## Supreme Court of Iowa

PLANNED PARENTHOOD OF THE HEARTLAND, INC., EMMA GOLDMAN CLINIC, AND SARAH TRAXLER, *Petitioners-Appellees*,

v.

KIM REYNOLDS EX REL. STATE OF IOWA AND IOWA BOARD OF MEDICINE, *Respondents-Appellants*.

ON APPEAL FROM THE IOWA DISTRICT COURT FOR POLK COUNTY HON. JOSEPH SEIDLIN, PRESIDING

### BRIEF OF AMERICAN COLLEGE OF PEDIATRICIANS AS AMICUS CURIAE IN SUPPORT OF APPELLANTS

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#### INTEREST OF AMICUS CURIAE

The American College of Pediatricians is a national organization of pediatricians and other health care professionals dedicated to the health and well-being of children. Formed in 2002, the College is committed to producing policy recommendations based on the best available research. The College currently has members in 47 states. Of particular importance to the College is the sanctity of human life from conception to natural death.

Under Iowa R. App. P. 6.906, all parties consented to the filing of this brief. *See* Addendum. No party or party's counsel authored the brief in whole or in part; no party or party's counsel contributed money that was intended to fund preparing or submitting the brief; and no person—other than *amicus curiae*, its members, or its counsel—contributed money that was intended to fund preparing or submitting the brief.

#### INTRODUCTION

The "Iowa Constitution is silent" about abortion. *Planned Parenthood* of the Heartland, Inc. v. Reynolds ex rel. State, 975 N.W.2d 710, 739 (Iowa 2022) ("PPH IV"). Thus, like the United States Constitution, it is neutral on this contentious issue. And "[b]ecause the Constitution is neutral on the issue of abortion, this Court also must be scrupulously neutral." *Dobbs v. Jackson Women's Health Org.*, 142 S. Ct. 2228, 2305 (2022) (Kavanaugh, J., concurring). The People of Iowa have spoken through their representatives. Planned Parenthood's demand that its preferences—its belief that pre-viability life has *no* value—be imposed on the People should be rejected.

The United States Supreme Court tried to impose a judicial vision of abortion-on-demand for nearly 50 years, to disastrous results. It struggled to identify the constitutional basis of such a right, veering from privacy in *Roe v. Wade*, 410 U.S. 113, 154 (1973), to autonomy and mysteries of life in *Planned Parenthood of Southeastern Pennsylvania v. Casey*, 505 U.S. 833, 851 (1992). It could not decide the parameters of such a right, careening from trimesters in *Roe* to viability in *Casey*. It could not identify why viability mattered but in purely "circular" fashion. *Dobbs*, 142 S. Ct. at 2311 (Roberts, C.J., concurring in judgment). It could not provide a workable standard to adjudicate any right to abortion, eventually recognizing that the "undue burden" test

"is inherently standardless." *Id.* at 2272 (majority opinion) (cleaned up). It adopted an abortion right that put the United States in the dubious company of a handful of countries hostile to basic human rights, "among them China and North Korea." *Id.* at 2312 (Roberts, C.J.). Its invented abortion right distorted vast swaths of the law, including "[s]tatutory interpretation, the rules of civil procedure, the standards for appellate review of legislative factfinding, and the First Amendment." *Memphis Ctr. for Reprod. Health v. Slatery*, 14 F.4th 409, 451 (6th Cir. 2021) (Thapar, J., concurring in judgment in part and dissenting in part). And its constitutional rule—that "a State may not prohibit any woman from making the ultimate decision to terminate her pregnancy before viability" (*Casey*, 505 U.S. at 879)—precipitated the deaths of more than 63 million unborn children in America.

Now, abortionists want this Court to make all these mistakes and more. They want this Court to take sides on one of the most contentious questions of our time: whether an unborn child deserves legal protection. And they want this Court to hold that unborn life—at least before some arbitrary point of viability, which is unknowable, circumstance-dependent, and always changing—cannot be protected. They claim that the Iowa Constitution enshrines their belief that pre-viability life deserves *no* protection. Unsurprisingly, the abortionists' extraordinary ideological view has never prevailed in our legislative process. Abortionists will continue pressing that view in the court of public opinion. But this Court should not countenance Planned Parenthood's strained effort to invoke constitutional provisions that have nothing to do with abortion to take away the ability of the People to protect unborn life. The Iowa Constitution does not impose Planned Parenthood's moral perspective on all Iowans. The Court too should be neutral.

Fortunately, upholding Iowa's law would not require the Court to decide when life begins. The Iowa Legislature determined that unborn life is worthy of legal protection. This legislative determination is consistent with the scientific evidence now available. "[B]y common understanding and scientific terminology, a fetus is a living organism while within the womb, whether or not it is viable outside the womb." *Gonzales v. Carhart*, 550 U.S. 124, 147 (2007). At five weeks' gestation, the unborn child's heart starts beating, and the heart is fully formed by around nine weeks when the heartbeat can be measured by the abdominal ultrasound required by Iowa's law. Contrary to Planned Parenthood's claims, medical literature refers to early cardiac activity as a fetal heartbeat. By six weeks, brain waves are detectable. By seven weeks, the child can move and starts to develop sensory receptors. By ten weeks, multiple organs begin to function, and the child has the neural circuitry for spinal reflex, an early response to pain. By twelve weeks, the child can open and close fingers and sense stimulation from the outside world. And medical interventions after fifteen weeks (other than abortion) use analgesia to prevent suffering. At this point of pregnancy, abortionists must rip the child "piece by piece" from the womb. *Gonzales*, 550 U.S. at 136.

To uphold the Act would not require this Court to consider the implications of these scientific facts; the People have already done so through their elected representatives, and they decided that pre-viability life is worth protecting. Accepting Planned Parenthood's theory, on the other hand, would require this Court to "impose on the [P]eople a particular theory about when the rights of personhood begin." Dobbs, 142 S. Ct. at 2261. It would require this Court to substitute a moral belief that pre-viability life has no value for the Iowa Legislature's scientific judgment that abortion ends "the life of an 'unborn human being." Id. at 2258. In other words, Planned Parenthood wants this Court to hold that the Iowa Constitution "*requires* the State[] to regard a fetus as lacking even the most basic human right—to live—at least until an arbitrary point in a pregnancy has passed." Id. at 2261. That extraordinary demand seeks relief far beyond this Court's judicial power to say what the law is: "Courts do not pass on the policy, wisdom, advisability or justice of a statute. The remedy for those who contend legislation which is within constitutional bounds is unwise or oppressive is with the legislature." *City of Waterloo v. Selden*, 251 N.W.2d 506, 508 (Iowa 1977).

The Court should reject Planned Parenthood's radical reinterpretation of the Iowa Constitution. As with many controversial issues, the issue of abortion is not decided by the Constitution. "The permissibility of abortion, and the limitations, upon it, are to be resolved like most important questions in our democracy: by citizens trying to persuade one another and then voting." *Dobbs*, 142 S. Ct. at 2243 (cleaned up). The People's representatives "can do what [this Court] can't: listen to the community, create fact-specific rules with appropriate exceptions, gather more evidence, and update their laws if things don't work properly." *Slatery*, 14 F.4th at 462 (Thapar, J.). This Court should reverse.

