Sperm, Egg, and a Petri Dish: Unveiling the Underlying Property Issues Surrounding Cryopreserved Embryos

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INTRODUCTION

The rapidly advancing field of biotechnology continually presents new, controversial issues for debate. Advances in reproductive technology have maintained a high public and legal profile because of the complex issues facing legislators and various judicial systems. In vitro fertilization (IVF) and cryopreservation of the resulting embryos have incited many of these controversial issues. The most prevalent among these is the disposition of cryopreserved embryos.

Renowned bioethicist George Annas has provided a cogent analysis of this modern day "doctor's dilemma" faced by physicians and health personnel who operate fertility clinics when human embryos are stored, left over, or otherwise unused during a couple’s attempts to become pregnant through the in vitro process.¹ The fate of such embryos unfortunately has been subjected to widely varied interpretations of state legislation, common law, medical ethics, and morality, interwoven with complex issues of parenthood, personhood, property rights, and divorce law. Worse, concern over stored human embryos appears to overlap superficially related issues such as human cloning, right-to-life/abortion rights, stem cell research, contraception, and the rights of gay and lesbian persons to become parents. When examined more closely,

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however, these inflammatory issues are only peripherally, if at all, pertinent to the dilemma presented when an IVF facility has unused or abandoned embryos after a successful fertilization, an unsuccessful fertilization, or a death or divorce within the couple.

Courts, legislators, and medical ethicists appear willing to categorize embryos in the following three manners:

1. Embryos can be defined as personal property with all ownership responsibility and obligations attaching to the couple facilitating the creation of the embryos;

2. Embryos can be defined as human beings with the full legal status afforded to all human beings; or

3. Embryos can be defined as neither persons nor property, but rather fall in an interim category entitled to special respect due to the embryos’ possibility for human life.²

Embryos and the issues arising because of their cryopreservation have been defined by several states in the context of judicial opinion and/or legislation, but with inconsistent results. Courts that have struggled with the issue of embryos and the various accompanying ownership disputes, mostly in divorce settings, have had little to no judicial precedent or legislation to guide them on the matter. In these instances, courts have faced the difficult situation of stepping outside of their intended role as interpreters of the law and been forced into becoming lawmakers. The inconsistent conclusions from the several courts addressing the complex issues surrounding embryos unwittingly have created confusion and unease among patients participating in, as well as medical institutions facilitating, IVF programs around the United States.³

In an attempt to create certainty in the uncertain and highly litigated medical field, IVF facilities, like most medical care providers, require patients to sign multiple, often lengthy, consent forms addressing the various issues that might arise during and after IVF. Many IVF facilities have attempted to protect themselves from litigation by requiring the signature of participating parties, and in some cases multiple witnesses, on numerous consent forms, each covering different contingencies. However, the forms used in these facilities have blurred the concept between consent to a procedure and a contract for services. This area is confusing in its own right, and IVF participants sign disposition agreements with little to no assurance that such agreements will be found enforceable if contested.

IVF has become an increasingly successful method of allowing couples unable to achieve pregnancy through the normal fertilization process to achieve pregnancy. With millions of couples suffering from infertility, coupled with the increasing success of IVF, legal issues surrounding embryos and their disposition inevitably arise. The divorce rate remains steadily between 40% and 50% in the United States. These issues are likely to be present in a divorce context, where couples may disagree on the fate of cryopreserved embryos.

Emotions run high when issues concerning cryopreserved embryos arise. Positions surrounding embryos range from one extreme, in which human rights advocates argue that embryos are human beings and bring class action suits on behalf of the embryos, to the opposite extreme, in which people try to manipulate the science accompanying stem cell research to clone a baby.

