THE STATE OF SOUTH CAROLINA
IN THE SUPREME COURT

IN ITS ORIGINAL JURISDICTION

Appellate Case No. 2022-001062

PLANNED PARENTHOOD SOUTH ATLANTIC; GREENVILLE WOMEN'S CLINIC; KATHERINA FARRIS, M.D.; and TERRY BUFFKIN, M.D..... Petitioners,

v.

STATE OF SOUTH CAROLINA; ALAN WILSON, in his official capacity as Attorney General of South Carolina; EDWARD SIMMER, in his official capacity as Director of the South Carolina Department of Health and Environmental Control; ANNE G. COOK, in her official capacity as President of the South Carolina Board of Medical Examiners; STEPHEN I. SCHABEL, in his official capacity as Vice President of the South Carolina Board of Medical Examiners; RONALD JANUCHOWSKI, in his official capacity as Secretary of the South Carolina Board of Medical Examiners; JIM C. CHOW, in his official capacity as a Member of the South Carolina Board of Medical Examiners; GEORGE S. DILTS, in his official capacity as a Member of the South Carolina Board of Medical Examiners; DION FRANGA, in his official capacity as a Member of the South Carolina Board of Medical Examiners; RICHARD HOWELL, in his official capacity as a Member of the South Carolina Board of Medical Examiners; THERESA MILLS-FLOYD, in her official capacity as a Member of the South Carolina Board of Medical Examiners; JEFFREY A. WALSH, in his official capacity as a Member of the South Carolina Board of Medical Examiners; CHRISTOPHER C. WRIGHT, in his official capacity as a Member of the South Carolina Board of Medical Examiners; SCARLETT A. WILSON, in her official capacity as Solicitor for South Carolina's 9th Judicial Circuit; BYRON E. GIPSON, in his official capacity as Solicitor for South Carolina's 5th Judicial Circuit; and WILLIAM WALTER WILKINS III, in his official capacity as Solicitor for South Carolina's 13th Judicial Circuit..... Respondents,

and

G. MURRELL SMITH, JR., in his official capacity as Speaker of the South Carolina House of Representatives; THOMAS C. ALEXANDER, in his official capacity as President of the South Carolina Senate; and HENRY MCMASTER, in his official capacity as Governor of the State of South Carolina
.....Respondents–Intervenors.

BRIEF OF AMICI CURIAE AMERICAN ASSOCIATION OF PRO-LIFE OBSTETRICIANS AND GYNECOLOGISTS AND DR. CHRISTINE HEMPHILL IN SUPPORT OF RESPONDENTS-INTERVENORS

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INTEREST OF AMICI CURIAE

The American Association of Pro-Life Obstetricians and Gynecologists (AAPLOG) is the largest organization of pro-life obstetricians and gynecologists in the world, with over 6,000 members and associates. AAPLOG advocates for the unique value and dignity of each individual human life in all stages of growth and development. It believes that an obstetrician-gynecologist is called to care for two patients, and it equips medical professionals to provide evidence-based rationales for defending the lives of pregnant mothers and their unborn children. AAPLOG further believes that the doctor's Hippocratic obligation requires that she treat each of her patients with beneficence and respect, maximize the good for each patient she cares for, and avoid intentionally inflicting harm.

Dr. Christine Hemphill, a South Carolina native, is a board-certified obstetrician-gynecologist in active clinical practice in Lugoff, South Carolina. She has been board certified by the American Board of Obstetrics and Gynecology since 2015. Dr. Hemphill's treatment, surgical offerings, and interests run the gamut from minimally invasive surgery/robotic surgery to natural family planning, and also include micro-surgery for tubal sterilization reversals. She has provided testimony to the General Assembly as to the effect of proposed laws promoting life, and the care that should be offered to unborn children and their families as a whole.

Amici have a strong interest in preserving the life and health of unborn children and their mothers. They believe that all human life is worth protecting—from conception until natural death—and that abortion is a violation of medical ethics. Amici support South Carolina's commonsense Fetal Heartbeat and Protection from Abortion Act, 2021 S.C. Acts 1 ("Fetal Heartbeat Act"), which save for limited exceptions prohibits abortion after a fetal heartbeat is detected, thereby preserving the lives of the most vulnerable South Carolinians.

SUMMARY OF THE ARGUMENT

Science tells us that from the moment of conception, a unique, irreplaceable human being comes into existence, one the world has yet to see, and one the world will never see again. Science further tells us that the unborn child's life is a continuum, and that she differs only in degree of development, and not in kind, from her already-born brothers and sisters, parents, and grandparents. Finally, science tells us that once an unborn child's heart begins to beat, the chances of her being born are overwhelmingly high.

