According to an earlier version of *Black’s Law Dictionary*, a popular legal dictionary, “status” in the legal context refers to one’s

Standing; state or condition; social position. The legal relation of [an] individual to rest of the community. The rights, duties, capacities and incapacities which determine a person to a given class. A legal personal relationship, not temporary in its nature nor terminable at the mere will of the parties, with which third persons and the state are concerned.¹

To inquire as to the legal status of the human embryo is to ask about the embryo’s standing in the community of individuals holding rights (or responsibilities) before the law. The law gives an individual legal standing by recognizing the individual’s claim to some legally guaranteed benefit. The article will examine how United States law treats the human embryo with respect to the law’s most fundamental benefit, protection against homicide, and will explore why the human embryo should qualify for such protection.

First, this article will survey public policies concerning the human embryo at the federal and state levels, particularly those policies governing abortion, and involving destructive research on and the disposition of human embryos *ex utero*.² This section will document the widespread legal consensus among the states that the human embryo deserves protection from fertilization even in the face of the abortion rulings of the United States Supreme Court. This section also will pay special attention to the public policy arguments contained in the official record asserting why the law should deny protective status to the human embryo and fetus. Second, the


² When relevant, the article will refer also to the human fetus.
The article will identify and discuss briefly the homicide (and constitutional) law’s traditional qualification for protected legal status—an individual must be a human being. This section will offer some suggestions about how to counter the public policy arguments asserting that the early embryo is not a human being.

**What Is the Embryo’s Legal Status?**

The law exists within a hierarchy of many levels, ranging from federal constitutional mandates to state regulations. The following survey, by no means exhaustive, will start at the top, so to speak, with the opinions of the United States Supreme Court interpreting the United States Constitution, and work its way down by touching upon, in the following order, federal legislative and executive policy, and state judicial, legislative, and executive rules.

**U.S. Constitution as Interpreted by the U.S. Supreme Court**

In its *Roe v. Wade*[^3] ruling, the United States Supreme Court furrowed the field and sowed the seedlings of a jurisprudence that has worked itself into every level and crevice of the law like so much kudzu. The State of Texas, defending its abortion statute against constitutional challenge before the Supreme Court, asserted that human embryos and fetuses were constitutionally cognizable persons and, as human lives, were proper recipients of the State’s protection against their destruction[^4] The Court conceded the existence of “the well-known facts of fetal development.”[^5] It recognized that in a pregnancy a woman “carries an embryo and, later, a fetus, if one accepts the medical definitions of the developing young in the human uterus.”[^6] It granted that “many physicians” agreed as to “the existence of life from the moment of conception.”[^7] Nevertheless, the Court held that the State could not override a woman’s choice to abort the embryo or fetus based on what the Court referred to as


[^4]: In its opening brief, the State devoted twenty-five pages of a thirty-two page argument on the merits to the discussion of the scientific and medical data related to when human life begins, including numerous pictures of the developing embryo and fetus. Brief for Appellee at 29-54, *Roe v. Wade*, 410 U.S. 113 (1973) (No. 70-18), published in 75 Landmark Briefs and Arguments of the Supreme Court of the United States: Constitutional Law 227 (Philip B. Kurland & Gerhard Caspar eds. 1975) (hereinafter “Landmark Briefs and Arguments”). Volume 75 contains the entire set of briefs filed by the parties and amici curiae in Roe.

[^5]: *Roe*, 410 U.S. at 156.

[^6]: *Id.* at 159.

[^7]: *Id.* at 160-61. An amici curiae brief filed on behalf of 222 prominent physicians and scientists provided additional scientific support for the State’s arguments about the biological status of the embryo and fetus. Brief Amicus Curiae of Certain Physicians, Professors and Fellows of the American College of Obstetrics and Gynecology in Support of Appellees, *Roe v. Wade*, 410 U.S. 113 (1973) (No. 70-18), in Landmark Briefs and Arguments, supra note 4, at 410. The brief filed on behalf of “Jane Roe” retorted: “Whether the fetus is or is not a human being is a matter of definition, not fact, and we can define it any way we wish.” Brief for Appellants at 122, *Roe v. Wade*, in Landmark Briefs and Arguments, supra note 4, at 202 (quoting Hardin, *Abortion or Compulsory Pregnancies?*, 30 Journal of Marriage & Family, No. 2 (May 1968)).
the State’s “theory of life.”8 This constraint would apply even when the fetus in the womb is at a stage of development where it is “presumably” capable of “meaningful life” outside the womb.9 In short, the human embryo and fetus in utero lacked a “right to life” cognizable under the United States Constitution.10

The Court refused to credit the State’s position because, on the one hand, the Constitution failed to mention the unborn child and no court had ruled that unborn humans were within the document’s protective scope11 and because, on the other hand, many people subscribed to the opposing view that life did not begin until birth.12 As more commentators than can be mentioned here have noted, the Court criticized the State for promoting one “view” of life while the Court itself, although claiming it was not taking sides by “speculat[ing]”13 as to when life begins, ruled in a manner entirely consistent with “the view that the fetus, at most, represents only the potentiality of life.”14 As “potential life,” the embryo or fetus failed to enjoy any legal status under the Constitution that guaranteed his or her right to exist.

Three features of the Court’s handling of the status question merit special note. First, the Court’s analysis placed the burden of proof upon the State to show that the unborn child possessed a constitutional status while those who would exclude unborn children from protection enjoyed the benefit of any judicial doubt. From this perspective, if error there were, then it is better to err on the side of those who in fact—if their views of fetal status are wrong—are extinguishing the life of a fellow human being. Second, the Court determined that religious and philosophical beliefs denying the existence of human life before birth could rebut scientific evidence substantiating the organic development and human identity of the embryo and fetus. Specifically mentioned by the Court as providing “strong support for the view that life does not begin until live birth” were the opinions of the Stoics, the “predominant but not unanimous attitudes of the Jewish faith,” “the position of a large segment of the Protestant community,” and “[t]he Aristotelian theory of ‘mediate animation,’ that held sway throughout the Middle Ages and the Renaissance in Europe.”15 Third, and finally, the Court reasoned that a woman’s privacy interests in escaping the burdens of pregnancy, maternity, parenting, and any accompanying social stigmas served as overriding justifications for guaranteeing access to abortion.16

Little has changed since the Supreme Court’s 1973 decision. In the 1992 case of Planned Parenthood of Southeastern Pennsylvania v. Casey, the Court reaf-

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8 Id. at 162.
9 Id. at 163–64.
10 Id. at 157.
11 Id. at 158.
12 Id. at 160–61.
13 Id. at 159.
14 Id. at 162.
15 Id. at 160.
16 Id. at 152.
firmed the constitutional nonstatus of the unborn human being. According to Justices Sandra Day O’Connor, Anthony Kennedy, and David Souter in a decision joined by three other members of the Court, women capable of making informed choices involving their offspring possess the “right to define one’s own concept of existence, of meaning, of the universe, and of the mystery of human life.” This judicially ordained prerequisite of pregnancy, extended to defining the status of the unborn, limits the ability of the State to determine whether the embryo or fetus in utero should be counted as a member of the community. Instead, the Court decided that this function resides solely with the woman, at least in the abortion context, because “the mother who carries a child to full term is subject to anxieties, to physical constraints, to pain that only she must bear.”

