

In The
Supreme Court of the United States

—◆—
PERSONHOOD OKLAHOMA,

Petitioner,

v.

BRITTANY MAYS BARBER, ET AL.,

Respondents.

—◆—
**On Petition For A Writ Of Certiorari
To The Supreme Court Of Oklahoma**

—◆—
**BRIEF OF AMERICAN ASSOCIATION
OF PRO-LIFE OBSTETRICIANS AND
GYNECOLOGISTS (AAPLOG) AS AMICUS
CURIAE IN SUPPORT OF PETITIONER**

—◆—
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The American Association of Pro-Life Obstetricians and Gynecologists (AAPLOG) respectfully submits this amicus curiae brief in support of Petitioners. Consent to file this amicus curiae brief was given by both parties. This brief supporting Petitioner was prepared by counsel for Amicus.¹



STATEMENT OF INTEREST OF THE AMICUS CURIAE

This case is of great national importance and consequence because it addresses the question that this Court could not answer in *Roe v. Wade* as to when life begins. It also goes to the heart of this Court's decision in *Planned Parenthood v. Casey* in requiring that a woman be given full, accurate, and truthful information so that she can exercise her right to decide whether to abort her unborn child. Amicus Curiae has specialized knowledge of the

¹ The parties were notified ten days prior to the due date of this brief of the intention to file. The parties have consented to the filing of this brief. No counsel for a party authored this brief in whole or in part, and no counsel or party made a monetary contribution intended to fund the preparation or submission of this brief. Trinity Legal Center is a nonprofit corporation and is supported through private contributions of donors who have made the preparation and submission of this brief possible. No person other than amicus curiae, their counsel, or donors to Trinity Legal Center made a monetary contribution to its preparation or submission.

scientific facts and can provide both a national and Oklahoma perspective.

Amicus American Association of Pro-Life Obstetricians and Gynecologists (AAPLOG) was founded in 1973 as a recognized group within the American College of Obstetricians and Gynecologists (ACOG). AAPLOG has approximately 2,500 members and associate members, primarily ob-gyn physicians from across the United States, including Oklahoma. They have knowledge, training, and practical experience about when life begins. They have a respect for life from fertilization because they understand that the unborn child is a human being from the time of fertilization. As physicians, they believe that they are responsible for the care and well-being of both the pregnant woman patient and her unborn child.

These physicians also understand the importance and value of pregnant women having full, accurate, and truthful information to make an informed decision. They are especially concerned about the potential long-term negative consequences of an abortion on a woman's future physical and psychological health. AAPLOG explores data from around the world regarding abortion associated complications (such as depression, substance abuse, suicide, other pregnancy associated mortality, subsequent preterm birth, placenta previa, and breast cancer) to provide a realistic appreciation of abortion-related health risks. AAPLOG believes that it is the responsibility and duty of the physician to properly advise and inform his/her patient including informing the patient of the

physical and psychological risks of abortion. Many of these physicians have experience with patients who were not fully informed as well as those who experienced the adverse physical and psychological effects of abortion.

Members of AAPLOG have served as expert witnesses on the abortion issue in the courts and before legislative bodies.



SUMMARY OF THE ARGUMENT

I.

The Oklahoma Personhood Ballot Initiative states the well-established, objective scientific fact of when life begins. This is a fact which the Oklahoma Legislature has recognized based on the scientific evidence. The Oklahoma Supreme Court erred in preemptively finding the ballot measure unconstitutional because it has denied voters their right to vote on the measure. In addition, the Oklahoma Supreme Court relied on this Court's decision in *Planned Parenthood v. Casey*, but it misinterpreted and misapplied *Casey*. Therefore, Amicus urges this Court to grant the writ of certiorari.

II.

The Oklahoma Personhood Ballot Initiative is constitutional because it provides a woman with factual information so that she can make an informed decision about her unborn child. Although this Court

did not resolve the issue of when life begins in *Roe v. Wade*, now almost forty years later, science confirms when life begins. This is a scientific and biological fact and not a legal or moral judgment. It is based on objective and universally accepted scientific facts. Based on these scientific facts, state legislatures have enacted laws to require that women be given full, accurate, and truthful information in accordance with *Casey*. These scientific facts have also been recognized at the federal and international levels. Women should be given full, accurate, and truthful information; therefore, the Oklahoma Supreme Court erred and certiorari should be granted to reverse the misinterpretation of this Court's decision in *Casey*.

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ARGUMENT

I. THIS CASE IS CERTWORTHY BECAUSE THE OKLAHOMA SUPREME COURT MISAPPLIED THIS COURT'S DECISION IN *PLANNED PARENTHOOD V. CASEY* AND ONLY THIS COURT CAN CORRECT THE ERROR.

Because this Court found a constitutional right to decide in *Roe v. Wade*² and *Doe v. Bolton*,³ only this Court can correct the lower court's errors in interpretation and application. The Oklahoma Supreme

² 410 U.S. 113 (1973).

³ 410 U.S. 179 (1973).

Court, relying on this Court's decision in *Planned Parenthood v. Casey*,⁴ preemptively held the Personhood Initiative unconstitutional and placed it squarely within the constitutional framework that would have to be decided by this Court.

The ballot initiative stated:⁵

BE IT ENACTED BY THE PEOPLE OF THE STATE OF OKLAHOMA THAT A NEW ARTICLE 2, SECTION 38 OF THE OKLAHOMA CONSTITUTION BE APPROVED:

RIGHTS OF THE PERSON.

A "PERSON" AS REFERRED TO IN ARTICLE 2, SECTION 2 OF THIS CONSTITUTION SHALL BE DEFINED AS ANY HUMAN BEING FROM THE BEGINNING OF THE BIOLOGICAL DEVELOPMENT OF THAT HUMAN BEING TO NATURAL DEATH. THE INHERENT RIGHTS OF SUCH PERSON SHALL NOT BE DENIED WITHOUT DUE PROCESS OF LAW AND NO PERSON AS DEFINED HEREIN SHALL BE DENIED EQUAL PROTECTION UNDER THE LAW DUE TO AGE, PLACE OF RESIDENCE OR MEDICAL CONDITION.

⁴ 505 U.S. 833 (1992).

⁵ The proposed amendment, Initiative Petition No. 395 ("IP 395"), available at <https://www.sos.ok.gov/documents/questions/761.pdf>.

The Attorney General prepared the following Ballot Title which states in relevant part:⁶

Ballot Title

This measure adds a new section of the Oklahoma Constitution.

The section defines a “person” for purposes of Article 2, Section 2 of the Oklahoma Constitution, which provides all persons with the inherent right to life, liberty, and the pursuit of happiness. The measure defines “person” as any human being from the beginning of biological development to natural death. Biological development of a human being begins at fertilization, which is the fusion of a female egg with a human male sperm to form a new cell.

The Oklahoma Supreme Court erred in preemptively deciding whether this ballot initiative was constitutional.⁷ In so doing, it deprived Oklahoma voters from exercising their right to vote on

⁶ Letter from Attorney General E. Scott Pruitt to Secretary of State Glenn Coffee (March 16, 2012), *available at* <https://www.sos.ok.gov/documents/questions/761.pdf>.

⁷ *See generally* Comment, *Pre-Election Judicial Review of Initiative Petitions: An Unreasonable Limitation on Political Speech*, 30 TULSA L.J. 425, 426 (1994) (stating: “When a court reviews an initiative during the petition stage, regardless of the auspices used to justify its action, the carefully structured sole example of pure democracy in our system of government loses its meaning.”).

measures.⁸ Furthermore, the court improperly defined this as an abortion issue. Nowhere in the ballot initiative is the word “abortion” used. The ballot initiative defines a “person” as “any human being from the beginning of the biological development of that human being to natural death.” The Oklahoma Legislature also has defined a person by statute⁹ based on the reliable medical evidence.¹⁰

The Oklahoma Supreme Court also erred in its interpretation and application of *Casey*. Although *Casey* discarded *Roe*’s trimester framework analysis, it reaffirmed the central holding in *Roe* that a woman has a right to decide.¹¹ In *Casey*, this Court emphasized the need for a woman to have full, accurate, and truthful information so that she could make an informed decision.¹² The ballot initiative provides a woman with accurate and truthful information based on reliable, objective medical and scientific knowledge. This information will help a woman make an informed decision which is essential to give informed consent for a medical procedure.

⁸ OKLA. CONST. art. V, § 2 (“The first power reserved by the people is the initiative. . .”).

⁹ Okla. Stat. Ann. tit. 63, § 1-730.

¹⁰ The Oklahoma Medical Board produced the Woman’s Right to Know brochure to give women the current and reliable information so that they could make an informed decision. This issue is discussed in more detail *supra* at Part II.B.

¹¹ *Planned Parenthood v. Casey*, 505 U.S. 833, 846 (1992).

¹² *Id.* at 882.