#### ARGUMENT

#### I. The People's decision to protect unborn life reflects scientific fact.

Scientific knowledge both underscores the legitimacy of the Iowa Legislature's decisions here and undermines any argument for a novel constitutional right to abortion. Medical advancements have produced scientific evidence that makes clear today what the U.S. Supreme Court in *Roe* could not understand: the human fetus is a living being from the moment of conception and can move, smile, and feel pain in the womb.

## A. Significant fetal development occurs before Iowa's law takes effect around nine weeks.

When the Court decided Roe in 1973, scientific knowledge about fetal development was limited, with fetology only recognized as a new field of science that same year.<sup>1</sup> Indeed, the Court had been told that "in early pregnancy" "embryonic development has scarcely begun." Brief for Appellant 20, Roe, 1971 WL 128054. Thus, "[a]s to the question 'when life begins,' the Roe majority maintained that 'at that point in the development of man's knowledge,' it was 'not in a position to speculate." *Slatery*, 14 F.4th at 450 (Thapar, J.) (quoting Roe, 410 U.S. at 159). The Court purported to rely on what it considered to be "the well-known facts of fetal development" to conclude that a pre-viability "fetus, at most, represents only the potentiality of life." Roe, 410 U.S. at 156, 162. Only in the late 1970s—years after Roe—did the use of ultrasound machines expand.<sup>2</sup> Unlike the prototypes in limited use in 1973, routine ultrasounds can now provide high-definition four-dimensional images in real time that reveal the fetus to be much more developed than the Court in

<sup>&</sup>lt;sup>1</sup> Sara Dubow, *Ourselves Unborn: A History of the Fetus in Modern America* 113 (2011).

<sup>&</sup>lt;sup>2</sup> Malcolm Nicholson & John E.E. Fleming, *Imaging and Imagining the Fetus: The Development of Obstetric Ultrasound* 232 (2013).

*Roe* could have known. Reflecting these advances in medical knowledge, ultrasound imagery available at the time of *Roe* looked much different from the imagery available today, as shown by these fifteen-week ultrasounds from 1973 and today<sup>3</sup>:



Now we know that "[f]rom fertilization, an embryo (and later, fetus) is alive and possesses its unique DNA."<sup>4</sup> The fusion of the oocyte and the sperm create the zygote "in less than a single second."<sup>5</sup> In a "biological sense," "the

<sup>&</sup>lt;sup>3</sup> Stuart Campbell, A Short History of Sonography in Obstetrics and Gynaecology, 5 FVV-ObGyn 217 (2013); Kristen J. Gough, Second Trimester Ultrasound Pictures (Dec. 5, 2019), https://perma.cc/J2NV-GT6M.

<sup>&</sup>lt;sup>4</sup> Slatery, 14 F.4th at 450 (Thapar, J.) (citing Enrica Bianchi et al., Juno Is the Egg Izumo Receptor and Is Essential for Mammalian Fertilization, 508 Nature 483, 483 (2014)).

<sup>&</sup>lt;sup>5</sup> Am. Coll. of Pediatricians, *When Human Life Begins* (Mar. 2017), https://perma.cc/Z9W5-UN9T; *see also* Ulyana Vjugina & Janice P. Evans, *New Insights into the Molecular Basis of Mammalian Sperm-Egg Membrane Interactions*, 13 Frontiers Bioscience 462, 462–76 (2008); Maureen L. Condic, *When Does Human Life Begin? A Scientific Perspective* 5 (2008).

embryo or fetus is whole, separate, unique and living" from conception. *Planned Parenthood Minn., N.D., S.D. v. Rounds*, 530 F.3d 724, 736 (8th Cir. 2008) (en banc). "Of course, that new life is not yet mature—growth and development are necessary before that life can survive independently—but it is nonetheless human life." *Hamilton v. Scott*, 97 So. 3d 728, 746–47 (Ala. 2012) (Parker, J., concurring).

During the fifth week, "[t]he cardiovascular system is the first major system to function in the embryo," with the heart and vascular system appearing in the middle of the week.<sup>6</sup> By the end of the fifth week, "blood is circulating and the heart begins to beat on the 21st or 22nd day" after conception.<sup>7</sup> By six weeks, "[t]he embryonic heartbeat can be detected" via transvaginal ultrasound—though not the abdominal ultrasound directed by Iowa's law.<sup>8</sup> After a six-week detection of a fetal heartbeat—and absent an abortion—the overwhelming majority of unborn children will now survive to birth.<sup>9</sup>

<sup>&</sup>lt;sup>6</sup> Keith L. Moore et al., *The Developing Human E-Book: Clinically Oriented Embryology* 8945 (Kindle ed. 2020).

<sup>&</sup>lt;sup>7</sup> *Id.* at 2662.

<sup>&</sup>lt;sup>8</sup> *Id.* at 2755; *accord* WebArchive, Planned Parenthood, *What Happens in the Second Month of Pregnancy?* (July 25, 2022), https://tinyurl.com/2jvsvh34. <sup>9</sup> Joe Leigh Simpson, *Low Fetal Loss Rates After Ultrasound Proved-Viability in First Trimester*, 258 J. Am. Med. Ass'n 2555, 2555–57 (1987).

Also during the sixth week, the child's nervous system is developing, with the brain already "patterned" at this early stage.<sup>10</sup> The earliest neurons are generated in the region of the brain responsible for thinking, memory, and other higher functions.<sup>11</sup> And the child's face is developing, with cheeks, chin, and jaw starting to form.<sup>12</sup>

At seven weeks, cutaneous sensory receptors, which permit prenatal pain perception, begin to develop.<sup>13</sup> The unborn child also starts to move.<sup>14</sup> During the seventh week, "the growth of the head exceeds that of other regions" largely because of "the rapid development of the brain" and facial features.<sup>15</sup> At eight weeks, essential organs and systems have started to form, including the child's kidneys, liver, and lungs.<sup>16</sup> The upper lip and nose can be seen.<sup>17</sup> At nine weeks, the child's ears, eyes, teeth, and external genitalia

<sup>&</sup>lt;sup>10</sup> Thomas W. Sadler, *Langman's Medical Embryology* 72 (14th ed. 2019); *see generally id.* at 59–95.

<sup>&</sup>lt;sup>11</sup> See, e.g., Irina Bystron et al., *Tangential Networks of Precocious Neurons and Early Axonal Outgrowth in the Embryonic Human Forebrain*, 25 J. Neuroscience 2781, 2788 (2005)

<sup>&</sup>lt;sup>12</sup> See Sadler, supra note 10, at 72–95.

<sup>&</sup>lt;sup>13</sup> Kanwaljeet S. Anand & Paul R. Hickey, Special Article, *Pain and Its Effects in the Human Neonate and Fetus*, 317 New Eng. J. Med. 1321, 1322 (1987).