These truths vindicate the Fetal Heartbeat Act. The Act, which save for limited exceptions prohibits abortion once a fetal heartbeat is detected, is justified by "contemporary medical research" revealing that over 95% of those with a detectable fetal heartbeat will eventually be born, absent some outside interference like abortion.[1] The Act also reflects modern medical practice, which treats the unborn child as a patient in her own right. At fetal treatment centers across the country, doctors now perform open surgery and other procedures on children in the womb so that they can treat conditions that previously may have proven significantly limiting, if not fatal.

The statistical significance of a detectable heartbeat and the status of the unborn child as an independent patient mark the Fetal Heartbeat Act as a permissible legislative preference for childbirth over abortion. For if the unborn child will mature to full term in the womb, and if the unborn child can be cured in the womb, it makes sense to protect her in the womb. By drawing the line at the point science confirms unborn children are almost guaranteed to be born, the Fetal Heartbeat Act rationally advances South Carolina's legitimate and important interest in protecting life. It thus passes constitutional muster.

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[1] 2021 S.C. Acts No. 1, § 2.

ARGUMENT

South Carolina's Fetal Heartbeat Act ensures that medical providers perform ultrasounds on pregnant women, display the resulting images, and "record a written medical description . . . of the unborn child's fetal heartbeat." S.C. Code Ann. § 44-41-630. If the unborn child is at least ten weeks gestation, or eight weeks post-fertilization, the provider must "tell the woman that it may be possible to make the embryonic or fetal heartbeat of the unborn child audible . . . and shall ask the woman if she would like to hear the heartbeat." *Id.* § 44-41-640. If the mother wants to hear her child's heartbeat, the provider must then "make [it] audible" for her. *Id.* Absent an emergency, the provider may not perform an abortion without first determining whether the unborn child "has a detectable heartbeat." *Id.* § 44-41-650. If the child's heartbeat is detectable, the provider may not perform an abortion except in cases of rape, incest, or fetal anomaly, or to save the life or physical health of the mother. *Id.* §§ 44-41-680-690.

The General Assembly passed the Act to further the State's "legitimate interests from the outset of a pregnancy in protecting the health of the pregnant woman and the life of the unborn child who may be born." 2021 S.C. Acts No. 1, § 2. Under *Dobbs v. Jackson Women's Health Org.*, the abortion issue has been returned to "the people and their elected representatives." 142 S. Ct. 2228, 2259 (2022). South Carolina is once again free to enact and enforce laws like the Fetal Heartbeat Act, so long as it has a rational basis for doing so.[2] Under rational-basis review, this Court is to give "great deference to legislative judgment to promote public welfare," and "legislation is not overturned unless the law has no rational relationship to any legitimate interest of government." *Fraternal Ord. of Police v. S.C. Dep't of Revenue*,

[2] *Dobbs*, 142 S. Ct. at 2283-84 (concluding that rational basis review is the "appropriate standard" for challenges to abortion regulations going forward, because "abortion is not a fundamental constitutional right").

352 S.C. 420, 433–34, 574 S.E.2d 717, 724 (2002).

Even under *Roe v. Wade*, 410 U.S. 113 (1973), and *Planned Parenthood of Se. Penn. v. Casey*, 505 U.S. 833, 876 (1992), South Carolina was free to "make a value judgment favoring childbirth over abortion." *Webster v. Reprod. Health Servs.*, 492 U.S. 490, 506 (1989) (internal quotation marks and citation omitted). And it had a "legitimate interest[]" in "respect[ing] . . . and preserv[ing] . . . prenatal life at all stages of development." *Dobbs*, 142 S. Ct. at 2284 (citing *Gonzales v. Carhart*, 550 U.S. 124, 157-58 (2007)). But now that *Roe* and *Casey* are no more, South Carolina's authority to advance this interest is even more robust—indeed, "[t]he Constitution does not prohibit [it] from regulating or prohibiting abortion" altogether. *Id.* Against this backdrop, the Fetal Heartbeat Act, by preferring childbirth over abortion based on the medically and statistically significant fetal heartbeat threshold, easily passes the rational basis test.[3]

I. The science of embryology and fetal development supports the heartbeat threshold established by the General Assembly.

a. Because life begins at conception, the General Assembly could have drawn the line even earlier than the fetal heartbeat threshold.