This Court correctly stated it is important for a woman to have full and accurate information to make an informed decision because of the psychological consequences of later realizing that she did not have the information or know the truth.¹³ This Court stated in *Casey*:

In attempting to ensure that a woman apprehend the full consequences of her decision, the State furthers the legitimate purpose of reducing the risk that a woman may elect an abortion, only to discover later, with devastating psychological consequences, that her decision was not fully informed. If the information the State requires to be made available to the woman is truthful and not misleading, the requirement may be permissible.¹⁴

Furthermore, the State may express its respect for the life of the unborn child.¹⁵ This Court recognized that the “government may use its voice and its regulatory authority to show its profound respect for the life within the woman.”¹⁶

¹³ *Id.*

¹⁴ *Id.*

¹⁵ *Gonzales v. Carhart*, 550 U.S. 124, 157 (2007); *Webster v. Reproductive Health Services*, 492 U.S. 490, 506 (1989); *Maher v. Roe*, 432 U.S. 464, 474 (1977).

¹⁶ *Gonzales v. Carhart*, 550 U.S. 124, 157 (2007) (*citing Casey*).

The Oklahoma Supreme Court has set a bad precedent based on a misinterpretation and misapplication of this Court's decision in *Casey*. Therefore, the Amicus urges this Court to grant certiorari.

II. THE BALLOT INITIATIVE IS CONSTITUTIONAL BECAUSE IT REITERATES A SCIENTIFIC FACT SO THAT A WOMAN CAN MAKE AN INFORMED DECISION.

A. Science Establishes the Fact That Life Begins at Conception, and Therefore, a Woman Should Know This Important Factual Information.

In *Roe v. Wade*, the State of Texas argued that life begins at conception, and therefore, the State has a compelling interest in protecting life from and after conception.¹⁷ This Court said that it did not need to resolve the difficult question of when life begins,¹⁸ reasoning that when “those trained in the respective disciplines of medicine, philosophy, and theology are unable to arrive at any consensus, the judiciary, at this point in the development of man’s knowledge, is not in a position to speculate as to the answer.”¹⁹

¹⁷ *Roe v. Wade*, 410 U.S. 113, 159 (1973).

¹⁸ *Id.*

¹⁹ *Id.*

Now almost forty years later, objective scientific evidence establishes with certainty when life begins.²⁰ This is a scientific and biological fact and not a legal or moral judgment.²¹ When a human ovum is fertilized by a human sperm, a biological life begins.²² Thus, scientific evidence confirms that life begins at conception.²³

²⁰ The leading textbooks also teach the scientific fact of when life begins. *See, e.g.*, WILLIAM J. LARSEN, HUMAN EMBRYOLOGY at 1 (2d ed. New York: Churchill Livingstone, 1997) (“ . . . [W]e begin our description of the developing human with the formation and differentiation of the male and female sex cells or gametes, which will unite at fertilization to initiate the embryonic development of a new individual.”); KEITH L. MOORE & T.V.N. PERSAUD, THE DEVELOPING HUMAN: CLINICALLY ORIENTED EMBRYOLOGY at 34 (6th ed. Only, Philadelphia: W.B. Saunders Co., 1998) (“Human development begins when a oocyte is fertilized.”); RONAN O’RAHILLY & FABIOLA MULLER, HUMAN EMBRYOLOGY & TERATOLOGY at 88 (3d ed. New York: Wiley-Liss, 2001) (“Just as postnatal age begins at birth, prenatal age begins at fertilization.”); *see also* “Carnegie Stages of Early Human Embryonic Development,” *available at* http://nmhm.washingtondc.museum/collections/hdac/Select_Stage_and_Lab_Manual.htm (“Stage One: Embryonic life commences with fertilization. . .”).

²¹ Affidavit of Maureen L. Condic, Ph.D., at Appendix A (stating that this conclusion is “entirely independent of any specific ethical, moral, political, or religious view of human life or of human embryos.”).

²² Maureen L. Condic, Ph.D., *When Does Life Begin? A Scientific Perspective*, Westchester Institute White Paper (October 2008), *available at* http://www.westchesterinstitute.net/images/wi_whitepaper_life_print.pdf.

²³ Affidavit of Maureen L. Condic, Ph.D., at Appendix A (explaining when life begins); Ankerberg & Weldon, *What Does Science Reveal about When Life Begins?* (2005), *available at* <http://>

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Based on a scientific description of fertilization, fusion of sperm and egg in the “moment of conception” generates a new human cell, the zygote, with composition and behavior distinct from that of either gamete. Moreover, this cell is not merely a unique human cell, but a cell with all the properties of a fully complete (albeit immature) human organism; it is “an individual constituted to carry on the activities of life by means of organs separate in function but mutually dependent: a living being.”²⁴

Furthermore, the “conclusion that human life begins at sperm-egg fusion is objective, based on the universally accepted scientific method of distinguishing different cell types from each other, and it [sic] consistent with the factual evidence.”²⁵

www.ankerberg.com/Articles/_PDFArchives/apologetics/AP3W0805.pdf (stating “What modern science has concluded is crystal clear: Human life begins at conception. This is a matter of scientific *fact*, not philosophy, speculation, opinion, conjecture, or theory. Today, the evidence that human life begins at conception is a fact so well documented that no intellectually honest and informed scientist or physician can deny it.”); JOHN C. WILKE & BARBARA H. WILKE, *ABORTION 63* (Hayes Pub. Co. 2003) (stating “. . . the beginning of any one human individual’s life, biologically speaking, begins at the completion of the union of his father’s sperm and his mother’s ovum, a process called ‘conception,’ ‘fertilization’ or ‘fecundation. . . .’”).

²⁴ Affidavit of Maureen L. Condit, Ph.D., at Appendix A.

²⁵ *Id.*

When life begins is a scientific fact that is no longer disputed and is confirmed by scientific knowledge. There is no controversy about biologic human development:

Biologic human life is defined by examining the scientific facts of human development. This is a field where there is no controversy, no disagreement. There is only one set of facts, only one embryology book is studied in medical school. The more scientific knowledge of fetal development that has been learned, the more science has confirmed that the beginning of any one human individual's life, biologically speaking, begins at the completion of the union of his father's sperm and his mother's ovum, a process called "conception," "fertilization" or "fecundation." This is so because this being, from fertilization, is alive, human, sexed, complete and growing.²⁶

This "is not debatable, not questioned. It is a universally accepted scientific fact."²⁷

²⁶ JOHN C. WILKE & BARBARA H. WILKE, ABORTION 63 (Hayes Pub. Co. 2003) (Dr. John Wilke is a physician and expert in human sexuality. He practiced medicine in Cincinnati, Ohio for forty years, where he was on the senior attending staff of the Providence and Good Samaritan hospitals. He is also the author of several books and a lecturer in the United States and in eighty-five foreign countries on abortion and life issues.).

²⁷ *Id.*

Because it is a scientific fact that life begins at conception, there is no scientific reason to separate a “human being” from a “human person” or “personhood.” There is “an objective and empirically-based definition of a human being and a human person, and that, other than conceptually, one cannot really split a human being from a human person. ‘Personhood’ begins when the human being begins – at fertilization.”²⁸

A woman should be given this factual information.²⁹ The purpose of “[i]nformed consent provisions serve not only to communicate information that would not necessarily be known to the patient, but also help the woman to make a fully informed

²⁸ Irving, *Scientific and Philosophical Expertise: An Evaluation of the Arguments on “Personhood,”* available at http://www.lifeissues.net/writers/irv/irv_04person1.html (stating “biological marker of fertilization a substantial change (or a change in natures) has taken place – and a new, unique, living, individual embryonic human being who is simultaneously a human person is present.”). Dr. Dianne Irving is a former career-appointed bench research biochemist/biologist (NIH, NCI, Bethesda, MD), an M.A. and Ph.D. philosopher (Georgetown University, Washington, D.C.), and Professor of the History of Philosophy, and of Medical Ethics. She has held teaching positions at Georgetown University, Catholic University of America, and The Dominican House of Studies.

²⁹ *Planned Parenthood of Indiana, Inc. v. Commissioner*, 794 F. Supp. 2d 892, 918 (S.D. Ind. 2011) (upholding the Indiana law, citing Dr. Condic, and concluding “mandated statement states only a biological fact relating to the development of the living organism; therefore, it may be reasonably read to provide accurate, non-misleading information to the patient.”).

decision.”³⁰ This Court recognized in *Casey* that “[r]equiring that the woman be informed of the availability of information relating to fetal development . . . is a reasonable measure to ensure an informed choice.”³¹ The Personhood Initiative states a biological fact relating to the development of the living organism, and thereby provides accurate, non-misleading information to the patient. Thus, the Oklahoma Supreme Court erred in holding it unconstitutional and misinterpreted this Court’s decision in *Casey*. Therefore, Amicus urges this Court to grant a writ of certiorari.

B. Based on Reliable Medical Certainty, State Legislatures Have Expressed This Scientific Fact to Give Women Accurate and Truthful Information.

Based on the scientific fact of when life begins, Oklahoma, like many other states, has enacted the Woman’s Right to Know law.³² The Legislature defined an unborn child as “the unborn offspring of human beings from the moment of conception, through pregnancy, and until live birth including the

³⁰ *Id.*

³¹ *Planned Parenthood v. Casey*, 505 U.S. 833, 883 (1992).