<sup>&</sup>lt;sup>14</sup> Alessandra Pionetelli, *Development of Normal Fetal Movements: The First* 25 Weeks of Gestation 98, 110 (2010).

<sup>&</sup>lt;sup>15</sup> Keith L. Moore et al., *The Developing Human: Clinically Oriented Embryology* 65–84.e1 (11th ed. 2020).

<sup>&</sup>lt;sup>16</sup> See Sadler, supra note 10, at 72–95.

<sup>&</sup>lt;sup>17</sup> Moore et al., *supra* note 15, 1–9.e1.

are forming.<sup>18</sup> By ten weeks, vital organs begin to function, and the child's hair and nails begin to form.<sup>19</sup> All this development happens by the time Iowa's regulation takes effect, as transabdominal ultrasounds can typically measure cardiac activity around nine weeks.<sup>20</sup>

## **B.** Fetal systems, including pain perception, grow even more sophisticated before viability.

Meanwhile, the peripheral pain receptors begin forming around seven weeks<sup>21</sup> and "the first evidence for an intact nociceptive system in the fetus emerges at about 8 weeks . . . [when] touching the perioral region will result in movement away."<sup>22</sup> Nociception—or the nervous system's processing of noxious stimuli—"causes physiologic stress, which in turn causes increases in catecholamines, cortisol and other stress hormones."<sup>23</sup> Starting around ten

<sup>&</sup>lt;sup>18</sup> See Sadler, supra note 10, at 72–95.

<sup>&</sup>lt;sup>19</sup> See id. at 106–127; Moore et al., *supra* note 15, at 65–84.e1; Johns Hopkins Med., *The First Trimester*, https://perma.cc/8N6H-M6CN.

<sup>&</sup>lt;sup>20</sup> Avick G. Mitra et al., *Transvaginal Versus Transabdominal Doppler Auscultation of Fetal Heart Activity: A Comparative Study*, 175 Am. J. Obstet. Gynecol. 41 (1996), https://www.ncbi.nlm.nih.gov/pubmed/8694073; *see* George M. Graham, *Ultrasound Evaluation of Pregnancy in the First Trimester*, 4(1) Donald School J. Ultrasound in Obstetrics and Gynecology 17, 20 (2010).

<sup>&</sup>lt;sup>21</sup> Linda A. Hatfield, *Neonatal pain: What's age got to do with it?*, Surgical Neurology International S479, S481 (2014).

<sup>&</sup>lt;sup>22</sup> Stuart W. G. Derbyshire, *Foetal Pain?*, Best Practice & Research Clincal Obstetrics and Gynaecology 647 (2010).

<sup>&</sup>lt;sup>23</sup> Curtis L. Lowery et al., *Neurodevelopmental Changes of Fetal Pain*, 31 Seminars Perinatology 275, 275 (2007).

weeks, the earliest connections between neurons constituting the subcorticalfrontal pathways—the circuitry of the brain that is involved in a wide range of psychological and emotional experiences, including pain perception—are established.<sup>24</sup>

At the time of *Roe*, "the medical consensus was that babies do not feel pain."<sup>25</sup> Only during the late 1980s and early 1990s did any of the initial scientific evidence for prenatal pain begin to emerge.<sup>26</sup> Today, the "evidence for the subconscious incorporation of pain into neurological development and plasticity is incontrovertible."<sup>27</sup> Updated reviews of prenatal pain consistently acknowledge: by ten to twelve weeks, a fetus develops neural circuitry capable of detecting and responding to pain.<sup>28</sup> Even more sophisticated reactions occur as the unborn child develops further.<sup>29</sup> And new developments—

<sup>&</sup>lt;sup>24</sup> Lana Vasung et al., *Development of Axonal Pathways in the Human Fetal Fronto-Limbic Brain: Histochemical Characterization and Diffusion Tensor Imaging*, 217 J. Anatomy 400, 400–03 (2010).

<sup>&</sup>lt;sup>25</sup> Am. Coll. of Pediatricians, *Fetal Pain: What is the Scientific Evidence?* (Jan. 2021), https://perma.cc/JM3T-XQV8.

<sup>&</sup>lt;sup>26</sup> *Id.* 

<sup>&</sup>lt;sup>27</sup> Lowery et al., *supra* note 23, at 275.

<sup>&</sup>lt;sup>28</sup> See, e.g., Carlo V. Bellieni & Giuseppe Buonocore, Is Fetal Pain a Real Evidence?, 25 J. Maternal-Fetal & Neonatal Med. 1203, 1203–08 (2012); Richard Rokyta, Fetal Pain, 29 Neuroendocrinology Letters 807, 807–14 (2008).

<sup>&</sup>lt;sup>29</sup> See Royal Coll. of Obstetricians & Gynaecologists, *Fetal Awareness: Review of Research and Recommendations for Practice* 5, 7 (Mar. 2010), https://perma.cc/4V84-TEMC; Susan J. Lee et al., *Fetal Pain: A Systematic* 

including videos of reactions—have provided still more evidence strengthening the conclusion that fetuses are capable of experiencing pain in the womb.<sup>30</sup>

As early as ten or eleven weeks, the fetus shows awareness of his or her environment.<sup>31</sup> Studies of twins, for example, show that by ten to eleven weeks, twins engage in "inter-twin contact."<sup>32</sup> The fetus also begins to perform "breathing movements" that "increase progressively" as he or she develops in the womb.<sup>33</sup>

At eleven weeks, the unborn child's diaphragm is developing.<sup>34</sup> The child has hands and feet, ears, open nasal passages on the tip of the nose, and a tongue.<sup>35</sup> "[A]n unborn child visibly takes on the human form in all relevant aspects by 12 weeks' gestation." *Slatery*, 14 F.4th at 450 (Thapar, J.) (cleaned up). The child can open and close fingers, starts to make sucking motions, and

Multidisciplinary Review of the Evidence, 294 J. Am. Med. Ass'n 947, 948–49 (2005).

<sup>&</sup>lt;sup>30</sup> See Lisandra Stein Bernardes et al., *Acute Pain Facial Expressions in 23-Week Fetus, Ultrasound Obstetrics & Gynecology* (June 2021), https://perma.cc/V8BU-PZK4. A video accompanying this article showing facial reactions can be accessed at https://obgyn.onlinelibrary.wiley.com/act ion/downloadSupplement?doi=10.1002%2Fuog.23709&file=uog23709-sup-0001-VideoS1.mp4.

<sup>&</sup>lt;sup>31</sup> Umberto Castiello et al., *Wired to Be Social: The Ontogeny of Human Interaction*, 5 PLOS One, Oct. 2017, e13199, at 1, 9.

<sup>&</sup>lt;sup>32</sup> Id.

<sup>&</sup>lt;sup>33</sup> Pionetelli, *supra* note 14, at 40.

<sup>&</sup>lt;sup>34</sup> *Id.* at 31.