For well over a century, embryological science has shown that life begins at conception, or fertilization:

- "The time of fertilization represents the starting point in the life history, or ontogeny, of the individual."[4]

- "Development begins at fertilization when a male gamete

[3] Even under *Roe*, when abortion was considered a federal constitutional right, a state had the "authority . . . to make a value judgment favoring childbirth over abortion." *Webster v. Reprod. Health Servs.*, 492 U.S. 490, 506 (1989). Indeed, *Casey* held that "a state measure designed to persuade [the mother] to choose childbirth over abortion will be upheld if reasonably related to that goal." *Casey*, 505 U.S. at 873, 878 (plurality opinion).

[4] BRUCE M. CARLSON, PATTEN'S FOUNDATIONS OF EMBRYOLOGY 3 (McGraw-Hill ed., 6th ed. 1996).

> or sperm (spermatozoon) unites with a female gamete or oocyte (ovum) to produce a single cell—a zygote."[5]
>
> - "Although life is a continuous process, fertilization . . . is a critical landmark because . . . a new, genetically distinct human organism is formed when the chromosomes of the male and female pronuclei blend in the oocyte . . ."[6]
>
> - "[T]he male and female sex cells or gametes . . . unite at fertilization to initiate the embryonic development of a new individual . . ."[7]

Indeed, after the "fertilization of the egg by the sperm," a "distinct separate human being" comes into existence.[8] At that point, "the genetic programme is already complete; and if there were a question of copyright on the programme, it would have to be recognized from that moment, precisely because the basic 'text' is all there from the start."[9] The issue of when life begins does not invite "scientific debate," precisely because the fact is "as certain as gravity or that the earth orbits the sun."[10]

The upshot of this consensus is that the General Assembly could have drawn its line even earlier in the embryological or fetal development process than it did, and would have been scientifically justified in doing so. Because upon conception, a unique human life appears in the world.

Put another way, the zygote or early embryo is no less deserving of the legal protections others get, whether they are newborns, growing children, adults, senior

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[5] KEITH L. MOORE & T.V.N. PERSAUD, THE DEVELOPING HUMAN: CLINICALLY ORIENTED EMBRYOLOGY 3 (Saunders, 7th ed. 2003).
[6] RONAN O'RAHILLY & FABIOLA MULLER, HUMAN EMBRYOLOGY & TERATOLOGY 87 (Wiley-Liss, 3rd ed. 2001).
[7] WILLIAM LARSON, HUMAN EMBRYOLOGY 1, 17 (W.B. Saunders Co., 2nd ed. 1997).
[8] Michael Egnor, *Fact Check: Yes, Human Life Begins at Fertilization*, EVOLUTION NEWS & SCIENCE TODAY (May 10, 2022, 9:26 AM), https://bit.ly/3Ehl3cg.
[9] Bartholomew Kiely, *Science and Morality*, L'OSSERVATORE ROMANO (April 13, 1987), https://bit.ly/3El5uQG.
[10] Egnor, *Fact Check*.

citizens, or people with disabilities. "Scientifically . . . there is no question or confusion whatsoever that the immediate product [of fertilization], and all continuous, contiguous, growth and developmental stages thereafter through adulthood, involves an already fully existing unique living human being."[11] That is why many states have historically recognized that conception should trigger legal protections for the unborn child, and most have passed laws protecting life from its earliest moments. *Dobbs*, 142 S. Ct. at 2248–2254 (concluding that abortion "is not deeply rooted in the Nation's history and traditions," and noting that "[n]ot only was there no support for . . . a constitutional right [to abortion] until shortly before *Roe*, but abortion had long been a crime in every single State").[12] And for 90 years—until *Roe v. Wade* interfered—South Carolina permissibly protected unborn children by codifying abortion as a crime unless an abortion was "necessary to preserve [a pregnant woman's] life or the life of [the] child." 1883 S.C. Acts No. 354, § 1.

b. The science of fetal development supports the Fetal Heartbeat Act.

After conception, the unborn child matures significantly from the very start. At three weeks gestation, which is just one week after conception,[13] the unborn child's sex has been determined.[14] At five weeks, the brain, spine, and heart are

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[11] Dianne N. Irving, M.A. Ph.D., *Legally Valid Informed Consent, Individual Testimony before the New Jersey State Senate Health and Human Services Committee on Human Embryonic Stem Cell Research, Ethical and Public Policy Considerations,* LIFEISSUES.NET (Nov. 4, 2002), https://bit.ly/3SzVVSc.