³² Oklahoma’s Woman’s Right to Know law, *available at* <http://www.awomansright.org/UnbornChild.html>.

human conceptus, zygote, morula, blastocyst, embryo and fetus.”³³

Subsequently, the Oklahoma State Board of Medical Licensure and Supervision produced the Woman’s Right to Know Booklet³⁴ to give women accurate and truthful information.³⁵ The medical experts included the medically accurate statutory language that the unborn child is the “unborn offspring of human beings from the moment of conception. . . .”

Furthermore, the Medical Board states: “The authors of this booklet have made efforts to present current and medically reliable information concerning probable anatomical and physiological characteristics of the unborn child, methods of commonly used abortion procedures, medical risks commonly associated with each abortion procedure, and risks commonly associated with carrying a child to term.”³⁶ The booklet also discusses that at conception, the unborn child’s “chromosomes contain genetic material that are the blueprint for growth and development. . . .”³⁷ The information provided to women by the Oklahoma

³³ Okla. Stat. Ann. tit. 63, § 1-730.

³⁴ Oklahoma Woman’s Right to Know Booklet, *available at* http://www.awomansright.org/pdf/AWRTK_Booklet-English-sm.pdf.

³⁵ *Id.* at 3 (stating that it gives “current and medically reliable” information).

³⁶ *Id.*

³⁷ *Id.* at 4.

Medical Board is the same type of information that this Court approved in *Casey*,³⁸ and therefore, is constitutional.

Like Oklahoma, other states have enacted the “Woman’s Right to Know” laws³⁹ to provide women with accurate medical and scientific information. These laws are usually accompanied by a “Woman’s Right to Know” booklet that explains the medical

³⁸ See *Planned Parenthood v. Casey*, 505 U.S. 833, 882 (1992).

³⁹ See, e.g., **Alabama:** Ala. Code § 26-23A-1 *et seq.*; **Arkansas:** Ark. Code Ann. § 20-16-901 *et seq.*; **Florida:** Fla. Stat. Ann. § 390.0111; **Georgia:** Ga. Code Ann. § 31-9A-1 *et seq.*; **Idaho:** Idaho Code Ann. § 18-609; **Indiana:** Ind. Code Ann. § 16-34-2-1.1; **Kansas:** Kan. Stat. Ann. § 65-6709; **Kentucky:** Ky. Rev. Stat. Ann. § 311.720 *et seq.*; **Louisiana:** La. Rev. Stat. Ann. § 40:1299.35.6; **Massachusetts:** Mass. Gen. Laws ch. 111, § 70E; **Michigan:** Mich. Comp. Laws § 333.17014 *et seq.*; **Minnesota:** Minn. Stat. Ann. § 145.4241 *et seq.*; **Mississippi:** Miss. Code Ann. § 41-41-33; **Missouri:** Mo. Rev. Stat. § 188.027; **Montana:** Mont. Code Ann. § 50-20-3 *et seq.*; **Nebraska:** Neb. Rev. Stat. Ann. § 28-327 *et seq.*; **North Carolina:** N.C. Gen. Stat. Ann. § 90-21-80 *et seq.*; **North Dakota:** N.D. Cent. Code § 14-02.1-01; **Ohio:** Ohio Rev. Code Ann. § 2317.56; **Oklahoma:** Okla. Stat. Ann. tit. 63, § 1-738.1A *et seq.*; **Pennsylvania:** 18 Pa. Cons. Stat. Ann. § 3203 *et seq.*; **South Carolina:** S.C. Code Ann. § 44-41-310 *et seq.*; **South Dakota:** S.D. Codified Laws § 34-23A-10.1 *et seq.*; **Texas:** Tex. Health & Safety Code Ann. § 171.012; **Utah:** Utah Code Ann. § 76-7-305 *et seq.*; **Virginia:** Va. Code Ann. § 18.2-76; **West Virginia:** W. Va. Code Ann. § 16-2I-1 *et seq.*; **Wisconsin:** Wis. Stat. Ann. § 253.10. See generally Annotation, *Validity of State “Informed Consent” Statutes By Which Providers of Abortion Are Required to Provide Patient Seeking Abortion with Certain Information*, 119 A.L.R.5th 315 (2004).

facts.⁴⁰ In addition, many of the statutes define an unborn child from conception⁴¹ or indicate that an abortion terminates the life of a whole, separate, unique, living human being.⁴²

In the largest government study on abortion since *Roe v. Wade*, the South Dakota Legislature created the South Dakota Task Force to Study Abortion [hereinafter Task Force].⁴³ The Task Force was specifically charged to study ten aspects of abortion

⁴⁰ *E.g.*, **Arkansas:** available at <http://www.healthy.arkansas.gov/programsServices/healthStatistics/Documents/abortion/abortiondecisionbook.pdf>; **Georgia:** available at <http://www.health.state.ga.us/pdfs/wrtk/PatientEducationBookEN.pdf>; **Idaho:** available at http://www.healthandwelfare.idaho.gov/Portals/0/Medical/MoreInformation/Fetal%20development10_27_08.pdf; **Kansas:** available at http://www.kansaswomansrighttoknow.org/download/Handbook_English.pdf; **Louisiana:** available at <http://new.dhh.louisiana.gov/assets/oph/Center-PHCH/Center-PH/familyplanning/wmnsRightToKnow.pdf>; **Minnesota:** available at <http://www.health.state.mn.us/wrtk/handbook.html>; **Missouri:** available at <http://health.mo.gov/living/families/womenshealth/sb793/pdf/InformedConsentBooklet.pdf>; **Oklahoma:** available at <http://www.awomansright.org/Intro.html>; **South Dakota:** available at <http://doh.sd.gov/abortion/doc/fetal.pdf>; **Texas:** available at <http://www.dshs.state.tx.us/wrtk/>; **West Virginia:** available at <http://www.wvdhhr.org/wrtk/wrtkbooklet.pdf>.

⁴¹ Ala. Code § 26-23A-3(10); Ga. Code Ann. § 31-9A-2(7); Ind. Code Ann. § 16-34-2-1.1(E); Ky. Rev. Stat. Ann. § 311.720(6); Minn. Stat. Ann. § 145.4241; Mo. Rev. Stat. § 188.027; Mont. Code Ann. § 50-20-303; N.D. Cent. Code § 14-02.1-02; Okla. Stat. Ann. tit. 63, § 1-730; 18 Pa. Cons. Stat. Ann. § 3203.

⁴² Kan. Stat. Ann. § 65-6709(B)(5); Mo. Rev. Stat. § 188.027; S.D. Codified Laws § 34-23A-10.1.

⁴³ The South Dakota Legislature enacted H.B. 1233.

including when life begins.⁴⁴ The Task Force was also charged with preparing a report that detailed its findings along with any proposals for additional legislation that the Task Force would deem advisable.⁴⁵

In compliance with its charge, the Task Force scheduled four full days of hearings.⁴⁶ “The Task Force heard live testimony of approximately fifty-five witnesses, including thirty-two experts, and considered the written reports and testimony from another

⁴⁴ Report of the South Dakota Task Force to Study Abortion (Dec. 2005), *available at* <http://www.dakotavoices.com/Docs/South%20Dakota%20Abortion%20Task%20Force%20Report.pdf>. The Task Force was to study (1) the practice of abortion since its legalization; (2) the body of knowledge concerning the development and behavior of the unborn child which has developed because of technological advances and medical experience since the legalization of abortion; (3) the societal, economic, and ethical impact and effects of legalized abortion; (4) the degree to which decisions to undergo abortions are voluntary and informed; (5) the effect and health risks that undergoing abortions has on the woman, including the effects on the woman’s physical and mental health, including the delayed onset of cancer, and her subsequent life and socioeconomic experiences; (6) the nature of the relationship between a pregnant woman and her unborn child; (7) whether abortion is a workable method for the pregnant woman to waive her rights to a relationship with the child; (8) whether the unborn child is capable of experiencing physical pain; (9) whether the need exists for additional protections of the rights of pregnant women contemplating abortion; and, (10) whether there is any interest of the state or the mother or the child which would justify changing the laws relative to abortion. *Id.* at 6.

⁴⁵ *Id.* at 5-6.

⁴⁶ *Id.*

fifteen experts” and the live testimony “was divided almost equally between witnesses who support the position that abortion is harmful to women and should be illegal and those who think it should be legal.”⁴⁷ In addition, the Task Force received approximately 3,500 pages of written materials, studies, reports, and testimony.⁴⁸ The Task Force noted that of particular significance were the affidavits of almost 2,000 post-abortive women who provided statements about their real life experiences.⁴⁹ The Task Force stated that “[o]f these post-abortive women, *over 99% of them* testified that abortion is destructive of the rights, interests, and health of women and that abortion should not be legal.”⁵⁰

Of particular note, the Task Force heard testimony from Dr. Bernard Nathanson, a board certified obstetrician and gynecologist who was personally responsible for approximately 75,000 abortions, and one of the original founders of the National Association for the Repeal of the Abortion Laws (NARAL) in the United States.⁵¹ Dr. Nathanson testified that it is generally known among obstetricians and scientists that abortion terminates the life of a living human

⁴⁷ *Id.* at 6-7.