For instance, Nightlight Christian Adoptions (Nightlight) brought a class action lawsuit, Nightlight Christian Adoptions v. Thompson, on behalf of embryos and potential embryo adoptees. Among other things, this organization argued stem cell research utilizing cryopreserved embryos greatly reduced potential adoptive parents’ chances of adopting human embryos and the research places the “lives” of the embryos at risk and denies them legal protection. Had the case not been stayed at the plaintiff’s request, the United States District Court for the District of Columbia could have found Nightlight was not a proper next friend of the embryos, because the next friend must be an appropriate alter ego for a plaintiff who is not able to litigate personally. The court decided under current Supreme Court rulings, Nightlight and other similar groups, like the Christian Medical Association, are not proper representatives for embryos and the embryos’ “parents” were likely the only proper representative(s) for the embryos’ interests. At the other extreme, CNN published an interview with reporter Connie Chung and a couple working with an embryologist to use reproductive advances to clone the wife, via manipulating a donor egg, and have a surrogate mother attempt to give birth to the resulting clone.

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4 See Ellen A. Waldman, Disputing Over Embryos: Of Contracts and Consents, 32 Ariz. St. L.J. 897, 901-03 (2000) (discussing IVF’s role as the oldest and most well-known reproductive technology).
5 See id. at 901-02.
6 Id. at 906.
7 No. 01 CV00502, slip op. (D.D.C. Mar. 8, 2001).
9 Id. at 182.
10 Id. at 183 (citing Roe v. Wade, 410 U.S. 113 (1973)).
11 Id. at 182-84.
These extremes represent the fears most people harbor regarding embryos. Most people do not understand the science surrounding embryos and are mislead by the extreme positions. Movies and propaganda further such fears surrounding these scientific issues, without sufficiently explaining the underlying science.

The overwhelming majority of research scientists and those involved with assisted reproductive technology are persons of integrity and not motivated to abuse scientific advances such as cloning, eugenics, or other reproductive technologies. Stem cell research and cloning have a multitude of benefits that will have a direct impact on society. The value of using embryos to enable such research is undeniable. Legislation clearly addressing cryopreserved embryos would have a wide impact and must address some of the fears and misunderstandings of the general public. To allay the legal uncertainty confronting medical professionals and IVF participants, as well as to prevent the judicial system from blindly deciding cases regarding these issues, this article provides a model form of legislation that clearly and efficiently addresses the definition of embryos and their potential fates.

I. MEDICAL SUMMARY

Because so many entities have expressed opinions on the subject of embryos, and have done so in such an inconsistent manner, confusion exists as to the meaning of the term “embryo.” In fact, the term “embryo” is medically synonymous with multiple other terms, including “pre-embryo,” “pre-zygote,” and “zygote,” used by courts and legal writers to describe a fertilized egg from the moment of fertilization until implantation into the uterus.13 These latter terms have been used in place of “embryo” in various contexts, with the suggestion that there is a legal or medical differentiation to be made.14 Such a differentiation is medically and clinically unsubstantiated. In reality, from the moment of fertilization all chromosomes necessary for an embryo to develop into a human being are present.15 Therefore, the embryo has the

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13 Dorland's Illustrated Medical Dictionary 542 (28th ed. 1994); id. at 1346 (defining “preembryo”); id. at 1351 (defining “prezygote”); id. at 1859 (defining “zygote”).
same potential to develop into a human person, given the proper complex circumstances, as the necessary chromosomes do not alter throughout normal cell division. There is no greater potential for life at any particular stage of cell division, once fertilization has been successful, up to the point of viability outside the womb. Thus, for the sake of consistency, the term "embryo" is used throughout this article. The following medical summary is intended to clarify the process by which embryos are created and provide further detail about the proper medical definition of human embryos.

A. In Vivo Fertilization

Most couples achieve fertilization through coitus. Natural biological fertilization within the woman's body is known as in vivo fertilization. Approximately once every 28 days, at ovulation, a single egg cell (egg) is released from the woman's ovary and carried into the fallopian tube, a narrow tube extending from either side of the uterus. The fallopian tubes encircle the ovaries and are open at the ends to allow the entrance of the egg following ovulation. Ovulation occurs via a complex combination of hormonal signals, generally occurring in the middle (approximately 14 days after the last menstrual period) of the woman's monthly cycle. Usually, only one egg is released per cycle, from either the left or right ovary, and is swept into the open end of the fallopian tube at that time.