[12] *See also* Paul Benjamin Linton, *Planned Parenthood v. Casey: The Flight From Reason in the Supreme Court*, 13 ST. LOUIS U. PUB.L.REV. 15, 120–137 (1993) (citing caselaw and statutes from 38 states and the District of Columbia stating that the life of a human being should be protected from conception onward).

[13] The gestational age is dated from the first day of the last menstrual period, and is two weeks more than the conceptional age, or time since actual fertilization. The dates used here refer to gestational age unless otherwise noted. *See* Mark A. Curran, *Fetal Development*, https://bit.ly/3e1AXgd (last visited Oct. 4, 2022).

[14] Curran, *Fetal Development*.

forming.[15] By the end of the fifth week the unborn child's heart begins pumping blood.[16] By the sixth week, "[t]he embryonic heartbeat can be detected"[17] and reaches "about 110 beats per minute."[18] The child's eyes, nostrils, and arms also begin to take shape in the sixth week, and the nervous system begins to develop.[19]

At seven weeks, the child's hands, feet, mouth, and face are forming; "the trachea and bronchi of the lungs have formed"; and the heart is pumping "at about 120 beats per minute."[20] By eight weeks, the unborn child's kidneys, liver, and lungs begin to form.[21] At ten weeks, the unborn child's fingerprints start to form and bone cells begin to replace cartilage.[22] At eleven weeks the unborn child starts to make breathing movements,[23] can open its mouth and swallow,[24] and can hiccup.[25] The child has hands and feet with individual fingers and toes, ears, a mouth and tongue, open nasal passages, and tooth buds and hair follicles forming.[26]

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[15] *Id*; *see also* Planned Parenthood, *What happens in the second month of pregnancy?,* https://bit.ly/3yesZqE ("during week 5-6 . . . [a] part of the embryo starts to show cardiac activity").
[16] Curran, *Fetal Development*; Keith L. Moore et al., THE DEVELOPING HUMAN E-BOOK: CLINICALLY ORIENTED EMBRYOLOGY 8945 (Kindle ed. 2020) (stating that the "cardiovascular system is the first major system to function," and "blood is circulating and the heart begins to beat on the 21st or 22nd day" after conception, the end of the fifth gestational week).
[17] *Id*. at 2662.
[18] Curran, *Fetal Development*.
[19] Thomas W. Sadler, LANGMAN'S MEDICAL EMBRYOLOGY 72 (LWW, ed., 14th ed. 2019).
[20] *Id*.
[21] Alessandra Piontelli, DEVELOPMENT OF NORMAL FETAL MOVEMENTS: THE FIRST 25 WEEKS OF GESTATION 98, 110 (Spring, ed., 2010th ed. 2014).
[22] Sadler, LANGMAN'S MEDICAL EMBRYOLOGY at 106–127; Curran, *Fetal Development*.
[23] Curran, *Fetal Development;* Piontelli, DEVELOPMENT OF NORMAL FETAL MOVEMENTS at 40.
[24] Curran, *Fetal Development*.
[25] Piontelli, DEVELOPMENT OF NORMAL FETAL MOVEMENTS at 40.
[26] Moore et al., THE DEVELOPING HUMAN at 1–9.e1; Prachi Jain & Manu Rathee, *Embryology, Tongue*, STATPEARLS (Aug. 11, 2021), https://bit.ly/3C5d5QN; *Your Pregnancy at 11 weeks*, MEDICAL NEWS TODAY, https://bit.ly/3RvLAFL.

She also now begins to show an awareness of her environment.[27] At twelve weeks, the unborn child begins to move, her pancreas makes insulin, her kidneys make urine, and she begins to produce thyroid hormone.[28] Vocal cords begin to form.[29] And at this stage, the unborn child has working pain receptors.[30]

By the end of the first trimester, "[a]ll the organs, muscles, limbs, and bones are in place, and the sex organs are well developed," so the unborn child has but to "grow and mature" to make her way to a successful live birth.[31] But she cannot do this alone: she still cannot survive outside her mother's womb at twelve weeks gestation, and she is still vulnerable to myriad potential insults, including "drugs, infectious agents, radiation, certain medications, tobacco[,] toxic substances,"[32] and elective abortion.