⁴⁸ *Id.* at 7.

⁴⁹ *Id.*

⁵⁰ *Id.* (emphasis added).

⁵¹ *Id.* at 11.

being, but that abortionists often deny this fact for strategic reasons.⁵² He stated:

The nature of the procedure is to terminate the life of the unborn child. Withholding these facts from the pregnant mother deprives her of the ability to make an informed decision for herself. Such informed written consent fails to meet the reasonable patient standard of disclosure and deprives the mother of her rights of self-determination.⁵³

Following the extensive hearings from both sides of the abortion issue, the Task Force issued its seventy-one page report in December 2005.⁵⁴ It reviewed the assumptions made by the *Roe* Court and expert testimony on the question of when life begins. After

⁵² Report of the South Dakota Task Force to Study Abortion at 12 (Dec. 2005), *available at* <http://www.dakotavoice.com/Docs/South%20Dakota%20Abortion%20Task%20Force%20Report.pdf> (testifying that he and other strategists for NARAL, for instance, adopted certain tactics to win the public perception that all forms of abortion should be and remain legal. Dr. Nathanson stated that one tactic was to suppress and denigrate all scientific evidence that supported the conclusions that a human embryo or fetus was a separate human being. He stated that he and others denied what they knew was true: “The abortion industry would routinely deny the undeniable, that is, that the human embryo and fetus is, as a matter of biological fact, a human being.”).

⁵³ *Id.*

⁵⁴ *See* Report of the South Dakota Task Force to Study Abortion (Dec. 2005), *available at* <http://www.dakotavoice.com/Docs/South%20Dakota%20Abortion%20Task%20Force%20Report.pdf>.

hearing from medical and scientific experts, the Report stated that “it can no longer be doubted that the unborn child from the moment of conception is a whole separate human being.”⁵⁵

In addition, the Report stated that “[n]o credible evidence was presented that challenged these scientific facts. In fact, when witnesses supporting abortion were asked when life begins, not one would answer the question, stating that it would only be their personal opinion.”⁵⁶ The Task Force concluded “[t]hat abortion terminates the life of a unique, whole, living human being. . . .”⁵⁷ Consequently, during the 2005 session, the South Dakota Legislature passed H.B. 1166 finding that “all abortions, whether surgically or chemically induced, terminate the life of a whole, separate, unique, living human being.”⁵⁸ This Act amended § 34-23A-10.1 of the South Dakota Code to require written disclosure by a physician to a pregnant mother “that the abortion will terminate the life of a whole, separate, unique, living human being.”⁵⁹ Planned Parenthood filed suit to challenge

⁵⁵ *Id.* at 10.

⁵⁶ *Id.*

⁵⁷ *Id.* at 13.

⁵⁸ H.B. 1166 was codified at S.D. Codified Laws § 34-23A-10.1 *et seq.*

⁵⁹ *Id.* § 34-23A-10.1.

the statute on First Amendment Free Speech grounds, but the provision has been upheld.⁶⁰

The United States Congress also had an opportunity to hold hearings on when life begins during the Human Life Bill, S. 158. The Subcommittee on the Separation of Powers of the Judiciary Committee held extensive hearings stating it had “exhaustively addressed” the fundamental issues concerning the unborn.⁶¹ It divided its inquiry into two basic questions: first, the biological and scientific question of when life begins; and, second the legal issue of what value would be given to the intrinsic worth and value that would be given to human life.⁶² The Subcommittee viewed these inquiries as two distinct questions.⁶³

In answering the first scientific question of when life begins, the Subcommittee concluded after hearing

⁶⁰ *Planned Parenthood v. Rounds*, 653 F.3d 662 (8th Cir. 2011) (holding provision requiring doctors to advise a woman seeking an abortion that the “abortion will terminate the life of a whole, separate, unique, living human being” did not facially violate doctors’ First Amendment rights); *Planned Parenthood v. Rounds*, 530 F.3d 724 (8th Cir. 2008) (upholding statutory language).

⁶¹ Report, Subcommittee on Separation of Powers to Senate Judiciary Committee S. 158, 97th Congress, 1st Session 1981, 3, 7 (stating it held eight days of hearings, with voluminous submissions, fifty-eight witnesses of which twenty-two were world-renowned geneticists, biologists and practicing physicians who addressed the medical and biological question).

⁶² *Id.* at 3.

⁶³ *Id.*

the testimony of world renown scientists and medical witnesses and reviewing the voluminous submissions that: “. . . contemporary scientific evidence points to a clear conclusion: the life of a human being begins at conception, the time when fertilization is complete.”⁶⁴

The Report went on to state that: “Until the early nineteenth century science had not advanced sufficiently to be able to know that conception is the beginning of human life; but today the facts are beyond dispute.”⁶⁵

The second issue is a legal issue concerning the value that would be given to human life. The Report concluded that the scientific conclusion that life begins at conception made clear the answer to the second question.⁶⁶ Based on the values in the Constitution, the Report concluded that it must affirm all human life.⁶⁷ The Subcommittee found that “the fourteenth amendment embodies the sanctity of human life and that today the government must affirm this ethic by recognizing the ‘personhood’ of all human beings.”⁶⁸

Indeed, the Fourteenth Amendment provides a basis for the state to define a person and not the

⁶⁴ *Id.* at 7.

⁶⁵ *Id.*

⁶⁶ *Id.* at 13.

⁶⁷ *Id.* at 18.

⁶⁸ *Id.*

federal government.⁶⁹ The Fourteenth Amendment provides:

All persons born or naturalized in the United States and subject to the jurisdiction thereof, are citizens of the United States and of the State wherein they reside. No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws.⁷⁰

“Personhood is derived from the inherent, natural rights of the people and the inherent power of the several states.”⁷¹ Natural rights are the rights of life, liberty, and property as affirmed in the Declaration of Independence.⁷² The states have the primary duty to

⁶⁹ Roden, *Unborn Children as Constitutional Persons*, 25 ISSUES OF LAW & MEDICINE 185, 192, available at http://www.grtl.org/docs/ILM_Spring%2010.pdf (Gregory Roden is a legal scholar who discusses the question whether unborn children are “persons” within the language and meaning of the Fifth and Fourteenth Amendments and analyzes the issue based on historical understanding, structure of the Constitution, and the jurisprudence of the Supreme Court because there is no constitutional text explicitly holding unborn children to be, or not to be, “persons.”).

⁷⁰ U.S. CONST. amend. XIV, § 1.

⁷¹ Roden, *Unborn Children as Constitutional Persons*, 25 ISSUES OF LAW & MEDICINE 185, 193, available at http://www.grtl.org/docs/ILM_Spring%2010.pdf.

⁷² *Id.*

protect those unalienable rights.⁷³ As this Court has stated:

The very highest duty of the States, when they entered into the Union under the Constitution, was to protect *all persons within their boundaries* in the enjoyment of these “unalienable rights with which they were endowed by their Creator.” Sovereignty, for this purpose, *rests alone with the States*.⁷⁴

The Personhood Initiative is neither new nor novel as it is based on what science has known and the legislatures have recognized. The Oklahoma ballot initiative states the scientific fact of when life begins and articulates what both state and federal legislatures have recognized based on objective, accurate, and reliable scientific information. Women are entitled to have full, accurate, and truthful information as this Court articulated in *Casey*. Therefore, the Oklahoma Supreme Court erred in summarily striking down the ballot initiative and misinterpreting and misapplying this Court’s ruling in *Casey*.

⁷³ *United States v. Cruikshank*, 92 U.S. 542 (1875).

⁷⁴ *Id.* at 553 (emphasis added).

C. International Law Also Recognizes the Scientific Fact That Life Begins at Conception.

In 2011, a distinguished group of doctors, lawyers, policy experts, elected officials, diplomats, judges, and professors met in San Jose, Costa Rica to review international law concerning abortion. They stated: “It is now commonplace that people around the world are told there is a new international right to abortion. . . . The assertion they make is false. No UN treaty makes abortion an international human right.”⁷⁵

The purpose of the San Jose Articles is “. . . to provide expert testimony that no such right exists. . . .”⁷⁶ A second purpose is “. . . to demonstrate that the unborn child is already protected in human rights instruments and that governments should begin protecting the unborn child. . . .”⁷⁷

The San Jose Articles consists of nine articles.⁷⁸ The first four articles pertain to the beginning of life. They state:⁷⁹

⁷⁵ San Jose Articles, *available at* http://www.sanjosearticles.com/?page_id=47.

⁷⁶ *Id.*

⁷⁷ *Id.*

⁷⁸ *See* San Jose Articles, *available at* http://www.sanjosearticles.com/?page_id=2.