In effect, the Court delegated to a pregnant woman the role of an immigration officer whose beliefs about what constitutes meaningful existence will govern the social status of an embryo or fetus within the mother’s womb. In a separate opinion in *Casey*, Justice Paul Stevens expounded on this analogy, first by quoting Ronald Dworkin:

The suggestion that states are free to declare a fetus a person ... assumes that a state can curtail some persons’ constitutional rights by adding new persons to the constitutional population. The constitutional rights of one citizen are, of course, very much affected by who or what else also has constitutional rights, because the rights of others may compete or conflict with his. So any power to increase the constitutional population by unilateral decision would be, in effect, a power to decrease rights the national Constitution grants to others.

If a state could declare trees to be persons with a constitutional right to life, it could prohibit publishing newspapers or books in spite of the First Amendment’s guarantee of free speech, which could not be understood as a license to kill .... Once we understand that the suggestion we are considering has that implication, we must reject it. If a fetus is not part of the constitutional population under the national constitutional arrangement, then states have no power to overrule that national arrangement by themselves declaring that fetuses have rights competitive with the constitutional rights of pregnant women. Justice Stevens then added:

The state interest in protecting potential life may be compared to the state interest in protecting those who seek to immigrate to this country. A contemporary example is provided by the Haitians who have risked the perils of the sea in a desperate attempt to become “persons” protected by our laws. Humanitarian and practical concerns would support a state policy allowing those persons unrestricted entry; countervailing interests in population control support a policy of limiting the entry of these potential citizens.

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18 Id. at 852.
19 Id. at 913 n. 2 (Stevens, J., concurring in part & dissenting in part) (quoting Ronald Dworkin, *Unenumerated Rights: Whether and How Doe Should Be Overruled*, 59 University of Chicago Law Review 381, 400–01 (1992)).
20 Id. at 913 n. 3.
In its 2000 decision in *Stenberg v. Carhart*, the Court continued to insist that abortion “seek[s] to terminate a potential human life.” By striking down a statute that banned partial birth abortions before and after viability, the Court made clear in *Stenberg* that fetal nonpersonhood endured throughout pregnancy and as long as a fetus remained even just partially within the womb.

The Supreme Court has yet to rule on whether an embryo or fetus possesses an independent legal status under the United States Constitution outside the context of uterine abortion. Nevertheless, the Court has recognized the right of Congress and the States to protect neonates against nonabortion related destruction, and to extend to them other benefits and rights under federal and state policy. In *Webster v. Reproductive Health Services*, the Court upheld a Missouri statute declaring that “[t]he life of each human being begins at conception,” that “[u]nborn children have protectable interests in life, health, and well-being,” and that other Missouri laws be interpreted to provide unborn children with “all the rights, privileges, and immunities available to other persons, citizens, and residents of this state,” subject to the United States Constitution and United States Supreme Court precedents. The Court noted approvingly that the State defended the law as “abortion-neutral” and only intended to determine as a matter of Missouri policy “when life begins in a nonabortion context, a traditional state prerogative.” The Court concluded that the State was free to apply its inclusive definition of protectable life to other areas of the law. Moreover, in decisions upholding bans on the use of government funds for abortion, the Court affirmed the right of the States and Congress to implement welfare policies that favored childbirth over abortion. Yet, in another decision, the Court refused to adopt an inference that the word “child,” when used in a federal statute bestowing welfare benefits to dependent children, included the unborn as a matter of definition. While acknowledging that one popular dictionary at the time the case was heard defined child to mean an “unborn or recently born human being,” the Court observed that other dictionaries lacked this reference, and concluded that, at most, the dictionary meaning of “child” was ambiguous and therefore not determinative.

**Federal Statutes and Regulations**

The federal law’s treatment of the human embryo and fetus is found in a patchwork of statutes and regulations, none of which assigns a global legal status to

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23 *Id.* at 505.
24 *Id.* See also *Casey*, 505 U.S. at 877 (holding that a State may not adopt policies that “have the purpose or effect of placing a substantial obstacle in the path of a woman seeking an abortion”).
27 *Id.* at 579 n.3.
the developing child. Attempts in Congress to include the embryo and fetus within the definition of “person” for general statutory purposes outside the abortion context have not succeeded, although legislative efforts continue in pursuit of the goal of broadening the definition of victims under the federal criminal code.28 Interestingly, one statute requires a federal bioethics commission to “take[e] into account the essential equality of all human beings, born and unborn.”29 Nevertheless, at the time of this writing no federal law applicable outside the abortion context prohibits the private killing or neglect of the embryo or fetus.

The fetus and embryo enjoy certain protections under federal rules concerning research and experimentation on human subjects. Specifically, federally funded research may not result in the creation of human embryos, nor directly involve procedures by which embryos or fetuses are destroyed, discarded, or otherwise subjected to more than minimal risks of harm.30 The controlling Congressional definition of “human embryo or embryos” refers to “any organism ... that is derived by fertilization, parthenogenesis, cloning, or any other means from one or more human gametes or human diploid cells.”31 The funding restrictions apply before and after the implantation stage of embryonic development and regardless of whether the embryos or fetuses reside within or without the womb.32

On August 25, 2000, the administration of President Bill Clinton issued final guidelines permitting federally funded research on embryonic stem cells acquired through the privately funded destruction of embryos.33 The embryos must “be the result of in vitro fertilization, are in excess of clinical need [for fertility treatments],

28 See the website of the National Right to Life Committee Inc. at www.nrlc.org/Unborn_Victims/keypointsuvva.html (noting that the unborn child is not recognized as a victim with respect to violent crimes governed by federal statutes and describing the proposed Unborn Victims of Violence Act).

29 42 U.S.C. § 300v-1(a)(1)(C) (instructing the President’s Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavior Research on how to conduct studies of the ethical implications of voluntary testing, counseling, and information and education programs with respect to genetic diseases and conditions).

30 This distillation of current federal law flows from a reading of three separate federal provisions: 45 C.F.R. 46.208 (a)(2) (2000), part of a comprehensive set of federal regulations governing research on human subjects; 42 U.S.C. § 289g (2000), part of a statute defining the responsibilities of the National Institutes of Health towards research subjects; and Public Law No. 106-554, § 510, part of the appropriations bill for funding the Departments of Labor, Health and Human Services, and Education in fiscal year 2001.


and have not reached the stage at which the mesoderm is formed.”\textsuperscript{34} These guidelines may be reviewed by the administration of President George W. Bush.\textsuperscript{35}

The federal discussion about the legal status of the human embryo and fetus has focused primarily on the very early and very late stages of human prenatal existence, as is evidenced by the recent debates over research involving newly conceived embryos and over the partial birth abortion of viable fetuses. The first debate has grappled largely with the question of when a human being begins such as to constitute a “human subject,” while the second debate has raged around the question of when, within the framework of the rulings of the U.S. Supreme Court, a human being is sufficiently “born” so as to acquire the status of constitutional personhood.\textsuperscript{36}

Snippets from these federal debates provide insight into the range and quality of arguments arrayed against the proposition that embryos should be counted as legally protected members of the human community. For example, movie stars, politicians, and others weighed in on the topic during a recent congressional hearing and a 1994 task force report provided a comprehensive public apologia at the federal level for destructive research on embryos.

**U.S. Senate Hearing 2000**

In a Fall 2000 hearing on human embryo research before a U.S. Senate subcommittee,\textsuperscript{37} Mary Tyler Moore asserted that “[t]he embryos that are being discussed, according to science, bears [sic] as much resemblance to a human being as a goldfish.” On the other hand there are persons with diseases in need of cure, meaning that “[w]e are dealing with flesh and blood people now who feel pain, feel fear, feel debilitation, and our obligation is to those who are here,” to which Senator Arlen Specter replied, “Very cogently and movingly stated.” A minute later, Senator Tom Harkin had this exchange with Moore:

Harkin: Can you tell me what’s on this paper?