<sup>&</sup>lt;sup>35</sup> Moore et al., *supra* note 15, 1–9.e1; Prachi Jain & Manu Rathee, *Embryology, Tongue* (last updated Aug. 11, 2020), https://perma.cc/FCP4-7788.

senses stimulation.<sup>36</sup> The child's digestive system begins to function, white blood cells develop, and the pituitary gland produces hormones.<sup>37</sup> And the child's vocal cords are developing.<sup>38</sup> At thirteen weeks, the bone structure is forming in the child's arms and legs,<sup>39</sup> and the intestines are in place within his or her abdomen.<sup>40</sup>



Unborn Child at Thirteen Weeks<sup>41</sup>

<sup>&</sup>lt;sup>36</sup> Pionetelli, *supra* note 14, at 50, 61–62; 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).

<sup>&</sup>lt;sup>37</sup> Sadler, *supra* note 10, at 230–55.

<sup>&</sup>lt;sup>38</sup> Johns Hopkins All Children's Hosp., A Week-by-Week Pregnancy Calendar: Week 12, https://perma.cc/32GP-WZYX.

<sup>&</sup>lt;sup>39</sup> Mayo Clinic, *Pregnancy Week by Week: Fetal Development: The 2nd Trimester* (June 30, 2020), https://perma.cc/M7PA-6T9A.

<sup>&</sup>lt;sup>40</sup> Mayo Clinic, *Pregnancy Week by Week: Fetal Development: The 1st Trimester* (June 30, 2020), https://perma.cc/D7JW-H6YW.

<sup>&</sup>lt;sup>41</sup> Moore et al., *supra* note 15, at 85–98.e1.

Moreover, by twelve weeks, the parts of the central nervous system leading from peripheral nerves to the brain are sufficiently connected to permit the peripheral pain receptors to detect painful stimuli.<sup>42</sup> Thus, the unborn "baby develops sensitivity to external stimuli and to pain much earlier than was believed" when *Roe* and *Casey* were decided. *MKB Mgmt. Corp. v. Stenehjem*, 795 F.3d 768, 774 (8th Cir. 2015) (cleaned up).

By fifteen weeks, "the fetus is extremely sensitive to painful stimuli," and physicians (other than those performing abortions) take this fact "into account when performing invasive medical procedures on the fetus."<sup>43</sup> Even more neural circuitry for pain detection and transmission develops between sixteen and twenty weeks, including spinothalamic fibers, which are responsible for the transmission of pain from the periphery to the thalamus.<sup>44</sup> By eighteen weeks, painful stimuli will cause the baby *in utero* to exhibit stressinduced hormonal responses.<sup>45</sup> Studies show that "the fetus reacts to intrahepatic vein needling with vigorous body and breathing movements."<sup>46</sup> The

<sup>&</sup>lt;sup>42</sup> Sekulic et al., *supra* note 36, at 1034–35.

<sup>&</sup>lt;sup>43</sup> *Id.* at 1036.

<sup>&</sup>lt;sup>44</sup> Ritu Gupta et al., *Fetal Surgery and Anesthetic Implications*, 8 Continuing Educ. Anesthesia, Critical Care & Pain 71, 74 (2008).

<sup>&</sup>lt;sup>45</sup> Stuart W. G. Derbyshire, *Can Fetuses Feel Pain?*, 332 Brit. Med. J. 909, 910 (2006).

<sup>&</sup>lt;sup>46</sup> Xenophon Giannakoulopoulos et al., *Fetal Plasma Cortisol and b-endorphin Response to Intrauterine Needling*, 344 Lancet 77, 77–78 (1994).

fetus also reacts to such stimuli with "hormonal stress responses," with rising hormone levels "independent of those of the mother."<sup>47</sup>

These recent discoveries have led scientists to conclude that "the human fetus can feel pain when it undergoes surgical interventions and direct analgesia must be provided to it."<sup>48</sup> For this reason, updated consensus among anesthesiologists is to "administer adequate fetal anesthesia in all invasive maternal-fetal procedures to inhibit the humoral stress response, decrease fetal movement, and blunt any perception of pain."<sup>49</sup> As one group of scholars explains, "the fetus is extremely sensitive to painful stimuli," and "[i]t is necessary to apply adequate analgesia to prevent the suffering of the fetus."<sup>50</sup> Other scholars agree with this assessment.<sup>51</sup>

Some have argued that fetal perception of pain requires connections to the cerebral cortex and the need for conscious awareness.<sup>52</sup> Neither is true. As a thorough 2023 review of the literature concluded, "[a]dvances in the fields

<sup>&</sup>lt;sup>47</sup> Rachel Gitau et al., *Fetal Hypothalamic-Pituitary-Adrenal Stress Responses to Invasive Procedures are Independent of Maternal Responses*, 86 J. Clinical Endocrinology & Metabolism 104, 104 (2001).

<sup>&</sup>lt;sup>48</sup> Carlo V. Bellieni, *Analgesia for Fetal Pain During Prenatal Surgery: 10 Years of Progress*, 89 Pediatrics Rsch. 1612, 1612 (2021).

<sup>&</sup>lt;sup>49</sup> Debnath Chatterjee, Anesthesia for Maternal-Fetal Interventions, 132 Anesthesia & Analgesia 1164, 1167 (2021); Sekulic et al., supra note 36, at 1036.
<sup>50</sup> Sekulic et al., supra note 36, at 1036.

 <sup>&</sup>lt;sup>51</sup> See, e.g., Carlo V. Bellieni et al., Use of Fetal Analgesia During Prenatal Surgery, 26 J. Maternal-Fetal Neonatal Med. 90, 94 (2013).
 <sup>52</sup> Lee et al., supra note 29.

of neonatology, fetal surgery, fetal anesthesiology, and fetal neurobehavior make this viewpoint no longer appropriate."<sup>53</sup> From an anatomic standpoint, substantial evidence demonstrates that *sub*cortical structures are sufficient for pain perception.<sup>54</sup> Proving the point are adults with cortical injuries who can still feel pain<sup>55</sup> and infants whose brains are abnormal or did not form (*e.g.*, anencephaly or hydrocephalus), yet they maintain the ability react to painful stimulation.<sup>56</sup>

Conscious awareness as shown by the ability to verbally describe one's pain is no longer part of the updated and often quoted International Association for the Study of Pain definition of pain.<sup>57</sup> Adults in a coma cannot describe or complain about pain, but no one denies that painful procedures affect them. A fetus also cannot recall describe or what hurt them, but in response to painful stimulation they have measurable increases in their stress hormones<sup>58</sup>

<sup>&</sup>lt;sup>53</sup> Bridget Thrill, *The Fetal Pain Paradox*, 4 Frontiers in Pain Research 1, 13 (2023).

<sup>&</sup>lt;sup>54</sup> See Stuart W. G. Derbyshire et al., *Reconsidering Fetal Pain*, 46 J. Med.
Ethics 3 (2020); Lowery et al., *supra* note 23; Roland Brusseau, *Developmental Perspectives: Is the Fetus Conscious?*, 46 Int'l Anesthesiology Clinics 11 (2008); Sampsa Vanhatalo, *Fetal Pain?*, 22 Brain & Development 145 (2000).
<sup>55</sup> Brusseau, *supra* note 54.