⁷⁹ *Id.*

Article 1. As a matter of scientific fact a new human life begins at conception.⁸⁰

Article 2. Each human life is a continuum that begins at conception and advances in stages until death. Science gives different names to these stages, including zygote, blastocyst, embryo, fetus, infant, child, adolescent and adult. This does not change the scientific consensus that at all points of development each individual is a living member of the human species.⁸¹

⁸⁰ San Jose Articles, *available at* http://www.sanjosearticles.com/?page_id=2. The explanation states:

“Conception” (fertilization) is the union of an oocyte and sperm cell (specifically, the fusion of the membranes of an oocyte and spermatozoon upon contact) giving rise to a new and distinct living human organism, the embryo. . . . *See, e.g., Sadler, T.W. Langman’s Medical Embryology, 7th edition.* Baltimore: Williams & Wilkins 1995, p. 3 (noting that “the development of a human begins with fertilization, a process by which the spermatozoon from the male and the oocyte from the female unite to give rise to a new organism . . . ”); Moore, Keith L. and Persaud, T.V.N. *The Developing Human: Clinically Oriented Embryology, 7th edition.* Philadelphia: Saunders 2003, p. 2 (noting that “the union of an oocyte and a sperm during fertilization” marks “the beginning of the new human being.”).

San Jose Articles, *available at* http://www.sanjosearticles.com/?page_id=88.

⁸¹ The explanation notes that:

Even the European Court of Human Rights, which has in recent years been reluctant to afford full protection to the unborn child, nonetheless stated in 2004: “It may be

(Continued on following page)

Article 3. From conception each unborn child is by nature a human being.

Article 4. All human beings, as members of the human family, are entitled to recognition of their inherent dignity and to protection of their inalienable human rights. This is recognized in the Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights, and other international instruments.

Thus, the international community recognizes the scientific fact that life begins at conception. In addition, there is also agreement that the unborn child is a human being who is entitled to dignity and protection.



CONCLUSION

Forty years after this Court's decision in *Roe v. Wade*, science has established with certainty that life begins at conception. State, federal, and international law all articulate this scientific fact. This Court clearly articulated in *Casey* that a woman should have full, accurate, and truthful information so that she could make an informed decision whether to

regarded as common ground between States that the embryo/fetus belongs to the human race." [*Vo v. France* (53924/00, GC, 8 July 2004, at § 84)].

San Jose Articles, available at http://www.sanjosearticles.com/?page_id=88.

continue the pregnancy or to abort her unborn child. Oklahoma is providing women with this accurate and undisputed scientific information. Therefore, Amicus AAPLOG supports Petitioner's petition for a writ of certiorari. Amicus urges this Court to issue a writ of certiorari because the Oklahoma Supreme Court has preemptively usurped the voters' right to voice their opinion on the ballot initiative and has misinterpreted and misapplied this Court's ruling in *Casey*.

Respectfully submitted,

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APPENDIX A

Affidavit of Dr. Maureen L. Condic, Ph.D.

STATE OF UTAH §
 § KNOW ALL MEN BY
COUNTY OF SALT LAKE § THESE PRESENTS:

AFFIDAVIT OF MAUREEN L. CONDIC, Ph.D.

BEFORE ME, the undersigned authority, on this day personally appeared MAUREEN L. CONDIC, Ph.D. who is personally known to me, and after being by me first duly sworn according to law on her oath did depose and say that:

1. “My name is MAUREEN L. CONDIC. I am over eighteen (18) years of age and I reside in Salt Lake City, Utah. I am fully competent to make this Affidavit. I have personal knowledge of the facts stated herein and the following is true and correct.
2. I submit this Affidavit in support of the Petitioner’s Petition for Writ of Certiorari in the Oklahoma Personhood Initiative. The opinions I render today are my own and do not represent any group.
3. I have reviewed the language of Oklahoma Personhood Initiative as well as the Affidavits submitted to the Oklahoma Supreme Court by Dana Stone, M.D. and Eli Reshef, M.D.
4. I am aware that the Oklahoma initiative would add a new section to the Oklahoma Constitution. The section would define a “person” as any

human being from the beginning of biological development to natural death. Biological development of a human being begins at fertilization, which is the fusion of a human female egg with a human male sperm to form a new cell.

5. This definition is an accurate scientific definition of biological development of a human being and when a human life begins. It is a universally accepted scientific fact that life begins at fertilization. There is no credible opposition to this scientific fact.
6. For the reasons set forth below, it is my expert opinion with reasonable medical certainty that this statement is based in scientific fact.
7. I am Associate Professor of Neurobiology and Anatomy at the University of Utah School of Medicine, with an adjunct appointment in the Department of Pediatrics. I received my undergraduate degree from the University of Chicago, and my doctorate from the University of California at Berkeley. Since my appointment at the University of Utah in 1997, my primary research focus has been the development and regeneration of the nervous system. In 1999, I was awarded the Basil O'Connor Young Investigator Award for my studies of peripheral nervous system development. In 2002, I was named a McKnight Neuroscience of Brain Disorders Investigator in recognition of my research in the field of adult spinal cord regeneration. My current research involves human stem cells as a treatment for congenital heart disease in infants and other medical conditions.

8. In addition to my scientific research, I participate in both graduate and medical teaching. I am director of the University of Utah School of Medicine curriculum in Human Embryology. I have published and presented seminars nationally on issues concerning science policy and the ethics of biological research.
9. My current C.V. is attached as Exhibit "A".
10. In considering the question of when the life of a new human being commences, we must first address the more fundamental question of when a new cell, distinct from sperm and egg, comes into existence. Human cells can be distinguished from each other by scientific criteria. Indeed, the entire scientific field of biology is based on the ability of scientists to distinguish one cell type from another. Skin cells can be converted into pluripotent stem cells by manipulation of specific genes, but this is clearly a *conversion* of one cell type to another. No credible scientist would argue that skin cells already "are" pluripotent stem cells or are the "equivalents" of pluripotent stem cells. These are two distinct cell types with distinct properties. The fact that one cell type can give rise to a distinct cell type in no way alters the fact that a new cell type has been produced.
11. How do scientists determine when a new cell type has been produced, either in the laboratory or as a consequence of a natural biologic process? The scientific basis for distinguishing one cell type from another rests on two criteria: differences in molecular composition and differences in behavior. Differences in molecular composition

can arise due to an alteration in gene expression, or a change in the subcellular localization of existing molecules, or a chemical modification of existing molecules. Alternatively, when cells exhibit new behavior, for example, going from a quiescent to an actively dividing state, they can be identified as distinct cell types. When a cell exhibits either a change in molecular composition or a change in behavior, it is considered a new cell type. These two criteria are not “religious,” they are objective, verifiable scientific criteria that distinguish one cell type from another.

12. Based on these criteria, the fusion of sperm and egg clearly produces a new cell type. The basic events of early development are both reasonably well characterized and entirely uncontested. Following the binding of sperm and egg to each other, the membranes of these two cells fuse, creating in this instant a single hybrid cell: the zygote or one-cell embryo. This fact is explicitly acknowledged by Dr. Stone (p. 17) in her Affidavit to the Oklahoma Supreme Court. Cell fusion is a well-studied and very rapid event, occurring in less than a second. Because the zygote arises from the fusion of two different cells, it contains all the components of both sperm and egg, and therefore the zygote has a unique molecular composition that is distinct from either gamete. Subsequent to sperm-egg fusion, events rapidly occur in the zygote that do not normally occur in either sperm or egg. Within minutes of membrane fusion, the zygote initiates changes in its ionic composition that will, over the next 30 minutes, result in chemical modifications that block sperm binding to the cell surface and prevent further intrusion

of additional spermatozoa on the unfolding process of development. Thus, the zygote acts immediately and specifically to antagonize the function of the gametes from which it is derived; while the “goal” of both sperm and egg is to find each other and to fuse, the first act of the zygote is immediately to prevent any further binding of sperm to the cell surface. Clearly, then, the prior trajectories of sperm and egg have been abandoned, and a new developmental trajectory – that of the zygote – has taken their place.

13. Based on this factual description of the events following sperm-egg binding, we can confidently conclude that a new cell, the zygote, comes into existence at the “moment” of sperm-egg fusion, an event that occurs in less than a second. At the point of fusion, sperm and egg are physically united – i.e., they cease to exist as gametes, and they form a new entity that is materially distinct from either sperm or egg. The behavior of this new cell also differs radically from that of either sperm or egg: the developmental pathway entered into by the zygote is distinct from both gametes. Thus, sperm-egg fusion is indeed a scientifically well defined “instant” in which the zygote (a new cell with unique genetic composition, molecular composition, and behavior) is formed.
14. What is the nature of this new cell, the zygote, that comes into existence upon sperm-egg fusion? Most importantly, is the zygote merely another human cell (like a liver cell or a skin cell or an egg cell) or is it something else? Just as science distinguishes between different types of cells, it

also makes clear distinctions between cellular life and organisms. Both cells and organisms are alive (i.e. they carry out complex metabolic processes to utilize energy and remove wastes), yet organisms exhibit unique behavior and molecular composition that can reliably distinguish them from mere cells.