Moore: You’ve got to be joking. No.

Harkin: There’s a little teeny little pencil dot that I put there that you can’t even see. That’s the size of the embryos we’re talking about.

\textsuperscript{34} NIH Guidelines, 65 Fed. Reg. at 51,979. Stem cells cannot be obtained from embryos specifically created for research purposes. 65 Fed. Reg. at 51, 977.


\textsuperscript{36} See colloquy during an October 20, 1999, congressional floor debate on a bill to ban partial birth abortion, between Senator Rick Santorum, a supporter, and Senator Barbara Boxer, an opponent, about exactly when during the birthing process she believed a baby received constitutional protection. 145 Cong. Rec. S12,878-80 (daily ed. Oct. 20, 1999).

\textsuperscript{37} The Subcommittee on Labor, Health and Human Services, Education and Related Agencies, of the U.S. Senate Committee on Appropriations held the hearing on September 14, 2000, to discuss the ethics of research using stem cells derived from and therefore destroying human embryos. A transcript of the hearing can be found on the Electric Library website at www.elibrary.com (visited Feb. 14, 2001). The following quotes from the hearing are taken from the Electric Library transcript.
Moore: Right. That’s the whole point.

Harkin: I think a lot of people get confused and think an embryo is something like a fetus or something like that, a fully developed fetus. We’re talking about something less than the size of a pencil dot ....

Moore: Yes.

Harkin: ... that contains the cells, the undifferentiated cells that Michael Fox38 was talking about. So somehow to equate this with a fully developed human being, I think, is stretching [off mike] quite a bit.

Another witness, Dr. Anton-Lewis Usala, a medical scientist, physician, and researcher in the transplantation of animal stem cells to cure diabetes, testified that, from the scientific perspective, “human life is the cellular mass able to produce and integrate this enormous number of sequences [involving cells sending and receiving specific signals], and this occurs shortly after fertilization ... It can be argued when the reasoning of the fetal organism begins. It cannot be argued when it is human.”

As a response, in his questioning of Dr. Usala and other witnesses, Senator Specter suggested that even if early embryos constituted human life, their “quality of life” justified their destruction in experiments to help save other lives. Frozen embryos maintained at in vitro fertilization clinics “are going to be discarded, as we all know, if they are not [implanted], and being discarded they will not live, again assuming life, and how do you evaluate their being discarded and the quality of life which they have as embryos contrasted with the good that may be done to people who have Parkinson’s or other diseases?” In other words, their lives are terminal and therefore without value, unless they are used as sources for stem cells that could help save other lives albeit at the expense of their own existence.


In 1994, the National Institutes of Health convened a panel of scientists, physicians, lawyers, and philosophers to study the ethics of destructive and other research on preimplanted human embryos. The Human Embryo Research Task Force produced in its Final Report what may be the most extensive argument by a public body at the American federal level in favor of denying moral and legal status to the early embryo.39

According to the Task Force,

During the preimplantation period the human embryo consists only of a small cluster of cells and is about 130 mm in diameter, significantly smaller than the period at the end of this sentence. Moreover, these cells are unspecialized; they do not form part of a coherent, organized, individual em-

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38 Fox, another actor, testified at the same hearing that he is “not a doctor or research scientist” but nonetheless was of the opinion that “those cells [of a newly conceived embryo] ... are undifferentiated, pluripotent in the sense that they haven’t been assigned to be things, they haven’t – they don’t know what they want to be, they’re very early in development, they are pluripotent in the sense that they can be anything.”

bryo, since one or more of them can be removed without affecting the development of the later fetus, and one embryo can give rise to identical twins.... During the first stage of gastrulation [defined by the Task Force as the stage at which organized development of the cells leads to “the first appearance of differentiated tissues, including primitive neural cells” or otherwise referred to as “the appearance of the primitive streak”], there is no human form, even a rudimentary nervous system is absent, and the cells giving rise to the fetus are unspecialized and identical in potential developmental fate.

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At the appearance of the primitive streak, the embryo proper is determined to be a distinct developing individual. Twinning of embryos and aggregation of two or more cleavage-stage embryos are no longer possible. With the appearance of the primitive streak, the cells of the inner cell mass begin to differentiate into various types of tissues. The embryonic disc (which develops from the inner cell mass) becomes a unified, organized, differentiating entity, the embryo proper, which develops continuously into the fetus and infant. The existence of a distinct individual is important to arguments for embryo status based on personal identity, continuity, or the theological concept of ensoulment (when the spiritual soul is joined to the developing organism). The absence of developmental individuation before the primitive streak supports the claim that the embryo could not be a person before that time, while leaving open the question of personhood after formation of the primitive streak.

The Task Force characterized a preimplanted embryo as “a developing form of human life” that nonetheless, according to the panel, failed to warrant “the same [moral consideration] as that due infants or children”:

The very high natural mortality, the absence of developmental individuation, the lack of even the possibility of sentience and most other qualities considered relevant to personhood, and the important human benefits research might achieve, together counsel for allowing [destructive] embryo research to be conducted under stringent guidelines. Thus, some research on the preimplantation human embryo should proceed.

The Task Force devoted considerable attention to what it called “single criterion views” about when a member of the morally and legally constituted human community becomes a member. Such approaches propose “some single criterion of moral personhood. Beings that meet this criterion are believed to merit full and equal moral respect; those that do not are either denied respect, or accorded a lesser

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41 Id. at 59–60.

42 Id. at 63.

43 Id. at 62–63.

44 Id. at 46.
status.”45 Included among the views discussed were those identifying either fertilization, sentience (the ability to experience pain), brain function, or the presence of “well-developed cognitive abilities such as consciousness, reasoning ability, or the possession of self-concept”46 as the sole event or characteristic upon which full human membership would depend.

Critiquing each view seriatim, the Task Force found fault with them all.47 The panel opted instead for what it termed “a pluralistic approach,”48 in which full membership is not viewed as instantaneously arising upon the occurrence of any one event but increases to full membership gradually and over the course of biological development as each event occurs or characteristic is manifested.49 In other words, the entrance into the moral order is to be handled much like the typical initiation into a fraternal order. Privileges multiply only upon the completion of successive acts of greater commitment and accomplishment by the inductees.

The Task Force argued that fertilization—recognized by the panel as the point at which “at least the beginnings of biological uniqueness” occur genetically50—qualifies the “developing form of human life”51 for just a minimal quantum of respect. This respect would take into account only whether research conducted before the primitive streak appears will negatively affect the life of the being if and when it “becomes” a child at birth.52 Thus, subjecting embryos intended for implantation to research that might leave postnatal injuries would be prohibited. Yet the preimplanted embryo, according to the Task Force, lacks any associated right against destruction since “the absence at this stage of almost all other qualities evoking respect makes it unreasonable to think of personhood as beginning here, and places

45 Id. at 45.
46 Id. at 48.
47 According to the Task Force, treating fertilization as the beginning of full personal membership would “offer a definitive standpoint on the status of the embryo” but would “lead to a logical paradox because twinning and the aggregation of two or more morula-stage embryos ... can occur well after fertilization” and “ignores the fact that ... development potential ... remains relatively low at least until implantation” due to spontaneous abortion. Id. at 46–47. The Task Force considered the other criteria to be either potentially overinclusive (as to encompass animals) or underinclusive (as to exclude newborns). Id. at 48.
48 Id. at 49.
49 Id. at 49–51.
50 Id. at 49.
51 Id. at 63.
52 On the basis of this calculus, the Task Force determined that embryos intended to be transferred to the womb warranted greater respect than those embryos not to be transferred, including those “leftover” and abandoned at IVF clinics and those created solely for research purposes. Only in the case of the former would there be “the need to avoid harms to any children born as a result of the procedures.” Id. at 63. Moreover, the Task Force found no ethical bar against creating embryos solely for research purposes as long as they were destroyed or otherwise prevented from developing into postnatal infancy and childhood. Id. at 63.
limits on the degree of respect accorded.” Ultimately, however, rather than finding any particular factor demanding that a right not to be killed should be connected to the appearance of the primitive streak, the Task Force conceded that “the choice of this stage represents a compromise among competing viewpoints.”

