Ethics," Indian Hill, Ohio, March 24.

3. 2016, *Speaker,* Conversations in Bioethics: The Intersection of Biology, Technology, and Faith, Mt. Washington Presbyterian Church, "Genetic Testing," Cincinnati, Ohio, October 12.
4. 2008, *Speaker,* Science in Society, Co-sponsored by KCPW and the City Library, "Death—Choices," Salt Lake City, Utah, November 20.
5. 2003, *Panelist,* Utah Symposium in Science and Literature, "The Goodness Switch: What Happens to Ethics if Behavior is All in Our Brains?" Salt Lake City, Utah, October 10.
6. 2002, *Respondent*, H. Tristram Englehardt, Jr. "The Culture Wars in Bioethics," Salt Lake Community College, Salt Lake City, Utah, March 29.

Podcasts

1. 2021, "Ethics of COVID Vaccines in Kids," PHM from Pittsburgh, August 12.
2. 2020, COVID Quandaries: Episode 1, "Is Getting Sick Just Part of the Job?" Hard Call, October 6.

EXHIBIT C

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TABLE 1: Strength of Recommendation and Quality of Evidence in Recommendations Made by the Endocrine Society

Strength of the Recommendation/ Quality of the Evidence[1]	Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons	Pediatric Obesity-Assessment, Treatment, and Prevention	Congenital Adrenal Hyperplasia Due to Steroid 21-Hydroxylase Deficiency
Strong|High	0 (0)[2]	0 (0)	0 (0)
Strong|Moderate	3 (11)	4 (13)	18 (33)
Strong|Low	5 (18)	6 (20)	13 (25)
Strong|Very Low	2 (7)	1 (3)	1 (2)
Weak|High	0 (0)	0 (0)	0 (0)
Weak|Moderate	0 (0)	0 (0)	2 (4)
Weak|Low	9 (32)	5 (17)	4 (7)
Weak|Very Low	3 (11)	12 (40)	7 (13)
Ungraded Good Practice Statement[3]	6 (21)	2 (7)	9 (17)
Either Low or Very Low	19 (68)	24 (80)	25 (46)
Total	28	30	54

[1] Quality of the Evidence
High: "Consistent evidence from well-performed RCTs [Randomized Controlled Trials] or exceptionally strong evidence from unbiased observational studies"
Moderate: "Evidence from RCTs with important limitations (inconsistent results, methodological flaws, indirect or imprecise evidence), or unusually strong evidence from unbiased observational studies"
Low: "Evidence for at least one critical outcomes from observational studies, from RCTs with serious flaws, or indirect evidence"
Very Low: "Evidence for at least one of the critical outcomes from unsystematic clinical observations or very indirect evidence"
See Swiglo BA, Murad MH, Schunemann HJ, et al. A case for clarity, consistency, and helpfulness: State-of-the-art clinical practice guidelines in endocrinology using the grading of recommendations, assessment, development, and evaluation system. *J Clin Endocrinol Metab*. 2008;93(3):666-73.

[2] n (%)

[3]Ungraded Good Practice Statement: "Direct evidence for these statements was either unavailable or not systematically appraised and considered out of the scope of this guideline. The intention of these statements is to draw attention to these principles." See Hembree WC, Cohen-Kettenis PT, Gooren L, et al. Endocrine treatment of gender-dysphoric/gender-incongruent persons: An Endocrine Society clinical practice guideline. *J Clin Endocrinol Metab*. 2017;102(11):3869-3903.

Guidelines:

Hembree WC, Cohen-Kettenis PT, Gooren L, et al. Endocrine treatment of gender-dysphoric/gender-incongruent persons: An Endocrine Society clinical practice guideline. *J Clin Endocrinol Metab*. 2017;102(11):3869-3903.

Styne DM, Arslanian SA, Connor EL, et al. Pediatric obesity-assessment, treatment, and prevention: An Endocrine Society clinical practice guideline. *J Clin Endocrinol Metab*. 2017;102(3):709-757.

Speiser PW, Arlt W, Auchus RJ, et al. Congenital adrenal hyperplasia due to steroid 21-hydroxylase deficiency: An Endocrine Society clinical practice guideline. *J Clin Endocrinol Metab*. 2018;103(11):4043-4088.