<sup>&</sup>lt;sup>56</sup> Sekulic et al., *supra* note 36.

<sup>&</sup>lt;sup>57</sup> Srinivasa N. Raja et al., *The Revised International Association for the Study* of Pain Definition of Pain, 161 Pain 1976 (2020).

<sup>&</sup>lt;sup>58</sup> Gitau et al., *supra* note 47.

and documented facial changes.<sup>59</sup> Both before and after birth, babies much younger than 24 weeks are capable of an unreflective, yet very real response to pain.<sup>60</sup>

Thus, in every other medical practice at this stage of fetal development, physicians recognize the need to protect the unborn child in the womb from pain and prioritize the child's health, even when making treatment plans for the child's mother.<sup>61</sup> By contrast, abortionists use no analgesia as they "dismember the fetus" "limb from limb" until the fetus "bleeds to death." *Stenberg v. Carhart*, 530 U.S. 914, 958–59 (2000) (Kennedy, J., dissenting).

At fifteen weeks, unborn children kick their legs, move their arms, and start curling their toes.<sup>62</sup> And by sixteen weeks, the child's eyes are moving side-to-side, and they can perceive light.<sup>63</sup> Between seventeen and eighteen weeks, the unborn child's fingers and toes each develop their own unique prints.<sup>64</sup> By eighteen weeks, the child can hear his or her mother's voice, and

<sup>&</sup>lt;sup>59</sup> Bernardes et al., *supra* note 30.

<sup>&</sup>lt;sup>60</sup> Derbyshire et al., *supra* note 54; Thrill, *supra* note 53, at 4–9.

<sup>&</sup>lt;sup>61</sup> See, e.g., Ryan M. Antiel et al., *Weighing the Social and Ethical Considerations of Maternal-Fetal Surgery*, 140 Pediatrics, Dec. 2017, e20170608, at 1, 3–4; Thrill, *supra* note 53, at 1–2.

<sup>&</sup>lt;sup>62</sup> Johns Hopkins All Children's Hosp., A Week-by-Week Pregnancy Calendar: Week 15, https://perma.cc/62JP-CXL3.

<sup>&</sup>lt;sup>63</sup> Mayo Clinic, *supra* note 39.

<sup>&</sup>lt;sup>64</sup> Johns Hopkins Med., *The Second Trimester*, https://perma.cc/M7WA-6PC5.

the child can yawn.<sup>65</sup> The nervous system is also developing the circuitry for all five senses.

At twenty weeks, the sex-specific reproductive organs have developed enough to permit identification of the child's sex by ultrasound, and girls have eggs in their ovaries.<sup>66</sup> Around this time, "facial expressions begin to appear consistently, including 'negative emotions.'"<sup>67</sup> These movements "require the involvement and coordination of more than one muscle."<sup>68</sup>

At twenty-one weeks, the physical and neurological development of the unborn child is sufficiently mature that, in some cases, the child can survive childbirth.<sup>69</sup> This is far earlier than was true in 1973 or 1992. *See Casey*, 505 U.S. at 860. At this stage of development, the child can also swallow and experience different tastes depending on what the mother eats. At twenty-two

<sup>&</sup>lt;sup>65</sup> *Id.*; see also Cleveland Clinic, *Fetal Development: Stages of Growth* (last updated Apr. 16, 2020), https://perma.cc/YG92-KRH4.

<sup>&</sup>lt;sup>66</sup> See, e.g., Kavita Narang et al., Developmental Genetics of the Female Reproductive Tract, in Human Reproductive and Prenatal Genetics 129, 132, 135 (Peter C. K. Leung & Jie Qiao eds., 2019).

<sup>&</sup>lt;sup>67</sup> Pionetelli, *supra* note 14, at 80.

<sup>&</sup>lt;sup>68</sup> Id.

<sup>&</sup>lt;sup>69</sup> See Kaashif A. Ahmad et al., *Two-Year Neurodevelopmental Outcome of* an *Infant Born at 21 Weeks' 4 Days' Gestation*, 140 Pediatrics, Dec. 2017, e20170103, at 1–2, https://perma.cc/D9UR-KHDU.

weeks, the child's senses are improving.<sup>70</sup> The child's ability to detect light from outside the womb (such as from a flashlight) can be observed.

According to a 2015 publication, between 23% and 60% of infants born at twenty-two weeks who receive active hospital treatment survive,<sup>71</sup> many without immediate or long-term neurologic impairment.<sup>72</sup> A 2019 publication showed that survival at some institutions increased to 78% at 22–23 weeks gestation, with 64% having no or mild neurodevelopmental impairment at 18 to 22 months follow-up.<sup>73</sup> In a large study that combined several databases, it was shown that "[t]he birth hospital contributed equally as much to prediction of survival as gestational age."<sup>74</sup> Thus, imposing particular values on

<sup>&</sup>lt;sup>70</sup> Johns Hopkins All Children's Hosp., *A Week-by-Week Pregnancy Calendar: Week 22*, https://perma.cc/7VR8-2LFX.

<sup>&</sup>lt;sup>71</sup> Matthew A. Rysavy et al., *Between-Hospital Variation in Treatment and Outcomes in Extremely Preterm Infants*, 372 New Eng. J. Med. 1801, 1804 (2015); Katrin Mehler et al., *Survival Among Infants Born at 22 or 23 Weeks' Gestation Following Active Prenatal and Postnatal Care*, 170 J. Am. Med. Ass'n Pediatrics 671, 675 (2016).

<sup>&</sup>lt;sup>72</sup> See, e.g., Noelle Younge et al., Survival and Neurodevelopmental Outcomes Among Periviable Infants, 376 New Eng. J. Med. 617, 622, 627 (2017) (describing study showing "an increase in the rate of survival without neurodevelopmental impairment from 2000 through 2011"); Antti Holsti et al., Two-Thirds of Adolescents who Received Active Perinatal Care After Extremely Preterm Birth Had Mild or No Disabilities, 105 Acta Paediatrica 1288, 1296 (2016) (similar).

<sup>&</sup>lt;sup>73</sup> Patricia L. Watkins et al., *Outcomes at 18 to 22 Months of Corrected Age for Infants Born at 22 to 25 Weeks of Gestation in a Center Practicing Active Management*, 217 J. Pediatrics 52 (2019).

<sup>&</sup>lt;sup>74</sup> Matthew A. Rysavy et al., Assessment of an Updated Neonatal Research

"viability" "create[s] facts": "A policy that limits treatment for infants born at 24 weeks' gestation will lead to [comparatively] low survival rates for those infants. Those [comparatively] low survival rates will seem to justify and validate the policy, even if the true causal relationship runs in the other direction."<sup>75</sup>

At twenty-three weeks, the child's skin tone changes color as his or her capillaries form and blood fills them under the skin.<sup>76</sup> At twenty-four weeks, the baby's face is nearly fully formed, with eyelashes, eyebrows, and hair clearly visible. The unborn child can indisputably feel substantial pain at this point. All this significant development happens before unborn children could be considered worthy of protection under the *Roe/Casey* viability and undue burden rule applied by the district court and advanced by Planned Parenthood.