State Policies Generally

This section will take a general look at the status of the human embryo and fetus under a variety of state statutes and court decisions, and then it will examine more specifically a collection of recent state court cases dealing with custody disputes involving frozen embryos.

Currently, at least twenty-nine states recognize expressly by statute or resolution, or by decision of their appellate courts, that “fertilization” or “conception” initiates the life of a human being. At least twenty-five states protect prenatal

53 Id. at 49.
54 Id. at 60.
55 Alabama: The Legislature asks Congress to convene a constitutional convention to propose a federal constitutional amendment protecting “the lives of all human beings including unborn children at every stage of their biological development ... from the moment of fertilization.” Alabama Constitutional Convention Call (S.J. Res. 9, 1980 Ala. Acts 396); Arizona: “‘Fetus’ means any individual human organism from fertilization until birth.” Ariz. Rev. Stat. Ann. § 36-2152(I)(2) (West 2000); Arkansas: “The policy of Arkansas is to protect the life of every unborn child from conception until birth” (Ark. Const. Amend. 68, § 2) and the Legislature asks Congress to convene a constitutional convention to propose a federal constitutional amendment declaring “that every human being ... shall be deemed from the moment of fertilization to be a person and entitled to the right to life.” Arkansas Constitutional Convention Call (Res. of Feb. 17, 1977, H.R.J. Res. 2); California: “A child conceived, but not yet born, is deemed an existing person, so far as necessary for its interests in the event of the child’s subsequent birth.” Cal. Civ. Code, § 43.1 (West Supp. 2001); Colorado: “‘Abortion’ for purposes of this article means the use of any means to terminate the pregnancy ... with knowledge that the termination by those means will, with reasonable likelihood, cause the death of that person’s unborn offspring at any time after fertilization.” Colo. Rev. Stat. § 12-37.5-103 (2000) & People v. Estergard, 457 P. 2d 698, 699 (Colo. 1969) (construing state paternity and support law as including unborn children “upon conception and during pregnancy” since “the physical and mental conditions of the expectant mother are vital factors in the unfolding life of the child itself”); Georgia: “In ... general, a child is to be considered as in being from the time of its conception, where it will be for the benefit of such child to be so considered.” Morrow v. Scott, 7 Ga. 535, 537 (1849); Idaho: The Legislature asks Congress to call a constitutional convention to propose a federal constitutional amendment guaranteeing personal rights “from the moment of conception.” Idaho Constitutional Convention Call (S. Con. Res. 132, 45th Legis. 2d Sess., 1980 Idaho Sess. Laws 1005); Illinois: “‘Unborn child’ shall mean any individual of the human species from fertilization until birth.” 720 Ill. Comp. Stat. 5/9-1.2., -2.1, & -3.2 (West 1993 & Supp. 2000) (employing same definition in three separate statutes); Indiana: “It is now established that some sort of independent life begins at conception.” Cheaney v. State, 285 N.E. 265, 268 (Ind. 1972), cert. denied, 410 U.S. 991 (1973); Kansas: “For many purposes the law regards the infant as alive from its conception.” State v. Harris, 136 P. 264, 267 (Kan. 1913); Kentucky: “‘Fetus’ shall mean a human
being from fertilization until birth” and “‘Human being’ shall mean any member of the species homo sapiens from fertilization until death.” Ky. Rev. Stat. Ann. §§ 311.720 (5), -(6) (Michie Supp. 2000); Louisiana: “A ‘human embryo’ ... is an in vitro fertilized human ovum, with certain rights granted by law, composed of one or more living human cells and human genetic material so unified and organized that it will develop in utero into an unborn child.” La. Rev. Stat. Ann. § 9:121 (West 2000); Massachusetts: “Unborn child, the individual human life in existence and developing from fertilization until birth.” Mass. Gen. Laws ch. 112, § 112:12K (1998); Minnesota: “‘Unborn child’ means the unborn offspring of a human being conceived, but not yet born.” Minn. Stat. Ann. § 609.266(a) (West 1987); Missouri: “The general assembly of this state finds that ... the life of each human being begins at conception” and “‘unborn child’ shall include all unborn children or the offspring of human beings from the moment of conception until birth at every stage of biological development.” Mo. Rev. Stat. § 1.205.1(1), -.3 (West 2000); Montana: “A child conceived but not yet born is to be deemed an existing person, so far as may be necessary for the child’s interests in the event of its subsequent birth.” Mont. Code Ann. § 41-1-103 (1999); Nebraska: “Pregnant means that condition of a woman who has unborn human life within her as the result of conception” and “Conception shall mean the fecundation of the ovum by the spermatozoa.” Neb. Rev. Stat. §§ 28-326(4), -(5) (1995); New Hampshire: “We adopt the opinion that the fetus from the time of conception becomes a separate organism and remains so throughout its life.” Bennett v. Hymers, 147 A.2d 108, 110 (N.H. 1958); New Jersey: “Medical authorities have long recognized that a child is in existence from the moment of conception” (Smith v. Brennan, 157 A. 2d 497, 502 (N.J. 1960)) and the Legislature asks Congress for a constitutional convention “to propose a constitutional amendment” protecting “every human being ... from the moment of conception.” New Jersey Constitutional Convention Call (Act of Apr. 21, 1977, S. 1271); New York: “It is not effectively contradicted, if it is contradicted at all, that modern biological disciplines accept that upon conception a fetus has an independent genetic ‘package’ with potential to become a full-fledged human being and that it has an autonomy of development and character although it is for the period of gestation dependent upon the mother. It is human , if only because it may not be characterized as not human, and it is unquestionably alive.” New York City Health and Hosp. Corp., 286 N.E.2d 887, 888 (N.Y. 1972), appeal dismissed, 410 U.S. 949 (1973); North Dakota: “‘Unborn child’ means the conceived but not yet born offspring of a human being ....” N.D. Cent. Code § 12.1-17.1-01(3) (1997); Ohio: “‘Unborn human’ means an individual organism of the species homo sapiens from fertilization until live birth” and “‘Fertilization’ means the fusion of a human spermatozoon with a human ovum.” Ohio Rev. Code Ann. §§ 2903.09(A) & 2919.16(A), -(K) (Anderson 1999) (employing same definition in two separate statutes); Oklahoma: “‘Unborn child’ means the unborn offspring of human beings from the moment of conception, through pregnancy, and until live birth including the human conceptus, zygote, morula, blastocyst, embryo and fetus” and “‘Conception’ means the fertilization of the ovum of a female individual by the sperm of a male individual.” Okla. Stat. tit. 63 § 1-730 (1997); Oregon: “When a virile spermatozoon unites with a fertile ovum in the uterus, conception is accomplished. Pregnancy at once ensues, and under normal circumstances continues until parturition. During all this time the woman is ‘pregnant with a child’ within the meaning of the [abortion] statute. She cannot be pregnant with anything else than a child. From the moment of conception a new life has begun.” State v. Ausplund, 167 P. 1019, 1022–23 (Or. 1917); Pennsylvania: “‘Fertilization’ and ‘conception’ ... shall mean the fusion of a human spermatozoon with a human ovum” and “‘Unborn child’ and ‘fetus’ ... shall mean an individual organism of the species homo sapiens from fertilization until live birth.” Pa. Cons. Stat. Ann. tit. 18 § 3203 (West 2000); Rhode Island: The Legislature requests Congress to call a convention to pro-
human beings throughout or during some part of their gestational development under state homicide laws.\textsuperscript{56} Moreover, state courts continue to expand the reach of personal injury laws to include compensation for torts against human beings at the embryonic and fetal stages.\textsuperscript{57} Some states have also attempted to ban “research” or “experimentation” on embryos and fetuses, but have met with some stiff resistance in the courts.\textsuperscript{58}