15. An organism is defined by Merriam Webster as “(1) a complex structure of interdependent and subordinate elements whose relations and properties are largely determined by their function in the whole and (2) an individual constituted to carry on the activities of life by means of organs separate in function but mutually dependent: a living being.” This definition stresses the interaction of parts in the context of a coordinated whole as the distinguishing feature of an organism. Again, this is not a religious definition; it is a scientific definition that distinguishes human cells from human organisms.
16. Organisms are “living beings.” Therefore, another name for a human organism is a “human being”; an entity that is a complete human, rather than a part of a human or a component of a human. Thus, the assertion of Dr. Stone that “IP 395 would give the cells that comprise an ectopic pregnancy constitutional rights, thereby restricting a physician’s ability to treat ectopic pregnancies” (p. 19) is both scientifically inaccurate and highly misleading. An ectopic pregnancy is a serious medical condition caused by an embryo (a living human being) developing in an abnormal location, not by “cells”.

17. Human beings can be distinguished from human cells using the same kind of criteria scientists use to distinguish different cell types. A human being (i.e., a human organism) is composed of characteristic human parts (cells, proteins, RNA, DNA), yet it is different from a mere collection of cells because it has the characteristic behavior of an organism: it acts in an interdependent and coordinated manner to “carry on the activities of life.”
18. Human embryos from the one-cell (zygote) stage forward show molecular composition that is distinct from other human cells, and more importantly, they show uniquely integrated, organismal behavior that constitutes the scientific definition of a whole human being. The zygote immediately and decisively enters into a complex pattern of development that sequentially produces all of the molecular interactions, cell types, tissues, structures and organs required for the organism as a whole to live and mature as a unique individual. This behavior is entirely unlike the behavior of human cells, and is the defining characteristic of human life. This is not a matter of religious belief, societal convention or emotional reaction. It is a matter of observable, objective scientific fact.
19. Based on a scientific description of fertilization, fusion of sperm and egg in the “moment of conception” generates a new human cell, the zygote, with composition and behavior distinct from that of either gamete. Moreover, this cell is not merely a unique human cell, but a cell with all the properties of a fully complete (albeit immature) human organism; it is “an individual constituted to carry on the activities of life by means of organs

separate in function but mutually dependent: a living being.”

20. In other words, this new human being has its own unique DNA that is distinct from his/her mother. The doctor has two patients – the mother and the unborn child. Thus, Dr. Reshef’s statement in his Affidavit to the Oklahoma Supreme Court that, “As a doctor, my charge is to heal people, not harm them” (p. 27) is precisely the issue. The scientific facts clearly indicate that human life begins at fertilization. Given Dr. Reshef’s description of the risks to human embryos involved in his medical practice, he is indeed causing harm to people at very early stages of development. While current practice makes it acceptable to ignore this harm, it is not consistent with the medical and scientific facts.
21. Drs. Stone and Reshef both assert that a large number of early embryos do not implant or ultimately miscarry after implantation. However, it is not clear on what evidence Dr. Stone bases her assertion that, “Approximately 30% of zygotes fail to achieve implantation due to natural causes” (p. 17). We do not have a reliable chemical or physiologic indicator for the formation of a zygote. Therefore it is impossible to know how many zygotes fail to implant. Similarly, the assertion by Dr. Reshef (p. 25) that “roughly 70% of the eggs fertilized in humans during natural conception will spontaneously abort, resulting in a miscarriage” is scientifically unsupported for the same reasons. Once a chemical pregnancy has been detected by the presence of human chorionic gonadotropin in a woman’s blood or urine (i.e.

there is a “recognized pregnancy”, p. 17), then a miscarriage can be detected. Yet based on Dr. Stone’s assertion, this is a relatively small number of cases (12-15%). Importantly, early pregnancy loss is irrelevant to the consideration of when life begins. The fact that early stages of human development are “risky”, with some percentage of embryos failing to survive, is a unfortunate medical reality but it does not alter the scientific facts regarding when human life begins. Dr. Stone asserts that, “Implantation is the benchmark that signifies the beginning of a pregnancy. A woman is not pregnant until implantation has occurred.” (p. 17). This assertion is misleading. There are several interpretations of when “pregnancy” begins (see, for example Gacek, *Conceiving Pregnancy*, National Catholic Bioethics Quarterly 543 (Autumn 2009)), with many medically authoritative sources contesting the assertion given by Dr. Stone and explicitly defining the onset of pregnancy at sperm-egg fusion. Importantly, when “pregnancy” commences is a separate question from when human life begins.

22. Dr. Stone further asserts that, “A drug or device that interrupts the chain of events leading up to implantation is a contraceptive.” (p. 17). This statement is false. Conception is the process of producing a zygote, and is clearly distinct from implantation. Indeed, Dr. Stone readily acknowledges that an zygote is produced at sperm-egg fusion, indicating “The resulting cell is called a zygote” (p. 17). This is the point at which IP 395 seeks to define the beginning of human life. Drugs that prevent a zygote from *forming* are

contraceptive. Drugs that prevent *implantation* after the formation of a zygote are contragestive (see, for example, Keenan, Ulipristal Acetate: Contraceptive or Contragestive?, 45 *The Annals of Pharmacotherapy* 813 (June 2011)). Drugs that *disrupt* gestation after implantation are abortifacient.

23. The conclusion that human life begins at sperm-egg fusion is objective, based on the universally accepted scientific method of distinguishing different cell types from each other, and it [sic] consistent with the factual evidence. It is entirely independent of any specific ethical, moral, political, or religious view of human life or of human embryos. Indeed, this definition does not directly address the central ethical questions surrounding the embryo: What value ought society to place on human life at the earliest stages of development? Does the human embryo possess the same right to life as do human beings at later developmental stages? A neutral examination of the factual evidence merely establishes the onset of a new human life at a scientifically well defined “moment of conception,” a conclusion that unequivocally indicates that human embryos from the zygote stage forward are indeed living individuals of the human species – human beings.
24. Thus, the scientific community does indeed have a clear set of criteria for distinguishing one cell type from another and human cells from human organisms. By these criteria, it is a matter of objective, scientific fact that a full and complete, albeit developmentally immature, human organism comes into existence at the fusion of sperm and

egg, and that this moment is “the beginning of biological development.”

Further Affiant sayeth not.”

DATED: This 9 day of August, 2012.

/s/ Maureen L. Condic
Dr. Maureen L. Condic, Ph.D

SWORN TO AND SUBSCRIBED BEFORE ME, the undersigned authority, on this 9 day of August, 2012

/s/ Jaleen Roiann Smith
NOTARY PUBLIC IN AND
FOR THE STATE OF UTAH
My commission expires: 11/16/2014
Notary Public, Salt Lake County, Utah

EXHIBIT A

CURRICULUM VITAE

Last Updated: 13 May 2012

PERSONAL DATA

Name: Maureen L. Condic
Birth Place: Chicago, Illinois
Citizenship: United States

EDUCATION

Years	Degree(s)	Institution (Area of Study)
1978-1982	B.A.	University of Chicago
1983-1989	Ph.D.	University of California, Berkeley (Neurobiology)
1989-1991	Postdoc	University of California, Berkeley
1991-1997	Postdoc	University of Minnesota, Minneapolis

ACADEMIC HISTORY

Neurobiology and Anatomy, University of Utah

7/1/1997-2/28/1999 Assistant Professor (Research)
3/1/1999-6/30/2004 Assistant Professor
(Scientist Scholar)
7/1/2004-Present Associate Professor, Tenured

Pediatrics, University of Utah

7/1/1997-6/30/2010 Adjunct Assistant Professor
7/1/2010-Present Adjunct Associate Professor

PROFESSIONAL EXPERIENCE

Full Time Positions

- 1997-1999 Research Assistant Professor,
Department of Neurobiology
University of Utah,
Salt Lake City, UT, USA
- 1999-2004 Assistant Professor,
Department of Neurobiology
University of Utah,
Salt Lake City, UT, USA
- 2004-present Associate Professor, Tenured,
Department of Neurobiology
University of Utah,
Salt Lake City, UT, USA

Part Time Positions

- 2007-Present Senior Fellow,
Westchester Institute
- 2007-Present National Catholic Bioethics
Quarterly; Scientific
Advisory Board
- 2008-Present Bioethics Defense Fund; Director,
Scientific Advisory Board

Temporary Positions

- 2010 Oxford University, Harris
Manchester College, Theology
Department Ph.D. External
Examiner. Stem Cell Research,
A critical study of the thought
of John Harris, Mary Warnock
and H. Tristram Engelhardt

in the light of Christian holistic anthropology, by Angeliki Kerasidou.

- 2011 Visiting Professor,
Notre Dame University.
- 2012 Visiting Professor,
Notre Dame University.