Network Extremely Preterm Birth Outcome Model in the Vermont Oxford Network, 174 JAMA Pediatrics 1, 1 (2020).

 <sup>&</sup>lt;sup>75</sup> John D. Lantos & William Meadow, Variation in the Treatment of Infants Born at the Borderline of Viability, 123 Pediatrics 1588, 1589 (2009).
 <sup>76</sup> Cleveland Clinic, supra note 65.

#### **II.** Early cardiac activity is a fetal heartbeat.

Planned Parenthood claims that "the term 'fetal heartbeat' is not only factually inaccurate, but purposefully misleading."<sup>77</sup> Its primary source for this claim is an old blog post from a single doctor who rants about the "the a\*\*holes . . . who voted for the fetal pole cardiac activity bill" without "giv[ing] a s\*\*\* about the medicine" because "it's no one else's f\*\*\*\*\* business what you do with your body."<sup>78</sup> But even this eloquent blog proposes the term "cardiac activity," which is exactly how Iowa's law defines a "fetal heartbeat."<sup>79</sup> So Planned Parenthood's word games have no legal relevance. In any event, both "cardiac activity" and "fetal heartbeat" are scientifically accurate.

Until recently, no one disputed that an early heartbeat was just that—a fetal heartbeat. Johns Hopkins Medicine has explained that by six weeks, "[t]he heart is beating."<sup>80</sup> Below, Petitioner Sarah Traxler filed an affidavit complaining about the terms "fetus" and "heartbeat"; yet the only source she

<sup>&</sup>lt;sup>77</sup> Planned Parenthood, *Iowa Lawmakers Again Pass Six-Week Abortion Ban* (July 11, 2023), https://tinyurl.com/2fujwrcb; *see* Brief in Support of Petitioners' Emergency Motion for Temporary Injunction Relief 4 (July 12, 2023) ("The Act's references to a 'fetal heartbeat' are inaccurate and misleading.").
<sup>78</sup> Jennifer Gunter, *Dear Press* (Dec. 11, 2016), https://tinyurl.com/4cb6m4cd; *see* Greg Greene et al., *Don't Call 6-Week Abortion Bans "Heartbeat" Bills*, Planned Parenthood (June 1, 2021), https://tinyurl.com/2p9pj28v .
<sup>79</sup> Iowa Code Ann. § 146E.1(1).

<sup>&</sup>lt;sup>80</sup> Johns Hopkins Med., *The First Trimester*, https://perma.cc/8N6H-M6CN.

cited in support says that "at week 6 we are able to obtain a *fetus* with a *heart-beat*" (using transvaginal ultrasound).<sup>81</sup> And until 2022, Planned Parenthood's website said much the same:<sup>82</sup>



Planned Parenthood's new view on the absence of an early fetal heart-

beat appears to be predicated on the assumption that a heartbeat requires the

existence of a fully formed heart. That assumption is inaccurate.

### A. Medical evidence confirms that the early fetal heart beats.

A heartbeat is defined as "[t]he contraction of the heart (or sequence of filling, contraction, and relaxation) by which blood is propelled around the

<sup>&</sup>lt;sup>81</sup> Affidavit of Sarah A. Traxler ¶¶ 12–13 & n.2 (July 12, 2023); Panos Antsaklis et al., *Early Pregnancy Scanning: Step-by-Step Overview*, 13 Donald Sch. J. of Ultrasound in Obstetrics & Gynecology 236, 237 (2019) (emphases added).

<sup>&</sup>lt;sup>82</sup> See Planned Parenthood, *What Happens in the Second Month of Pregnancy*?, WebArchive (July 25, 2022), https://tinyurl.com/2jvsvh34.

body."83 Again, Iowa's law defines "fetal heartbeat" as "the cardiac activity, the steady rhythmic contraction of the fetal heart within the gestational sack."84 A fetal heart does not have to be fully developed to contract. Insights enabled by up-to-date imaging demonstrate the early valveless heart's ability to act as a pump—which, in turn, produces the first integral beats.<sup>85</sup> Cardiac function—"the ability of cardiomyocytes [heart cells] to contract to produce force"<sup>86</sup>—starts very early: "[t]he human embryonic heart is a spontaneously contracting cylindrical tube at approximately 5 weeks of gestation."<sup>87</sup> Though "the spatio-temporal resolution of echocardiography" may not be "sufficient to visualize and record the human embryonic circulation before 6 weeks of gestation"-so Doppler ultrasounds are used instead to measure "flow velocity waveforms"-scientists have confirmed that "primitive blood starts to circulate through the embryo quite early in gestation."88 Many sources confirm

<sup>&</sup>lt;sup>83</sup> Oxford English Dictionary (July 2023), https://doi.org/10.1093/OED/ 5575749553.

<sup>&</sup>lt;sup>84</sup> Iowa Code Ann. § 146E.1(1).

<sup>&</sup>lt;sup>85</sup> Shang Wang & Irina V. Larina, *Following the Beat: Imaging the Valveless Pumping Function in the Early Embryonic Heart*, 9 J. Cardiovascular Dev. & Disease 267 (2022).

<sup>&</sup>lt;sup>86</sup> Richard Tyser & Shankar Srinivas, *The First Heartbeat—Origin of Cardiac Contractile Activity*, 12(7) Cold Spring Harbor Perspectives in Biology 1 (2020).

<sup>&</sup>lt;sup>87</sup> Ganesh Acharya et al., *Human Embryonic Cardiovascular Function*, 95
Acta Obstetricia et Gynecologica Scandinavica 621, 623 (2016).
<sup>88</sup> Id.

this fact (using the same terminology): "The initiation of the first heart beat via the primitive heart tube begins at gestational day 22, followed by active fetal blood circulation by the end of week 4."<sup>89</sup> In sum, it is well-settled that "the primitive heart tube is formed and begins to *beat* shortly after 5 completed weeks' gestation."<sup>90</sup>

#### **B.** Medical literature refers to the fetal heartbeat.

Medical literature is in accord, consistently describing even the early heart as a *heart*—no matter that it is not fully formed early in development. "Among organs, the heart is unusual in having to contract rhythmically while still undergoing extensive remodeling."<sup>91</sup> The definitive medical resource Up-ToDate<sup>92</sup> refers repeatedly to early fetal *hearts* and *cardiac activity*:

<sup>&</sup>lt;sup>89</sup> Cheryl Tan & Adam Lewandowski, *The Transitional Heart: From Early Embryonic and Fetal Development to Neonatal Life*, 47 Fetal Diagnosis & Therapy 373, 373 (2020).