A review of state law and judicial rulings on the biological status of the embryo and fetus leads to an important point: The proposition that human life begins at fertilization is not an extremist position in the law but represents the majority view among the states. Unfortunately, certain courts have ignored this remarkable consensus when issuing landmark rulings on the disposition of “leftover” frozen embryos created through \textit{in vitro} fertilization.

\textbf{State Court Decisions on the Disposition of Frozen Embryos}

Appellate courts in Tennessee, New York, Massachusetts, New Jersey, and Washington have ruled that embryos fertilized and immediately cryopreserved outside the womb are not “human beings,” “children,” or “persons” for purposes of

\textsuperscript{56} Clarke D. Forsythe, \textit{Human Cloning and the Constitution}, 32 Valparaiso University Law Review 469, 499 (1998) (providing list, including eleven states that extend the homicide code’s protection in nonabortion circumstances to embryos and fetuses from fertilization).


\textsuperscript{58} See Forbes v. Napolitano, 236 F.3rd 1009, 1010 (9th Cir. 2000) (striking down Arizona statute banning “use [of] any human fetus or embryo, living or dead . . . in any manner for any medical experimentation” and citing cases invalidating similar statutes in Utah, Louisiana, and Illinois because the laws’ reference to nontherapeutic “experimentation” is too vague). As yet unchallenged, a longstanding law in Massachusetts prohibits the use of “any live human fetus [defined as including “an embryo or neonate”] before or after expulsion from its mother’s womb, for scientific, laboratory, research or other kind of experimentation.” The statute allows an exception for diagnostic or remedial procedures necessary to “determine” or “preserve the life or health of the fetus involved.” Mass. Gen. Laws ch. 112, §§ 12J(a)(I), -(a)(IV) (West 1998).
determining their custody in divorce proceedings. In reaching their decisions, the courts relied on the self-interested assertions of the fertility industry regarding the biological status of newly fertilized embryos.

The Davis v. Davis case in Tennessee set the course. At issue was a request by the mother of seven frozen embryos to be awarded post-divorce custody so that she could donate them to another couple interested in implanting them, a move opposed by the divorced husband and father, who wanted them destroyed.

During the trial, expert witness Dr. Jerome Lejeune, a world renowned French geneticist, testified that “each human has a unique beginning which occurs at the moment of conception” and thus “upon fertilization of the ovum by the sperm, a unique personal constitution is spelled out for the specific human being then created”. The embryologist and endocrinologist who assisted in the creation of the embryos at issue in the case, and Professor John Robertson, a member of the Ethics Committee for the then-named American Fertility Society challenged Dr. Lejeune’s testimony. These three witnesses opined that “as far as we know, ..., to my knowledge” the embryos consisted “largely of undifferentiated cells” and that it was “not entirely clear” that “a human embryo [at the eight-cell stage] is a unique individual.”

The trial judge noted that:

these gentlemen most sharply differ with Dr. Lejeune ... in the area of cell differentiation. Dr. Lejeune, of course, gives emphatic testimony that the cells are especially differentiated and that such position is proven scientific fact.

The term “differentiate” means to distinguish by a specific difference. If the cells, therefore, of a four-cell zygote are undifferentiated, the cells lack any distinction; a skilled scientist could not distinguish the cells of one zygote from those of another zygote nor could the scientist distinguish between any of four cells within the hypothetical zygote. Dr. Lejeune bases his emphatic opinion to the contrary (“.... the most specialized cell under the sun ...”) on a complicated scientific process of manipulating and reading the DNA molecule [also called DNA profiling of the genetic “fingerprint”], characterized by him as new findings which definitely prove differentiation, now known through the science of molecular genetics beyond any doubt.


60 References to the trial court proceedings are taken from the trial court opinion, Davis v. Davis, No. E-14496 (Tenn. Cir. Ct. Blount County 1989) (Circuit Judge W. Dale Yount), accessed online at VersusLaw.com (visited Feb. 23, 2001). The trial court included with its opinion summaries of each witness’ testimony.

61 The organization is now called the American Society of Reproductive Medicine.

In the face of the conflicting testimony, the trial judge proceeded in a way quite different from the path taken by the United States Supreme Court in *Roe*. Instead of characterizing the dispute as an unsolvable dilemma in which any opinion is to be treated just as likely as another, the judge described the proposition forwarded by Dr. Lejeune, that the individual human life exists at fertilization, as a presumption to be “rebutted.” Hence, after summarizing the opposing testimony offered by Robertson et al., and after noting that each of these witnesses “hedges the point” by not claiming absolute certainty, the judge concluded that “[t]he testimony of Dr. Lejeune stands unrebutted in the record” and that therefore “from the record in this case, the Court finds and concludes that human life begins at the moment of conception.” As presumptive human beings, according to the trial judge, the embryos were children as defined under the custody statute, and their best interests lay in their implantation and survival.

A unanimous Tennessee Supreme Court reversed the trial judge’s ruling and permitted the embryos to be destroyed. The court dismissed Dr. Lejeune’s testimony because he lacked “any degree of expertise in obstetrics or gynecology (specifically in the field of infertility) or in medical ethics,” and because his contributions at trial purportedly “revealed a profound confusion between science and religion.” The court failed to explain why an expertise in genetics had no bearing on determining the biological identity of the early human being, or somehow had lesser import than an expertise on infertility issues. Moreover, Dr. Lejeune submitted a technical argument based on the science of genetics, and thus it was irrelevant that he was not testifying as a medical ethicist. The court accused Dr. Lejeune of being confused because he was “deeply moved” by the mother’s desire to save the embryos from death, and because he believed that the father “has a moral duty” to try to bring the “tiny human beings” to term, as if these views, oddly characterized as religious, somehow impeached his scientific credibility.