In other words, at every step of this rapid and miraculous development, the

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[27] Umberto Castiello et al., *Wired to Be Social: The Ontogeny of Human Interaction*, 5 PLOS ONE (Oct. 7, 2010), https://bit.ly/3EiBAwv (showing "inter-twin" contact as early as ten to eleven weeks and that twins "execute movements specifically aimed at the co-twin" by fourteen weeks); Janelle Weaver, *Social before Birth: Twins First Interact with Each Other as Fetuses*, SCIENTIFIC AM. (Jan. 1, 2011), https://bit.ly/3EcxG8q (discussing research showing twins socially interacting with each other in the womb as early as the fourteenth week).

[28] Curran, *Fetal Development*.

[29] Johns Hopkins All Children's Hospital, *A Week-by-Week Pregnancy Calendar: Week 12*, KIDSHEALTH, https://bit.ly/3rsWEJ0.

[30] Slobodan Sekulic et al., *Appearance of Fetal Pain Could Be Associated with Maturation of the Mesodiencephalic Structures*, 9 J. PAIN RSCH. 1031, 1034–35 (2016), https://bit.ly/3SEyN4Y; Stuart WG Derbyshire & John C. Bockmann, *Reconsidering Fetal Pain*, J. OF MED. ETHICS (Nov. 14, 2019), https://bit.ly/3rw7MEY (concluding that "current neuroscientific evidence supports the possibility of fetal pain" at 12 weeks gestation); Am. Ass'n. of Pro-life Obstetricians & Gynecologists, *AAPLOG Fact Sheet Fetal Pain* (Feb. 13, 2019), https://bit.ly/3C8BzbJ (outlining development of fetal pain perception, which begins with the "presence of cutaneous sensory receptors (nociceptors), which begin to develop in the peri-oral area at 7 weeks, spread to the palms and soles by 11 weeks, to trunk and proximal limbs by 15 weeks, and are present throughout the fetus' entire body by 20 weeks").

[31] National Health Service UK, *You and your baby at 12 weeks pregnant*, NHS, https://bit.ly/3CxUUVd.

[32] Johns Hopkins Med., *The First Trimester*, https://bit.ly/3RQMwEV.

unborn child needs protection so that nothing prevents her from completing her nearly inevitable maturation. South Carolina provides this protection through the Act, based on its prerogative to safeguard life. South Carolina could have rationally drawn a line to further its important interest in protecting life at any point along the developmental continuum. But after careful deliberation, the General Assembly chose the fetal heartbeat as the threshold past which, with limited exceptions, life is protected from abortion.

c. The General Assembly set a medically sound threshold based on the scientific consensus that a detectable fetal heartbeat predicts a successful live birth.

In passing the Fetal Heartbeat Act, the General Assembly made a medically and practically sound decision. It found, based on incontrovertible medical evidence, that "fewer than five percent of all natural pregnancies end in spontaneous miscarriage after the detection of a fetal heartbeat," and that "a fetal heartbeat is a key medical predictor that an unborn human individual will reach live birth." Act of Feb. 18, 2021, No. 1 § 2(2),(5), 2021 S.C. Acts 1. The medical consensus on the importance of a detectable fetal heartbeat underscores why the Act is rationally related to the State's interest in protecting life.

More specifically, once an unborn child has a detectable heartbeat, her "chances of surviving to full term are between 95%–98%."[33] Indeed, although miscarriages "are estimated to occur in 10-15% of clinically recognized pregnancies," miscarriages after a detected heartbeat "are rare, estimated at 2-3%."[34] "[E]ven in

[33] David F. Forte, *Life, Heartbeat, Birth: A Medical Basis for Reform*, 74 OHIO. ST. L.J. 121, 140 & nn. 121-22 (2012), https://bit.ly/3eagIgm (collecting research).
[34] *Planned Parenthood South Atlantic, et al. v. South Carolina, et al.*, Expert Report of Dr. Ingrid Skop ¶ 39, Aug. 23, 2022; *see also* S.A. Brigham et al., *A Longitudinal Study of Pregnancy Outcome Following Idiopathic Recurrent Miscarriage*, 14 HUMAN REPROD. 2868, 2868-71 (1999), https://bit.ly/3RPNIs8 ("our prospective study of a larger population showed a fetal loss rate of 3% (6/222) after the initial detection of fetal cardiac activity . . ."); J.S. Hyer et al., *Predictive value of the presence of an embryonic heartbeat for live birth: Comparison of women with and*

'threatened pregnancies,' after a detection of fetal heartbeat, there was only a 3.7% loss."[35] In sum, the unborn child who develops a detectable heartbeat, even if only 21 days after her conception,[36] "can reasonably be expected to reach birth and entry into human society unless an external action causes [her] demise."[37]