Editorial Experience

- 2007-Present National Catholic Bioethics Quarterly; Editorial Board
- 2010-Present Stem Cell Reviews and Reports, Editorial Board
- 1997-Present Journal Referee:
(12-20 manuscripts/year)
- Cell Biology
 - Cell Stem Cell Development
 - Developmental Biology
 - Developmental Dynamics
 - European Journal of Neuroscience
 - Experimental Cell Research
 - Experimental Neurology
 - Journal of Cell Biology
 - Journal of Comparative Neurology
 - Journal of Neuroscience
 - Molecular Biology of the Cell
 - Molecular and Cellular Neuroscience
 - National Catholic Bioethics Quarterly
 - Neural Development

Regenerative Medicine
Science
Stem Cells and Development
Stem Cell Reviews and Reports
Stem Cells

SCHOLASTIC HONORS

1999	Pew Scholarship nominee, University of Utah
1999-2001	Basil O'Conner Young Investigator, March of Dimes, USA
2002-2005	McKnight Neuroscience of Brain Disorders Investigator
2006	Invited Audience with His Holiness Pope Benedict XVI

ACTIVE MEMBERSHIPS IN PROFESSIONAL SOCIETIES

1997-Present	American Association for the Advancement of Science
1997-Present	Society for Developmental Biology
1997-Present	Society for Neuroscience

TEACHING RESPONSIBILITIES/ASSIGNMENTS

Course and Curriculum Development

2010	Phase I: Human embryology content director, University of Utah, Salt Lake City.
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- 2010 Phase II: Metabolism and Reproduction, Human embryology content director, University of Utah, Salt Lake City.
- 2011 Phase II: Circulation, Respiration and Regulation, Human embryology content director, University of Utah, Salt Lake City.
- 2012 Phase II: Metabolism and Reproduction, Human embryology content director, University of Utah, Salt Lake City.

Courses Directed

- 2001-2006 Course Director, “Research in Progress Seminar”. (Anat 7720). Presentation of current research with formal review by Departmental faculty and course director, University of Utah, Salt Lake City.
- 2001-2003 Co-Director (with Dr. C.-B. Chien), “Axon guidance”. (Mbiol 6100). Presentation of current literature with formal review by course directors, University of Utah, Salt Lake City.
- 2006 Co-Director (with Dr. A. Moon), “Cell adhesion and motility”. (Mbiol 6100). Presentation of current literature, writing of a grant proposal, University of Utah, Salt Lake City.

App. 17

- 2006-2009 Course Director, "Human Embryology," (Anat 6060). University of Utah, Salt Lake City.
- 2010 Course Director, "Human embryology and craniofacial development". Presentation of formal lectures for Dental students (independent component of (Orb 133), University of Utah, Salt Lake City.
- 2010-present Course/Content Director, "Human Embryology" in Phase I, Phase II. University of Utah, Salt Lake City.

Course Lectures

- 1985-1986 Graduate Instructor, Laboratory Instructor, "Developmental Biology". University of California, Berkeley.
- 1988 Graduate Instructor, Laboratory Instructor, "Biology" University of California, Berkeley.
- 1989 Graduate Instructor, "Integrated Systems Neurobiology" University of California, Berkeley.
- 1992-1996 Instructor, Discussion Leader, "Developmental Neurobiology" University of Minnesota, Minneapolis.
- 1993-1995 Instructor, Discussion Leader, "Molecular, Cellular Development" University of Minnesota, Minneapolis.

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1998-Present	Instructor, Discussion Leader, "Developmental Neurobiology," (Anat 7750) University of Utah, Salt Lake City.
1998-2010	Instructor, "Frontiers in Neuroscience," (Neusc 6010) University of Utah, Salt Lake City.
1998-2010	Instructor, "Faculty Research in Progress," (Mbiol 6050)
1999	Instructor, "Cell Biology," (Mbiol 6480) Utah, Salt Lake City.
1999-2006	Instructor, "Human Embryology," (Anat 6060) University of Utah, Salt Lake City.
2001-2006	Course Director, "Research in Progress Seminar," (Anat 7720) University of Utah, Salt Lake City.
2001	Co-Director, "Axon Guidance," (Mbiol 6100). Offered 2001, 2003. University of Utah, Salt Lake City.
2006-2009	Course Director, "Human Embryology," (Anat 6060) University of Utah, Salt Lake City.
2007	Instructor, "Genetics and Society (Honors 3215) University of Utah, Salt Lake City.
2010	Instructor, "Health Law" (LAW 7360) University of Utah, Salt Lake City.
2010	Course Director, "Human embryology and craniofacial development" (independent component of (Orb 133), University of Utah, Salt Lake City.

2010-present Course/Content Director,
“Human Embryology” in
Phase I, Phase II. University
of Utah, Salt Lake City.

Laboratory Teaching

1985-1986 Graduate Instructor, Laboratory
Instructor, “Developmental Biology”
University of California, Berkeley.

1988 Graduate Instructor, Laboratory
Instructor, “Biology” University
of California, Berkeley.

Small Group Teaching

2010-Present Instructor, Integrated Case
presentation, Phase I,
University of Utah School
of Medicine, Salt Lake City.

Supervision

1997-2012 Supervised 11 undergraduate
trainees, 22 graduate students,
and 2 post-doctorate fellows.

1999-present Served on 11 graduate
student committees

PEER-REVIEWED JOURNAL ARTICLES (under- line faculty member’s name)

1. Condic, M.L. and Bentley, D. (1989).
Pioneer neuron pathfinding from normal and
ectopic locations in vivo after removal of the
basal lamina. Neuron 3, 427-439.

2. Condic, M.L. and Bentley, D. (1989).
Removal of the basal lamina in vivo reveals growth cone-basal lamina adhesive interactions and axonal tension in grasshopper embryos. *J. Neurosci.* 9, 2678-2686.
3. Condic, M.L. and Bentley, D. (1989).
Pioneer growth cone adhesion in vivo to boundary cells and neurons after enzymatic removal of basal lamina in grasshopper embryos. *J. Neurosci.* 9, 2687-2696.
4. Condic, M.L., Lefcort, F. and Bentley, D. (1989).
Selective recognition in vitro between embryonic afferent neurons of grasshopper appendages. *Dev. Biol.* 135, 221-230.
5. Condic, M.L., Fristrom, D. and Fristrom, J.W. (1991).
Apical cell shape changes during *Drosophila* imaginal leg disc elongation: A novel morphogenetic mechanism. *Development* 111, 23-33.
6. *Fessler, L.I., *Condic, M.L., Nelson, R.C., Fessler, J.H., Fristrom, J.W. (1993).
Site specific cleavage of basement membrane collagen IV during *Drosophila* metamorphosis. *Development* 117, 1061-1069. (*The first two authors contributed equally to this work.)
7. Condic, M.L. and Letourneau P.C. (1997).
Ligand-induced changes in integrin expression regulate neuronal adhesion and neurite outgrowth. *Nature* 389, 852-856.
8. Condic, M.L., Snow, D.M. and Letourneau, P.C. (1999).
Embryonic neurons adapt to the inhibitory proteoglycan aggrecan by increasing integrin expression. *J. Neurosci.* 19, 1003643.

9. Schroeder, K.E. Condic, M.L. Eisenberg, L.M. and Yost, H.J. (1999).
Spatially regulated translation in embryos: Asymmetric expression of maternal Wnt-11 along the dorsal-ventral axis in *Xenopus*. *Dev. Biol.* 214, 288-297.
10. Condic, M.L. (2001).
Adult neuronal regeneration induced by transgenic integrin expression. *J. Neurosci.* 21(13), 4782-4788.
11. Guan, W. Puthenveedu, M. and Condic, M.L. (2003).
Sensory neuron subtypes have unique substratum preference and receptor gene expression prior to target innervation. *J. Neurosci.* 23, 1781-1791.
12. Guan, W. and Condic, M.L. (2003).
Characterization of Netrin-1, Neogenin and UNC-5 expression during chick dorsal root ganglion development. *Mech. Dev. (Gene expression patterns)* 3(3), 367-371.
13. Strachan, L. and Condic, M.L. (2003).
Neural crest motility and integrin regulation are distinct in cranial and trunk populations. *Dev. Biol.* 259, 288-302.
14. Strachan, L. R. and Condic, M.L. (2004).
Mechanisms of substratum-dependent integrin regulation in neural crest. *J. Cell Biology* 167(3):545-54. Commentary on manuscript:
-LeBrasseur, N. (2004) Speed from recycling. *J. Cell Biology.* 167 (3): 395.
-Faculty of 1000: evaluations for Strachan LR & Condic ML *J Cell Biol* 2004 Nov 8 167 (3) :545-54 [h]<http://www.f1000biology.com/article/15520227/evaluation>.