<sup>&</sup>lt;sup>90</sup> Monique Haak & John van Vugt, *Echocardiography in Early Pregnancy: Review of Literature*, 22 J. Ultrasound Med. 271, 272 (2003) (emphasis added); *see also* Paul Hamelmann et al., *Doppler Ultrasound Technology for Fetal Heart Rate Monitoring: A Review*, 67 IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control 226, 226 (2020) ("the fetal heart spontaneously starts beating at a gestational age (GA) of five weeks"); Oriana Valenti et al., *Fetal Cardiac Function During the First Trimester of Pregnancy*, 5 J. Prenatal Med. 59, 60 (2011) ("At the end of the 4th week of gestation, the heartbeats of the embryo begin.").

<sup>&</sup>lt;sup>91</sup> Tyser et al., *supra* note 86.

<sup>&</sup>lt;sup>92</sup> Wolters Kluwer, *UpToDate* (last visited Sep. 28, 2023), https://ti-nyurl.com/2s3bd7bc.

- "The signs of true pregnancy on physical examination are identification of a fetal heart rate that is distinguishable from the maternal heart rate and palpation of fetal parts."<sup>93</sup>
- Ultrasound examinations confirm "[e]mbryonic cardiac activity" at 5.5-6 weeks.<sup>94</sup>
- "Screening for fetal arrhythmias is already a routine component of prenatal care since determination of the fetal heart rate (FHR) is performed at each prenatal visit."<sup>95</sup>
- "Doppler ultrasound is used for studying most of the major fetal circulatory systems and is particularly helpful in evaluating the functional state of the fetal cardiovascular system," including the "fetal heart rate."<sup>96</sup>

Other authorities use similar terminology. The International Society of

Ultrasound in Obstetrics and Gynecology Guidelines discuss the use of Dop-

pler ultrasounds "[i]n the evaluation of the fetal heart" and to determine "fetal

heart rates."97 A recent article in Ultrasonography says that "[t]he fetal heart

<sup>&</sup>lt;sup>93</sup> Lori A. Bastian, *Clinical Manifestations and Diagnosis of Early Pregnancy*, UpToDate (Mar. 16, 2023), at 18, https://tinyurl.com/uxvrb4vc.
<sup>94</sup> Id. at 5.

<sup>&</sup>lt;sup>95</sup> Jami Levine & Mark Alexander, *Fetal Arrythmias*, UpToDate (May 11, 2022), at 1, https://tinyurl.com/nuedv5cr.

<sup>&</sup>lt;sup>96</sup> Thomas Shipp, *Overview of Ultrasound Examination in Obstetrics and Gynecology*, UpToDate (July 31, 2023), at 14, https://tinyurl.com/nhb96n9w.

<sup>&</sup>lt;sup>97</sup> Amar Bhide et al., *ISUOG Practice Guidelines (Updated)*, 58 Ultrasound in Obstetrics & Gynecology 331, 332–33 (2021).

rate gradually increases with gestational age from approximately 110 beats per minute (bpm) at 6.2 weeks to approximately 159 bpm at 7.6–8.0 weeks."<sup>98</sup>

More, the literature confirms the medical significance of these early heartbeats as "a primary accessible indicator of prenatal development."<sup>99</sup> "[A]fter embryonic/fetal heart activity is demonstrated with ultrasound, fetal loss occurs in 2–5% of pregnancies."<sup>100</sup> If "fetal heart activity cannot be convincingly demonstrated at the initial ultrasound examination at 6 weeks of pregnancy" then "the viability of the pregnancy is considered to be uncertain."<sup>101</sup> As a study in the International Journal of Gynecology & Obstetrics explains, "[t]he embryonic heart . . . should be seen in all living embryos by 6.5-7.0 weeks gestation."<sup>102</sup>

<sup>&</sup>lt;sup>98</sup> Venkatesh Murugan et al., *Role of Ultrasound in the Evaluation of First-Trimester Pregnancies in the Acute Setting*, 39 Ultrasonography 178, 181 (2020).

<sup>&</sup>lt;sup>99</sup> Plamen Ivanov, *Maternal-Fetal Heartbeat Phase Synchronization*, 106 Proceedings of the Nat'l Acad. of Sci. 13641, 13641 (2009).

<sup>&</sup>lt;sup>100</sup> Yuen Tannirandorn et al., *Fetal Loss in Threatened Abortion After Embryonic/Fetal Heart Activity*, 81 Int'l J. Gynecology & Obstetrics 263, 264 (2003).

<sup>&</sup>lt;sup>101</sup> Jun Guo et al., *Comparison of Uterine Artery Doppler Measurements*, 152
Int'l J. Gynecology & Obstetrics 249, 249 (2020); *see also* Murugan et al., *supra* note 98, at 181 ("The absence of a detectable heartbeat once the embryo measures greater than 7 mm in length is diagnostic of pregnancy failure").
<sup>102</sup> Tannirandorn et al., *supra* note 100, at 265.

# C. Planned Parenthood concedes that "the heart has formed" by nine weeks, when Iowa's law takes effect.

Planned Parenthood's argument is especially misplaced here because Iowa's law requires abdominal ultrasounds, which typically detect fetal heartbeats closer to nine weeks<sup>103</sup>—a time when even Planned Parenthood concedes that "the heart has formed."<sup>104</sup> As two recent scientific articles explain, "[t]he 4 chambers form by the end of week 7" (pictured below),<sup>105</sup> and the "fetal heart is already fully developed by 9 <sup>1</sup>/<sub>7</sub> weeks gestation."<sup>106</sup>



So Planned Parenthood's complaints about the "fetal heartbeat" terminology are triply irrelevant: they have no legal bearing on the "cardiac activity" definition, they are wrong, and they are *concededly* wrong when this law applies.

<sup>&</sup>lt;sup>103</sup> *Supra* note 20.

<sup>&</sup>lt;sup>104</sup> Petition for Original Jurisdiction 5 n.5, *Planned Parenthood S. Atl. v. South Carolina*, No. 2023-001449 (S.C. Sept. 14, 2023), https://perma.cc/5KKH-AQ2Y.

<sup>&</sup>lt;sup>105</sup> Tan & Lewandowski, *supra* note 89, at 376.

<sup>&</sup>lt;sup>106</sup> Katherine Bishop et al., *Ultrasound Examination of the Fetal Heart*, 72 Obstetrical & Gynecological Survey 54, 59 (2017).

## **D.** Planned Parenthood now agrees that ACOG's position against early fetal heartbeats was wrong.

Planned Parenthood previously asserted that that "[m]edical experts agree that the fetal cardiac activity detectable early in pregnancy is not accurately described as a heartbeat," citing a "Guide to Language and Abortion" created by the American College of Obstetricians and Gynecologists (ACOG).<sup>107</sup> Indeed, last time the Court considered this issue, ACOG filed an *amicus* brief stating that "a fetal heartbeat exists only after the chambers of the heart have developed and can be detected via ultrasound, which typically occurs around 17 to 20 weeks' gestation."<sup>108</sup>

Every aspect of ACOG's statement was false. A fully formed heart is not necessary for a heartbeat, and as just shown, the heart's chambers are formed *and* can be viewed *long* before "17 to 20 weeks." This is common knowledge. Even Planned Parenthood now says (elsewhere) that "[a]fter consulting with experts," it "understand[s] that a heart forms earlier than that."<sup>109</sup> ACOG was not close: the heart's chambers form by seven weeks. Planned Parenthood also concedes that all four chambers can be *viewed* well before

<sup>&</sup>lt;sup>107</sup> *Iowa Lawmakers*, *supra* note 77.