This medical and statistical consensus shows why the Fetal Heartbeat Act rationally furthers the State's legitimate and important interest in protecting life. Moreover, unlike the arbitrary and unworkable viability standard, which "ma[de] no sense" and bedeviled courts since *Roe* was decided in 1973,[38] the fetal heartbeat standard is objectively verifiable and substantively meaningful.[39] The heartbeat can

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without recurrent pregnancy loss, FERTILITY AND STERILITY 82, 1369 (Nov. 2004), https://bit.ly/3rzX94c (presence of heartbeat at 6-8 weeks' gestation correlates with live birth rate of 98% in normal pregnancies absent intervention); KA Cashner, et al., *Spontaneous fetal loss after demonstration of a live fetus in the first trimester*, 70 OBSTET GYNCOL. 827, 827-830 (1987), https://bit.ly/3M7DYba (finding miscarriage rate of only 2% in naturally conceived pregnancies after detection of a fetal heartbeat between 8 and 12 weeks of gestation).

[35] Forte, *Life, Heartbeat, Birth: A Medical Basis for Reform* at 143-44 (quoting Y. Tannirandorn et al., *Fetal Loss in Threatened Abortion After Embryonic/Fetal Heart Activity*, 81 INT'L J. GYNECOLOGY& OBSTETRICS 263, 263-66 (2003), https://bit.ly/3MdmN8b).

[36] Curran, *Fetal Development* (noting that the heart will be pumping blood by the end of the fifth gestational week).

[37] *Supra* n. 33, Expert Report of Dr. Ingrid Skop ¶ 39; *see also* Forte, *Life, Heartbeat, Birth* at 146 ("[A]bsent some external, unexpected development, once a fetus has reached the stage of five or six weeks and his or her heart has begun to function, it is almost certain that she will continue to develop to full term."); Charlotte Lozier Institute, *Fact Sheet: Fetal Survival and Risk of Pregnancy Loss* (July 2021), https://bit.ly/3MgzKhK ("Numerous published studies document that detection of a fetal heartbeat, verification of a live embryo or fetus, is a prognostic indicator for survival of the fetus to term. Even early detection of fetal heartbeat points to long-term survival.").

[38] *See Dobbs v. Jackson Women's Health Org.*, 142 S. Ct. 2228, 2268-70 (2022) (discussing many problems with viability standard and concluding that "viability is not really a hard and fast line").

[39] In their recently filed amicus brief, the American College of Obstetricians and Gynecologists ("ACOG") makes much of the fact that the unborn child's heart continues to develop throughout pregnancy, and uses this unremarkable fact to argue that "a true fetal heartbeat exists only after the chambers of the heart have

be routinely detected by "readily available medical technology" like ultrasonography.[40] And, contrary to viability—which changes over time with medical advancements and is virtually unknowable in any given pregnancy—fetal heartbeat "represents a much more determinable point at which the State's interest in the protection of prenatal life begins," precisely because it is such a strong statistical "predictor of survivability to term."[41]

Given all this, the fetal heartbeat threshold set by the General Assembly is sensible, workable, and directly furthers the State's aim of preserving innocent human life—it thus bears all the hallmarks of constitutionality.

II. The unborn child's status as a patient in her own right further supports the Fetal Heartbeat Act.

Technological advancements like magnetic resonance imaging and ultrasonography have made it possible to diagnose and treat fetal conditions and abnormalities, *in utero*, earlier and earlier.[42] This capability has spurred on a "perinatal revolution" in which "fetal therapy and surgical interventions have made it possible for [unborn children] with previously life-limiting or life-threatening diagnoses to not only survive to birth, but also to experience marked increases in

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been developed." Brief of American College of Obstetricians and Gynecologists 10. At the same time, however, ACOG cannot help but admit that "embryonic cardiac activity . . . typically is detectable at approximately six weeks' gestation," *id.*, which directly accords with the medical science the General Assembly relied upon in passing the Fetal Heartbeat Act. Even more important, ACOG misses the point entirely. It is precisely the detectable early embryonic or fetal heartbeat at around six weeks which statistically predicts a successful live birth later on, absent some intervention like abortion. It is legally irrelevant that the heart continues to develop and mature. What matters is that the early heartbeat—whose significance ACOG tries to downplay by sleight of hand—overwhelmingly and reliably predicts a healthy live birth.

[40] Forte, *Life, Heartbeat, Birth* at 140.

[41] *Id.* at 140-41.