Instead, the Tennessee high court accepted without question the assertions made by the opposing witnesses, who as representatives of an industry dealing in the creation and potentially involving the destruction of “left over” embryos, had their own stake in the question of when, as a matter of law, human life begins. The court acknowledged that a decision affording legal personal status and cognizable rights to embryos “would doubtless have ... the effect of outlawing IVF programs in the state of Tennessee.” Nonetheless, the court deferred to the fertility industry’s view, as if it were beyond reproach, that what the industry referred to as a “preembryo” at the eight-cell stage is no more than a “loose packet of identical cells,” at which point “the developmental singleness of one person has not been established.” The court thus agreed that the “‘preembryo ... should not be treated as a person, because it has not

63 Davis v. Davis, 842 S.W.2d 588, 604–05 (Tenn. 1992).
64 Id. at 593.
65 Id.
66 Id. at 595.
67 Id. at 593 (quoting Report on IVF Ethical Considerations, supra note 62, at 31S–32S).
yet developed the features of personhood, is not yet established as developmentally individual, and may never realize its biologic potential."68

The Tennessee high court adopted another proposition of the American Fertility Society to treat preimplanted embryos as nonliving objects due “special respect,” thus obliging fertility researchers to refrain from conducting experiments on preimplanted embryos that will “hurt or injure the offspring who might be born after transfer [into the womb].”69 However, since the court would not consider the embryos as having independently protected lives, their ultimate fate would remain in the hands of the couple as “gamete providers.”70 At most, the embryos were “potential life,” and while the government may have an interest in protecting potential life, the State of Tennessee had laws that exercised its interest in potential life only after viability and thus would not override the interests of the couple in a case involving previable offspring.71 If the embryos were just potential lives, whose only “value lies in the ‘potential to become, after implantation, growth and birth, children’,”72 then the couple in the case were not yet “parents” but were individuals who “stand on the brink of potential parenthood.”73

Thus, the Tennessee high court recast the dispute involving the disposition of the frozen embryos into one involving the interests of “avoiding parenthood” and “achieving parenthood.”74 In such a contest, the court concluded that “[o]rdinarily, the party wishing to avoid procreation should prevail, assuming that the other party has a reasonable possibility of achieving parenthood by means other than the use of the preembryos in question.”75 In this context, “prevailing” means having the authority to prevent the embryos from being thawed, implanted, and allowed to mature.

In following the path blazed in Davis, none of the succeeding court decisions has paid much attention to the biological status of the frozen embryos, accepting as a given that the embryos have no independent legal status as well. The courts have adopted with little discussion the definitions and conclusions that the Davis court borrowed from the fertility industry, invented new terms absent even from the fertility industry’s lexicon, and assigned new meanings to old words. Post-Davis rulings have referred to embryos as “prezygotes”76 or “reproductive biological material”77

68 Id. at 596 (quoting Report on IVF Ethical Considerations, supra note 62, at 35S).
69 Id. at 596–97.
70 Id. at 597.
71 Id. at 594–95 (citing Tennessee laws using viability as the point at which a fetus would be considered a victim of homicide or tortious conduct, and subject to increased protection in the abortion context).
72 Id. at 598.
73 Id. at 601.
74 Id. at 604.
75 Id.
that implantation in the womb would “bring to life,”78 and have moved “conception” from fertilization to implantation as a matter of common law definition.79

This review of current federal and state law documents an intense conflict between methodological approaches, bioethical opinions, and legal theories as applied to the question of the legal status of the embryo. The courts (although not without significant exceptions) have rejected the claim that embryos from fertilization merit recognition as members of the human community while the legislatures (although not unanimously) have assumed a far more receptive attitude. The shoots of the exclusionary jurisprudence rooted in Roe v. Wade have found fertile fields in state court opinions dealing with the disposition of frozen embryos, while at the same time they have animated many legislatures to counter with expressions of public policy that are insistently inclusionary. If in fact Roe v. Wade is settled law,80 then it has settled precariously upon an active sociopolitical fault line.

What Should the Embryo’s Legal Status Be, and Why?

Legal questions tend to focus on discrete issues and narrow the scope of inquiry so that otherwise interesting problems fall outside the borders of the immediate jurisprudential concerns. The larger domains of moral and ethical contemplation about what constitutes a “person” or “subject,” for example, must contend with a multiplicity of contexts that make the inquiry more global in nature. The law taken as a whole may match in depth and breadth the aggregate of moral and ethical inquiry, but usually approaches by the bite what philosophers and moral commentators con-

78 Litowitz v. Litowitz, 10 P.3d 1086, 1093 (Wash. App. 2000). The Litowitz opinion, issued in October, 2000, insisted that “[h]ere [in the case of newly conceived embryos] we have preembryos, not a child”. Id. If “most embryology textbooks have now dropped the term [preembryo], and some texts openly refer to it as a ‘discarded’ and ‘inaccurate’ term” (Richard Doerflinger, Testimony on Behalf of the Committee for Pro-Life Activities, National Conference of Catholic Bishops, before the Senate Appropriations Subcommittee on Labor, Health and Education, Hearing on Embryonic Cell Research, Dec. 2, 1998 (http://www.nccbuscc.org/prolife/issues/bioethic/1202.htm), then the message still has not reached the courts.


80 Neil A. Lewis & David Johnston, In Hearing’s Second Day, Ashcroft Says He Would Not Challenge Roe Ruling, N.Y. Times, Jan. 18, 2001, at A16 (reporting on nomination hearing in which issue of whether Roe is settled law was addressed).
template by the mouthful or as a totality. The contrast is evinced in a way by Dr. Martin Luther King, who wrote that “It may be true that the law cannot make a man love me, but it can keep him from lynching me, and I think that’s pretty important.”

In other words, the question of whether a human embryo or fetus should possess a legal status sufficient to qualify for protection against intentional destruction may be confused by bioethicists with other more evocative questions, such as whether an embryo should be loved, admired or feared. The law does not concern itself with whether an emotional, intellectual, or even contractual bond exists between the protector and those for whom protection against homicide is sought. The very word itself, “homicide,” provides initial guidance as to where the search for an answer about status should focus. Webster’s Dictionary reports that by including the Latin root homo, homicide refers to the killing of a “human being.”

Webster’s Dictionary reports that by including the Latin root homo, homicide refers to the killing of a “human being.”

An earlier edition of Black’s Law Dictionary reflected the common legal understanding of the term by likewise defining homicide as the “killing of one human being by the act, procurement, or omission of another” and as “The act of a human being in taking away the life of another human being.”

In the most comprehensive survey of the law’s treatment of the human embryo and fetus in print, Clarke Forsythe observed:

At common law, homicide law provided very broad protection to human life—extending its protection to “the killing of any human creature,” according to William Blackstone, the leading authority on the common law. The modern debate over the moral status of the human embryo, however, typically disregards the fact that homicide law protects human beings, not persons. This disregard evidences a confusion of the Fourteenth Amendment (and the Court’s discussion of “person” in Roe v. Wade) with the criminal code. Homicide law does not protect only mature or developed persons, but all human beings, that is, all offspring of human parents. It is species-directed. In effect, Roe v. Wade merely created a constitutional exception to the general rule when it stipulated that legal protection of the unborn may not interfere with a woman’s right to “terminate pregnancy.” Even if a human being were not a “person” within the meaning of the Fourteenth Amendment, and thus without constitutional protection, that same human being may be protected under state homicide law.

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81 Dr. King used this line in numerous speeches. Western Michigan University has published online a representative speech in its entirety that Dr. King gave December 18, 1963, at WMU on “Social Justice,” available at http://www.wmich.edu/library/mlk/transcription.html (visited March 1, 2001).


83 Black’s Law Dictionary 661 (5th ed. 1979). The current edition defines homicide as “the killing of one person by another” but retains the original meaning in its definition of “criminal homicide”: “the act of purposefully, knowingly, recklessly, or negligently causing the death of a human being”. Black’s Law Dictionary 739 (7th ed. 1999) (quoting Model Penal Code § 210.1 (1977)).