 <sup>&</sup>lt;sup>108</sup> Brief of *Amici Curiae* American College of Obstetricians and Gynecologists et al. 22–23, *Planned Parenthood of the Heartland, Inc. v. Reynolds*, No. 22-2036 (Iowa March 20, 2023), https://perma.cc/9U3V-42HW.
 <sup>109</sup> Petition, *supra* note 104, at 5 n.6.

seventeen weeks.<sup>110</sup> One recent study found that a four-chambered heart could be identified in 80% of patients by the tenth week and 98% of patients by the eleventh week.<sup>111</sup>

Within the past couple months, ACOG has quietly deleted its grossly inaccurate claim from its ideological "Guide to Language and Abortion"<sup>112</sup> the only source Planned Parenthood provided to support its claim about "medical experts." Yet, to *amicus*'s knowledge, ACOG has never retracted this statement or explained how it got basic facts wrong—and misled courts. Rather than treat ACOG as what it pretends to be—the "leading provider of authoritative scientific data"<sup>113</sup>—the Court should treat it as what it is: an ideologically-motivated interest group whose members have financial stakes in these procedures.<sup>114</sup> For many years, "science" has been merely "the ideological veneer for [ACOG's] political position[s]."<sup>115</sup>

<sup>&</sup>lt;sup>110</sup> *Id.* at 6 n.6.

<sup>&</sup>lt;sup>111</sup> Darren Hutchinson, *First-Trimester Fetal Echocardiography*, 30 J. Am. Soc'y Echocardiography 763, 763, 766–67 (2017).

<sup>&</sup>lt;sup>112</sup> See ACOG Guide to Language and Abortion, WebArchive (Sept. 21, 2023), https://tinyurl.com/bdef55f5.

<sup>&</sup>lt;sup>113</sup> Brief, *supra* note 108, at 13.

<sup>&</sup>lt;sup>114</sup> See, e.g., Christina Francis, *The OB-GYNs Who Play Politics With Women's Lives*, Wall St. J. (Mar. 3, 2020), https://tinyurl.com/yc7mdbkd ("ACOG routinely puts politics ahead of medicine"); Carole Novielli, *Exposing ACOG*, Live Action (June 24, 2021), https://tinyurl.com/y92793jv.

<sup>&</sup>lt;sup>115</sup> Nancy Aries, The American College of Obstetricians and Gynecologists and the Evolution of Abortion Policy, 1951–1973: The Politics of Science, 93

In sum, the scientific evidence supports Iowa's determination that early cardiac activity is a fetal heartbeat, and Planned Parenthood's protests otherwise are legally irrelevant and factually wrong.

#### CONCLUSION

"Constitutions—and courts—should not be picking sides in divisive social and political debates." *PPH IV*, 975 N.W.2d at 741–42. As reflected by the fact that Iowa's regulations of abortion and its Constitution have co-existed for well over a century, these regulations are fully constitutional. Imposing Planned Parenthood's desired rule—subjecting to heightened scrutiny every abortion regulation up until the moment of birth, viability, or some other unstated, unreasoned time—would not only be a grievous departure from the judiciary's proper role in our system of government and "produc[e] a makeit-up-as-you-go abortion jurisprudence,"<sup>116</sup> but it would also end the lives of countless unborn children. As shown, those children are unique human beings with beating hearts, and the People's decision to protect them accords with science. This Court should reverse.

Am. J. Pub. Health 1810, 1810 (2003).

<sup>&</sup>lt;sup>116</sup> *Slatery*, 14 F.4th at 438 (Thapar, J).

Respectfully submitted,

CHRISTOPHER E. MILLS\* Spero Law LLC 557 East Bay St. #22251 Charleston, SC 29413 (843) 606-0640 cmills@spero.law \*pro hac vice pending <u>s/ Timm Reid</u>

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Counsel for Amicus Curiae

NOVEMBER 14, 2023

#### **CERTIFICATE OF COMPLIANCE**

This brief complies with the typeface requirements of Iowa R. App. P. 6.906(4) because it has been prepared in a proportionally spaced typeface using Times New Roman, 14-point type and contains 6,786 words, excluding the parts of the brief exempted by rule.

Dated: November 14, 2023

<u>s/ Timm Reid</u> Timm Reid

### **CERTIFICATE OF SERVICE**

I hereby certify that on November 14, 2023, I electronically filed the foregoing with the Clerk of the Supreme Court of Iowa using the Iowa Electronic Document Management System, which will accomplish service on the parties' counsel of record.

<u>s/ Timm Reid</u> Timm Reid ADDENDUM

#### **Christopher Mills**

From:	Wessan, Eric <eric.wessan@ag.iowa.gov></eric.wessan@ag.iowa.gov>
Sent:	Wednesday, November 1, 2023 11:11 AM
То:	Christopher Mills; Johnston, Daniel
Subject:	RE: Amicus Consent, Planned Parenthood of the Heartland, Inc. v. Reynolds, No. 23-1145 (Iowa S. Ct.)

#### Dear Chris,

Thank you for reaching out. The parties have agreed to blanket consent for amici.

Best, EHW

From: Christopher Mills <cmills@speco.law>
Sent: Wednesday, November 1, 2023 9:31 AM
To: Wessan, Eric <Eric.Wessan@ag.iowa.gov>; Johnston, Daniel <Daniel.Johnston@ag.iowa.gov>
Subject: Amicus Consent, Planned Parenthood of the Heartland, Inc. v. Reynolds, No. 23-1145 (Iowa S. Ct.)

Counsel,

I write to request Appellants' consent to file an amicus brief in the above case on behalf of the American College of Pediatricians in support of Appellants.

Thanks,

#### Christopher

Christopher Mills (843) 606-0640 | <u>cmills@spero.law</u> | <u>www.spero.law</u> 557 East Bay Street #22251 Charleston, SC 29413



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#### **Christopher Mills**

From:	lm, Peter <peter.im@ppfa.org></peter.im@ppfa.org>
Sent:	Wednesday, November 1, 2023 10:32 AM
To:	Christopher Mills
Cc:	rita.bettis@aclu-ia.org; Sharon Wegner; Dylan Cowit; Anjali Salvador; Sam Jones; Caitlin Slessor
Subject:	Re: Amicus Consent, Planned Parenthood of the Heartland, Inc. v. Reynolds, No. 23-1145 (Iowa S. Ct.)

Hi Christopher,

Counsel for the parties have agreed to consent to all amicus briefs on both sides for this case.

Thanks, Peter

On Wed, Nov 1, 2023 at 10:30 AM Christopher Mills <cmills@spero.law> wrote:

Counsel,

I write to request Appellees' consent to file an amicus brief in the above case on behalf of the American College of Pediatricians in support of Appellants.

Thanks,

Christopher

Christopher Mills

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