[42] Colleen Malloy, M.D. et al., *The Perinatal Revolution*, 34 ISSUES L. & MED. 15, 16 (2019), https://bit.ly/3yhYf8i.

quality of life and lifespan."[43] Practically speaking, the unborn child "has truly become a patient" apart from her pregnant mother.[44] Put another way, modern medicine's treatment of the unborn child now directly aligns with embryology's teaching that the unborn child is an individual from the moment of conception.

The interventions available to children in the womb are considerable and growing. The unborn child may now be a candidate for fetal cardiac surgery *in utero*.[45] She may undergo open fetal surgery, where an incision is made in the mother's abdomen, for conditions such as myelomeningocele (also known as open spina bifida); sacrococcygeal teratoma, the most common type of fetal tumor; and congenital diaphragmatic hernia, which can compress the lungs and hinder their growth and development.[46] The unborn child can also undergo fetoscopy, a "[l]aparoscopic-type technique[]" which makes possible treatments like the placement of shunts for bladder obstructions and the opening of posterior urethral valves.[47] During these surgical interventions, the child is almost always provided with anesthesia or analgesia, much like any other surgical patient would be, which further confirms her humanity and need for protection.[48]

To perform and perfect these treatments, and to explore other avenues to treat children *in utero*, dedicated fetal treatment centers have been established "at

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[43] *Id.*
[44] Kenneth J. Moise, Jr., *The History of Fetal Therapy*, 31 AM. J. OF PERINATOLOGY 557, 557-566 (2014), https://bit.ly/3SPfbLk.
[45] Malloy, *The Perinatal Revolution* at 20 ("Recent studies suggest that management of congenital heart disease based on accurate fetal diagnosis may improve morbidity and mortality, especially for those fetuses with critical congenital heart disease.").
[46] *Id.* at 21-23; *see also* Moise, *History of Fetal Therapy* at 561-564.
[47] Malloy, *The Perinatal Revolution* at 19.
[48] Carlo V. Bellieni, *Analgesia for fetal pain during prenatal surgery: 10 years of progress*, 89 PEDIATRIC RES. 1612, 1612 (2020), https://go.nature.com/3V9ayOi ("[T]he human fetus can feel pain when it undergoes surgical interventions and direct analgesia must be provided to it.").

many of the major children's hospitals throughout the United States."[49] Meanwhile, progress continues: "several novel techniques are being investigated that show real promise of augmenting fetal repair, serving as alternatives for specific prenatal conditions, and even expanding the breadth of conditions treated *in utero*."[50] Close to home, the Medical University of South Carolina has an advanced fetal care center of its own.[51]

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The medical advancements making *in utero* fetal treatments possible show that protecting the unborn child as the individual she is makes sense. Whereas once many serious fetal health conditions would likely have resulted in severe disabilities or death upon birth, or even prompted recommendations to parents to "terminate the pregnancy,"[52] such outcomes and advice are decreasingly common because of the treatments available to unborn children.[53] As two prominent obstetrician-gynecologists who specialize in maternal-fetal medicine put it, "[n]o longer do we accept the limited choices of prenatal diagnosis—to continue the pregnancy, or not."[54]

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[49] Moise, *History of Fetal Therapy* at 557.
[50] Malloy, *The Perinatal Revolution* at 29 (describing "the perinatal revolution['s] significant advances in successfully treating the fetus with specific conditions *in utero*," namely new treatments involving "utero cellular therapy, tissue engineering, gene-based therapies, and the artificial womb").
[51] *See* Med. Univ. of S.C., *Advanced Fetal Care*, https://bit.ly/3V8cq9K.
[52] Byron Calhoun, M.D., *The Perinatal Hospice: Allowing Parents to be Parents*, 1 CHARLOTTE LOZIER INSTITUTE, AM. REPORTS SERIES 3 (2012), https://bit.ly/3CaEMaW (noting that previous counseling generally centered on abortion as the only viable option).
[53] *See* Child. Hosp. of Phila., *Volumes and Outcomes: Fetal Anomalies*, (2022), https://bit.ly/3RCE5wD (noting that physicians at the Center for Fetal Diagnosis and Treatment at Children's Hospital of Philadelphia have performed over 2,104 fetal surgeries, and evaluated more than 19,373 patients from 1995 to the present).
[54] Choolani, M. and A. Biswas, *Fetal diagnosis and therapy,* 26 BEST PRAC. & RSCH. CLINICAL OBSTETRICS & GYNAECOLOGY 515, 515-516 (2012), https://bit.ly/3MgPmld.