15. Lemons, M.L., Barua, S. Abanto, M.L., Halfter, W. and Condic, M.L. (2005).
Adaptation of sensory neurons to hyalectin and decorin proteoglycans. *J. Neuroscience* 25, 4964-73.
16. Lemons, M.L. and Condic, M.L. (2006).
Combined integrin activation and intracellular cAMP cause Rho GTPase dependent growth cone collapse on laminin-1. *Exp. Neurol.* 202, 324335.
17. Strachan, L. R. and Condic, M.L. (2008).
(Epub Nov 1, 2007). Neural crest motility on fibronectin is regulated by integrin activation. *Exp. Cell Res.* 314 (3); 441-452.
18. Condic, M.L. (2008).
Alternative sources of pluripotent stem cells; altered nuclear transfer. *Cell Proliferation*, 41 (Suppl. 1), 7-19.
19. Guan, W. Wang, G., Scott, S.A. and Condic, M.L. (2008).
(Epub Dec 4, 2007). Shh regulates cell number and neuronal identity in dorsal root ganglia. *Dev. Biol.* 15;314(2):31728.
20. Cadwalader, E. L., Condic, M.L. and Yost, H.J. (2012).
2-O-Sulfotransferase Controls Wnt Signaling to Regulate Cell Cycle and Adhesion in Zebrafish Epiboly. *Development* 139; 1296-1305.

EDITORIALLY-REVIEWED BIOETHICS AND SCIENCE POLICY ARTICLES

1. Condic, M.L. (2002).
The basics about stem cells. *First Things*. 119, 30-34. [Reprinted in: *The Human Life Review* (2002) XXVIII (1-2): 119-126].

2. Condic, M.L. (2002).
Stem cells and false hopes. *First Things*. 125, 21-22.
3. Condic, M.L. and Condic, S.B. (2003).
The appropriate limits of science in the formation of public policy. *Notre Dame Journal of Law, Ethics and Public Policy* 25(1), 157-179.
4. Condic, M.L. (2003).
Life: Defining the Beginning by the End. *First Things*. 133, 50-54. [Reprinted in: *The Human Life Review* (2003) XXIX (2): 22-29].
5. Condic, M.L. and Condic, S. B. and Hurlbut, W.B. (2005).
Producing non-embryonic organisms for stem cells. *National Cath. Bioethics Quart.* 5(1): 13-15
6. Condic, M.L. and Condic, S. B. (2005).
Defining organisms by organization. *National Cath. Bioethics Quart.* 5(2): 331-53.
7. Condic, M.L. (2005).
Stem cells and babies. *First Things*. 155: 12-13.
8. Arkes H., Austriaco N.P., Berg T., Brugger E.C., Cameron N.M., Capizzi J., Condic M.L., Condic S.B., FitzGerald K.T., Flannery K., Furton E.J., George R.P., George T., Gomez-Lobo A., Grisez G., Grompe M., Haas J.M., Hamerton-Kelly R., Harvey J.C., Hoehner P.J., Hurlbut W.B., Kilner J.F., Lee P., May W.E., Miranda G., Mitchell C.B., Myers J.J., Oleson C., Pacholczyk T., Ryan P.F., Saunders W.L., Stevens D., Swetland S.W., Whelan M.E., Williams T. (2005).
Production of pluripotent stem cells by oocyte-assisted reprogramming: joint statement with signatories. *Natl Cathol Bioeth Quart.* 5(3):579-83.

9. Burke WJ, Pullicino P, Richard EJ, and Condic M. L. (2005).
Stemming the tide of cloning. *First Things*. 158: 6-9.
10. Condic, M.L. (2007).
What we know about embryonic stem cells. *First Things*. 169: 25-29.
11. Cameron, N, Condic, M.L., Kelly, J. and Ruse, A. (2007). Missouri amendment.
Natl Cathol Bioeth Quart. 7(1):9-11.
12. Condic, M.L. (2007).
The beginning of life: a perspective from science. *DeVos Medical Ethics Colloquy*. Van Andel Press. Grand Rapids, MI.
13. Condic, M.L. and Furton, E..J. (2007).
Harvesting Embryonic Stem Cells from Deceased Human Embryos. *Natl Cathol Bioeth Quart*. 7(3):507-525.
14. Condic, M.L. (2008).
Getting Stem Cells Right. *First Things*. 180: 10-12.
15. Anderson, R.T. and Condic, M.L. (2008).
Professor Lee Silver's Vast Scientific Conspiracy. *First Things*, on the square p. 946 (<http://www.firstthings.com/onthesquare/?p=946>).
16. Berg, T.V. and Condic, M.L. (2008).
Emerging Biotechnologies, the Defense of Embryonic Human Life, and Altered Nuclear Transfer. *Linacre Quarterly*. 75(4): 269-291.
17. Condic, M.L. (2008).
When does human life begin? A scientific perspective. *Westchester Institute White Paper*. 1(1): 1-18. Westchester Institute for Ethics & the Human Person, Thornwood, NY. (available at: <http://www.westchesterinstitute.net/>). [Reprinted in: *Natl Cathol Bioeth Quart*. 9(1):127-208.]

18. Condic, M.L., Lee, P. and George, R.P. (2009).
Ontological and Ethical Implications of Direct
Nuclear Reprogramming. *Kennedy Institute
Ethics Journal*. 19(1): 33-40.
19. Condic, M.L., Lee, P. and George, R.P. (2009).
The Grail Searchers, *National Review* (online), July
20, 2009. (available at: [http://article.national
review.com/?q=ZDFkM2ZiOGEwOWVvY2Y2ZTlh
NDk2MjdkMWQ3NzZhNmY](http://article.nationalreview.com/?q=ZDFkM2ZiOGEwOWVvY2Y2ZTlhNDk2MjdkMWQ3NzZhNmY))
20. Condic, M.L. (2009).
Stem cells: reviewing the science and the ethics.
Ethics and Medicine. 34(8):1-3.
21. Condic, M.L., Lee, P. and George, R.P. (2009).
Rejoinder to Magill and Neaves on Stem Cells
vs. Organisms. *Kennedy Institute Ethics Jour-
nal*. 19(1):33-40.
22. Alvaré, H., Anderson, R.T., Bottum, J., Bradley,
G.V., Cohen, E., Condic, M.L., Curlin, F.A.,
Elshtain, J.B., Franck, M.J., George, R.P.,
Glendon, M.A., Hurlbut, W.B., Landry, D.W.,
Lee, P., Levin, Y., Novak, M., Ponnuru, R.,
Snead, C., Stoner, J.R., Tollefsen, C., Watson,
M.J. (2010).
Embryos in the Age of Obama. The First Annual
Neuhaus Colloquium calls for a permanent
reversal of a misguided stem-cell policy. *First
Things*. 206: 57-62.

REVIEW ARTICLES (peer reviewed)

1. Letourneau, P.C., Condic, M.L., Snow, D.M. (1992).

Extracellular matrix and neurite outgrowth. *Curr. Op. Genetics and Dev.* 4, 625-634.

2. Letourneau, P.C., Condic, M.L., Snow, D.M. (1994). Interactions of neurons with the extracellular matrix. *J. Neurosci.* 14, 915-928.
3. Condic, M.L., Lemons, M.L. (2002). Extracellular matrix in spinal cord regeneration: getting beyond attraction and inhibition. *NeuroReport.* 13(3), A37-A48.
4. Condic, M.L. (2002). Neural Development: Axon regeneration derailed by dendrites. *Current Biology* 12 (13), R455-R457.
5. Condic, M.L. (2004). The science of wishful thinking. Review: Whose view of life? by Jane Maienschein. *First Things.* 145:69-74.
6. Lemons, M. L. and Condic, M.L. (2008). (Epub 14 Jun, 2007). Integrin signaling is integral to regeneration. *Experimental Neurology.* 209(2): 343-52.
7. Rao, M. and Condic M.L. (2008). Alternative sources of pluripotent stem cells: Scientific solutions to an ethical dilemma. *Stem Cells and Development.* 17(1):1-10.
8. Condic, M.L. and Rao, M. (2008). (Epub Jul 31, 2008) Regulatory issues for personalized pluripotent cells. *Stem Cells.* 26:2753-2758.
9. Rao, M. and Condic M.L. (2009). Is there hope for ethical and safe stem cell therapeutics? *Genome Medicine.* Jul 14;1(7):70.
10. Condic, M.L. and Rao, M. (2010).

Alternative sources of pluripotent stem cells: Scientific solutions revisited. *Stem Cells and Development*. Aug;19(8):1121-9.

BOOKS

1. Condic, M.L. The making of man; what modern embryology tells us about the nature of human individuality. (in preparation)

BOOK CHAPTERS

1. Condic, M.L. (2003). Chapter 24: The basics about stem cells. *The Stem Cell Controversy: Debating the Issues*. Prometheus Books, Amherst, NY, USA.
 2. Condic, M.L. (2005). Chapter 12: Regeneration and repair. *Developmental Neurobiology*, 4th Edition. Plenum Press, New York, NY.
 3. Condic, M.L. (2011). Is this cell a human being?: Exploring the status of embryos, stem cells and human-animal hybrids. Chapter 2: Pre-implantation stages of human development: the biological and moral status of early embryos. Eds. Antoine Suarez, Joachim Huarte *Social Trends Institute Monograph Series*. Barcelona, Spain. Springer, New York, NY.
 4. Condic, M.L. (2011). A Critical Analysis of Pro-Choice Arguments: Persons, Moral Worth, and Embryos. Chapter 10: A biological definition of the human embryo. Ed. Stephen Napier. *Philosophy and Medicine Series*, Springer, New York, NY.
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