84 Forsythe, supra note 56, at 486–87. Forsythe’s article surveys in depth how the law has advanced towards protecting human life in progressively earlier stages as the scientific and medical professions have advanced in their knowledge of early human development.
The opinion of Justice Blackmun et al. in *Roe* notwithstanding, the framers of the Fourteenth Amendment understood in the nineteenth century that “person” and “human being” coincided such as to extend the amendment’s guarantee of protection to all human beings. Congressional supporters of the Fourteenth Amendment used the two terms interchangeably: “in the eyes of the Constitution, every human being within its sphere ... from the President to the slave, is a person;”85 “any legislation or any public sentiment which deprives any human being in the land of those great rights of liberty will be in defiance of the constitution;”86 “does the term “person” carry with it anything further than the simple allusion to the existence of the individual?”87 “Our fathers, recognizing God as the author of human life, proclaimed it a ‘self-evident’ truth that every human being holds from the Creator an inalienable right to live .... If this right be denied, no other can be acknowledged. If there be exceptions to this central, this universal proposition, that all men, without respect to complexion or condition, hold from the Creator the right to live, who shall determine what portion of the community shall be slain?”88

In 1968, Justice William O. Douglas (who later joined the majority in *Roe v. Wade*89), writing for a unanimous Supreme Court in a case involving a Fourteenth Amendment claim raised on behalf of an illegitimate child, observed that “illegitimate children are not ‘nonpersons.’ They are humans, live, and have their being. They are clearly ‘persons’ within the meaning of the Equal Protection Clause of the Fourteenth Amendment.”890 The legal test for determining eligibility for homicide and constitutional protection then, simply stated, should be whether embryos from fertilization are human, are living, and have their being.

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88 Cong. Globe, 35th Cong., 1st Sess. App. 65–66 (1858) (Rep. J.R. Giddings). The author thanks Messrs. Harold J. Cassidy, Esq. And Thomas F. Shebell, Jr., Esq., for their assiduous research in uncovering these and other references and including them in their brief filed in a federal lawsuit seeking to persuade the courts to reconsider *Roe’s* characterization of the embryo and fetus as “potential life.” Plaintiffs’ Brief in Opposition to Defendants’ Motion to Dismiss and In Support of Plaintiffs’ Cross-Motion at 70-71, Santa Marie v. Whitman (N. Dist. N.J.) (No. 99-2692).
89 410 U.S. 113 (1973). In another abortion case issued at the same time the Court decided *Roe v. Wade*, Justice Douglas agreed with the views of a former Supreme Court Justice, who wrote: “‘To say that life is present at conception is to give recognition to the potential, rather than the actual .... When sperm meets egg life may eventually form, but quite often it does not .... No prosecutor has ever returned a murder indictment charging the taking of the life of a fetus. This would not be the case if the fetus constituted human life.’” Doe v. Bolton, 410 U.S. 179, 217–18 (1973) (Douglas, J., concurring) (quoting Thomas Clark, *Religion, Morality, and Abortion: A Constitutional Appraisal*, 2 Loyola University Law Review 1, 9–10 (1969)). Justice Douglas concluded that a state may not “equate the value of embryonic life immediately after conception with the worth of life immediately before birth.” *Id.* at 218.
890 Levy v. Louisiana, 391 U.S. 68, 70 (1968). An amicus curiae brief filed in *Roe* reminded the Court of its holding in *Levy*, but of course to no avail. See Brief of Ameri-
So why did the case for protecting human embryos fail when it went before the U.S. Supreme Court, before U.S. Senators Harkin and Specter, and before the Human Embryo Research Task Force, among others? Leaving aside for now all of the sociological dimensions of this question and sticking strictly to the written record itself, the answer resolves itself into three components:

1) The manner in which these officials addressed the status of the human embryo required a showing of either absolute certainty or social consensus that the human embryo is a human life or human being, instead of proceeding in what could be called a “safer course” direction that established presumptions, assigned burdens of proof, and fixed the benefit of the doubt to shape the inquiry in favor of the safer hypothesis that human life is at stake;

2) These officials dismissed the case for recognizing fertilization as the beginning of a human being’s life as paradoxical, illogical, and unsubstantiated by biological inquiry without seriously considering the countering philosophical suppositions and scientific evidence;

3) These officials imposed additional qualifications (sentience, etc.) beyond the longstanding test that inquires only as to whether the individuals in question were human, alive, and have their being.

It is beyond the scope of this article to lay out the scientific evidence and philosophical reasoning favoring the proposition that embryos are human, alive, and have their being, as this falls outside the author’s professional competence. Of immediate relevance to the purposes of this article is how society should address the question of when human life begins in light of the claims and counterclaims.

The public record, some of which this article has described, includes the claims that the early human embryo cannot qualify as a living “individual” with a human...
destiny because many embryos will die early through spontaneous abortion, may twin, may lack an integrated or differentiated structure, or are just too small to be worthy of respect. These claims have come under substantial scientific and philosophical attack.93

**Recommendations for Public Policy**

If indeed a valid scientific hypothesis and a rational philosophical explanation of the scientific data can be presented in support of the claim that the human embryo is a human being, then advocates for extending legal protection to the human embryo might profitably pursue the following options:

1) **Emphasize the difference between the approach taken by the United States Supreme Court and the “safer course” approach to addressing the question of when human life begins.** The state should presume that life begins at

research, and contained evaluative as well as observational elements .... The members of the pro-research lobby, unlike their opponents, had access to a well-established cultural stereotype, formed in the course of earlier scientific victories over religious opposition, which gave them the advantage of being able to portray themselves as the exclusive representatives of detached, rational thought. In practice however, the pro-research lobby triumphed, not because of its supporters’ superior rationality or their detached assessment of the facts, but because it succeeded in imposing on the debate the cultural authority of science, and of generating a sufficient degree of dogmatic conviction and unquestioning faith about the morality and benefits of embryo research among the decision-makers in Parliament.


93 Sources besides those already referenced in this article that greatly assisted the author’s understanding of the “wastage,” twinning and “cluster of undifferentiated cells” questions (and many other issues as well), and that provided careful and compelling arguments for identifying the human embryo as an individual member of the human community, include: *The Identity and Status of the Human Embryo: Proceedings of Third Assembly of the Pontifical Academy for Life* (Juan de Dios Vial Correa & Elio Sgreccia, eds. 1999); Benedict Ashley & Albert S. Moraczewski, “Is the Biological Subject of Human Rights Present From Conception?” in *The Fetal Tissue Issue: Medical and Ethical Aspects* (Peter J. Cataldo & Albert S. Moraczewski, eds. 1994); Mark Johnson, “Quaestio Disputata: Delayed Hominization, Reflections on Some Recent Catholic Claims for Delayed Hominization,” *56 Theological Studies* 743 (1995); Mark Johnson, “Quaestio Disputata: Delayed Hominization, A Rejoinder to Thomas Shannon,” *58 Theological Studies* 708 (1997); Dianne N. Irving, “The Woman and the Physician Facing Abortion: The Role of Correct Science in the Formation of Conscience and the Moral Decision Making Process,” *Linacre Quarterly*, Nov. 2000, at 21; Dianne N. Irving, “When Do Human Beings Begin? Scientific’ Myths and Scientific Facts,” *19 International Journal of Sociology and Social Policy* 22 (1999); W. Jerome Bracken, “Is the Early Embryo a Person?” *Linacre Quarterly*, Feb. 2001, at 49. As for the argument that the embryo is as small as a typographic period, and therefore of insignificant value, the author would love to write checks for anyone who fails to appreciate the difference that one period makes in writing $1.00000000 and $1000000.00. If size does not diminish the period’s import in this context, then size should not diminish the newly-conceived embryo’s import in the context of determining one’s legal status if in fact an embryo is human, alive,
fertilization and place the burden of overriding this presumption on those who claim that the life of a human being begins at some later point. The United States Supreme Court acted in *Roe* as if personal opinions based on religious beliefs cancelled out scientific evidence regarding the biological status of the human embryo by preventing societal consensus from occurring. However, the presumption that a human being’s life begins at fertilization, if based on scientific observation, should prevail against nonscientifically based claims. All things being equal, that is, in the face of seemingly conflicting claims, public policy should err on the side of life.94