This paradigm shift has noteworthy implications for legislative bodies like the South Carolina General Assembly, which is tasked with making sound public policy on issues like abortion. Given the unborn child's status as an independent patient, the General Assembly could permissibly conclude that laws should protect such patients. For if the unborn child with a heartbeat can be medically treated and even cured in the womb, she should be protected in the womb so that such treatments can be carried out. This approach, unlike abortion, treats both the mother *and* her unborn child as human beings meriting care, and respects and upholds the traditional role of the doctor as a healer. *See Dobbs*, 142 S. Ct. at 2284 (noting that in regulating abortion the state has a legitimate interest in "preserv[ing] . . . the integrity of the medical profession").

CONCLUSION

South Carolina has a legitimate and important interest in protecting unborn life, including at its earliest stages. *See id.* (concluding that a state's "legitimate interests include respect for and preservation of prenatal life at all stages of development"). And the Fetal Heartbeat Act does just that: based on sound medical science and practice, and consistent with South Carolina's traditional solicitude for protecting life,[55] the law protects unborn children from the moment they show a detectable heartbeat, a sign that reliably and overwhelmingly predicts a healthy live birth. Although South Carolina could have stepped in to protect unborn children even earlier in the fetal development process, the medical evidence it relied on to pass the Fetal Heartbeat Act shows that the line it ultimately drew is rational and therefore permissible.

[55] Br. of Gov. McMaster 9-16, Oct. 5, 2022.

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October 6, 2022
Columbia, South Carolina

THE STATE OF SOUTH CAROLINA
IN THE SUPREME COURT

IN ITS ORIGINAL JURISDICTION

Appellate Case No. 2022-001062

PLANNED PARENTHOOD SOUTH ATLANTIC; GREENVILLE WOMEN'S CLINIC; KATHERINA FARRIS, M.D.; and TERRY BUFFKIN, M.D..... Petitioners,

v.

STATE OF SOUTH CAROLINA; ALAN WILSON, in his official capacity as Attorney General of South Carolina; EDWARD SIMMER, in his official capacity as Director of the South Carolina Department of Health and Environmental Control; ANNE G. COOK, in her official capacity as President of the South Carolina Board of Medical Examiners; STEPHEN I. SCHABEL, in his official capacity as Vice President of the South Carolina Board of Medical Examiners; RONALD JANUCHOWSKI, in his official capacity as Secretary of the South Carolina Board of Medical Examiners; JIM C. CHOW, in his official capacity as a Member of the South Carolina Board of Medical Examiners; GEORGE S. DILTS, in his official capacity as a Member of the South Carolina Board of Medical Examiners; DION FRANGA, in his official capacity as a Member of the South Carolina Board of Medical Examiners; RICHARD HOWELL, in his official capacity as a Member of the South Carolina Board of Medical Examiners; THERESA MILLS-FLOYD, in her official capacity as a Member of the South Carolina Board of Medical Examiners; JEFFREY A. WALSH, in his official capacity as a Member of the South Carolina Board of Medical Examiners; CHRISTOPHER C. WRIGHT, in his official capacity as a Member of the South Carolina Board of Medical Examiners; SCARLETT A. WILSON, in her official capacity as Solicitor for South Carolina's 9th Judicial Circuit; BYRON E. GIPSON, in his official capacity as Solicitor for South Carolina's 5th Judicial Circuit; and WILLIAM WALTER WILKINS III, in his official capacity as Solicitor for South Carolina's 13th Judicial Circuit..... Respondents,

and

G. MURRELL SMITH, JR., in his official capacity as Speaker of the South Carolina House of Representatives; THOMAS C. ALEXANDER, in his official capacity as President of the South Carolina Senate; and HENRY MCMASTER, in his official capacity as Governor of the State of South Carolina
.....Respondents–Intervenors.

CERTIFICATE OF COMPLIANCE

I hereby certify that the foregoing brief complies with South Carolina Appellate Court Rules 208(b), 211, 213, and 267.

s/Henry W. Frampton IV
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Counsel for Amici Curiae AAPLOG and Dr. Christine Hemphill

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.....Respondents–Intervenors.

CERTIFICATE OF SERVICE

I certify that the foregoing *Brief of Amici Curiae AAPLOG and Dr. Christine Hemphill in Support of Respondents-Intervenors* was served on counsel of record on October 6, 2022, via email under Paragraph (d)(1) of Order Re: Methods of Electronic Filing and Service Under Rule 262 of the South Carolina Appellate Court Rules (As Amended May 6, 2022), Appellate Case No. 2020-000447.

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