2) **Encourage policymakers to establish a blue-ribbon panel of scientists and other medical experts to find for the public record that human fertilization marks the beginning of an individual who is human, alive, and has his or her being.** What disciplines should be represented? Human embryology, genetics, and cellular and molecular biology would be the most likely candidates. The public record (outside of academic articles and medical textbooks) lacks scientific statements equal in official stature to those already issued by industry-related and government-instituted task forces favoring destructive embryo research. In particular, the assertions made by the fertility industry and the Human Embryo Research Panel should not be the last official word on this question. Make these findings widely available, including in the courts through the filing of briefs by the parties or by organizations as amici curiae (friends of the court).

3) **Continue to communicate through professional and popular media, including the Internet, a cogent philosophical response to the valid scientific data, making sure that policymakers are also targeted as an audience.** Thus, for example, a key statement such as made by Pope John Paul to the effect that “the human embryo has basic rights, that is, it possesses indis-

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94 The courts have adopted this approach when determining whether legally incapacitated patients should receive or forgo life-sustaining treatment. *See, e.g.*, Cruzan v. Director, Missouri Department of Health, 497 U.S. 261, 283 (1990) (holding that a state may place “an increased risk of an erroneous decision on those seeking to terminate an incompetent individual’s life-sustaining treatment” because, among other factors, a decision to withdraw such treatment will result in death, which is “not susceptible of correction”); In re Westchester County Medical Ctr., 531 N.E.2d 607, 613 (N.Y. 1988) (holding that since “[e]very person has a right to life,” surrogates seeking to withdraw essential treatment from a legally incapacitated patient must bear the burden of proving by clear and convincing evidence that such a decision corresponds to the patient’s prior-expressed wishes, “because if an error is made it should be made on the side of life”); In re Conroy, 486 A.2d 1209, 1220, 1233 (N.J. 1985) (noting that in deciding a course of treatment for a legally incapacitated patient, either “keep[ing] a patient alive under circumstances under which he would rather have been allowed to die, or allowing that person to die when he would have chosen to cling to life ... would be deeply unfortunate;” nevertheless, “[w]hen evidence of a person’s wishes or physical or mental condition is equivocal, it is best to err, if at all, in favor of preserving life” because if “there is a lot to lose by being wrong, it is generally better to stick to the safer, known way in the absence of the highest probability for proceeding otherwise.”)
pensable constituents for a being’s connatural activity to be able to take place according to its own vital principle"95 must be unpacked and otherwise rendered comprehensible to policymakers not trained in philosophy. The philosophical argument should address why a human being, even in his or her earlist stages of existence, is the appropriate subject of legal protection. What once was obvious has become controversial, thus renewed formation is necessary to explain why being human, alive, and in possession of being—and no other qualification—should suffice for societal inclusion.

4) **Be humble in recognizing the limited, albeit essential, role of science and philosophy in the public arena.** Many other seemingly irrelevant factors all too often will eclipse in impact the scientific and philosophical propositions favoring the embryo’s inclusion when a policymaking body considers individual policy proposals.96 1) Politically influential pro-research groups with stakes in denying legal status to embryos and the unborn to preserve their status as “biological material” will continue to refine and strengthen their public appeals.97 2) Many policymakers will continue to dismiss the scientific evidence supporting the existence of human life from fertilization as unpersuasive or irrelevant. Erroneous public opinions holding that the embryo is more like a fish then a human being still hold sway even among the educated. Most importantly, our society remains riven by a fundamental clash between competing worldviews that goes much deeper than a factual dispute over scientific evidence.98 3) In the end, success in making the law more inclusive may hinge on the ability to persuade policymakers and the public that abortion and destructive research on embryos are no longer necessary.99


96 A comprehensive sociological study by Michael Mulkey covering the intense battle in Britain over the status of embryos is required reading for anyone who wishes to understand the dynamics of public debate and the forces at play in the public arena. Michael Mulkey, supra note 92.


98 See “Talking with the Enemy,” Boston Globe, Jan. 28, 2001, at F1. Recent conversations between leaders of both sides of the abortion debate in Massachusetts “revealed a deep divide. We saw that our differences on abortion reflect two world views that are irreconcilable.” Id. at F3. Nonetheless, while the conversations produced a “paradox” in that “we all have become firmer in our views about abortion,” the participants were “challenged to dig deeply, defining exactly what we believe, why we believe it, and what we still do not understand.” Id.

99 Reports on the latest developments with using cells from adults as an alternative to using embryo or fetal cells are available online at http://www.stemcellresearch.org/. See also Clarke Forsythe, “A New Strategy,” Human Life Review, Fall 1999, at 15 (“There will be no
versions due to the scientific basis for and philosophical clarity of the pro-life position will continue to surface even in the face of the insistent appeals by pro-research and abortion rights advocates and despite the ongoing culture clash. The conversion of Dr. Bernard Nathanson, among other examples, testifies to this dramatic possibility. No matter what else a campaign to protect human life at all its stages will require to engage the countering social forces successfully, its underlying philosophical and scientific premises must always be readily apparent and easily accessible to facilitate more conversions among those honestly searching for the truth.

Confirming as a matter of public policy the biological fact that the human embryo is a human being from fertilization will not end the public policy debate. If the proponents of abortion and destructive embryo research have their way, then the question of when human life begins would no longer be relevant. Instead, the question would be “Who decides?” But this is only an incomplete way of asking the question that Congressman Giddings raised during the Fourteenth Amendment debates: “[W]ho shall determine what portion of the community shall be slain?” Private individuals beset by personal needs may have every incentive to view the human embryo as an intruder, a competitor, or as a biological stockpile, and not as a fellow human being. Thus, in all too many cases it may only be the law that prevents one human being from slaying another, even if the law cannot command one to love or welcome the other.

Should the law exclude from its protection against homicide what even the Human Embryo Research Task Force admits is a developing form of human life, and on whose say so? Is it unjust to delegate to private individuals or fetal research firms, as if they were immigration officers, the power to deny other human beings access to the community and its protection? Is the developing human being to be respected more as a cure for cancer than as a member of the human species? Our society can face these value-laden questions more honestly once it is established in the public record that the human embryo is, from the scientific perspective and for purposes of determining public policy, a human being. Then the debate will turn from assessing competing claims about scientific facts to evaluating two starkly different moral visions about how welcoming our law and social community should be towards the most vulnerable human beings in our midst.

As the foregoing legal survey reveals, the federal and state legislatures are free to protect the human embryo so long as a woman’s access to abortion is preserved. Thus the quest must continue to include the human embryo within our community to the fullest extent possible.

dramatic turn around in the short-term in the uncertain public attitudes that we have unless we overcome the myth of abortion as a necessary evil. This myth has dominated public debate for thirty years, and the cause for life has never done the heavy lifting needed to dispel it, yet it may be the key to unlocking the puzzle of changing public opinion over the next decade.”