During coitus, seminal fluid from the male, containing spermatozoa (sperm cells) is deposited in the vagina near the cervix. To contact the egg, the sperm cells then must be transported upward through the cervical os, or opening, into the uterus. Once inside the uterus, the spermatozoa migrate up and into the fallopian tube, the site of actual fertilization. When fertilized, the egg (now a fertilized embryo) continues its migration down into the uterus and becomes implanted into the uterine lining. As many as a half billion sperm cells may be released in the vagina by a single ejaculation of seminal fluid, but only a few hundred sperm cells ever reach the egg.

When a sperm cell reaches the egg, it must penetrate the protective coating around the egg, known as the zona pellucida. Once a single sperm cell

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16 See GUYTON, supra note 15, at 944 (discussing the reformation of "a complete complement of 46 chromosomes" during fertilization).
17 Hollowell, supra note 15, at 327-32 (discussing all division, differentiation, and the Davis court's treatment of "preembryo").
18 DORLAND'S, supra note 13, at 856 (defining "in vivo").
19 GUYTON, supra note 15, at 944.
20 Id.
21 Id. at 929-31.
22 Id. at 929.
23 Id. at 944.
24 Id.
penetrates the zona pellucida, other sperm cells are prevented from penetrating the egg, thus eliminating the possibility of multifetal pregnancies (for example, twins or triplets). After the sperm cell enters the egg cell membrane, chromosomes from the male (contained in the sperm) combine with the chromosomes of the female (contained in the egg). Both egg and sperm cells are known as haploid cells, that is, they contain half of the normal amount of chromosomes. Thus, when the sperm cells and egg fuse together, the resulting fertilized embryo or zygote contains a normal, full complement of human chromosomes.

Shortly after fertilization, the embryo begins to divide rapidly. During this process, the developing embryo migrates through the fallopian tube to the uterus. It takes approximately three to five days for the developing embryo to travel to the uterine cavity. By the time it reaches its destination, the embryo is comprised of a ball of about 100 cells. This ball of cells is referred to as a blastocyst.

Via a complex interactive process, the embryo or blastocyst becomes imbedded in the uterine lining. By the end of the first week of development, the embryo should be implanted in the uterus. Pregnancy generally is defined as the condition of having a developing embryo in the body, after the union of egg and sperm cells. Therefore, if the biologic process has been successful and the egg has been fertilized and implanted, a woman is considered pregnant after approximately one week of embryo development.

B. In Vitro Fertilization

Over two million couples in the United States are infertile. Americans spend billions of dollars each year on medical and surgical fertility

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25 Id. at 919-20.
26 Id. at 944.
27 Id.
28 Id.
29 Id. at 944-45.
30 Id. at 945. Rarely, the fertilized egg or embryo fails to migrate into the uterus, and instead remains within the fallopian tube, giving rise to a tubal, or ectopic, pregnancy. The embryo cannot be as properly nourished in the fallopian tube as it would be within the uterus, and thus cannot survive. Tubal or ectopic pregnancies can be life-threatening to the female if they grow to sufficient size to rupture the fallopian tube, causing internal bleeding.
31 Id.
32 Id.
33 Id.
34 Id.
35 Id.
36 DORLAND'S, supra note 13, at 1347.
37 See id. (defining "pregnancy").
procedures.\textsuperscript{39} One of the increasingly successful methods of reproductive assistance is IVF.\textsuperscript{40} IVF consists of a medical procedure that takes approximately two weeks to complete and affords infertile couples an opportunity to conceive a child.\textsuperscript{41} \textit{In vitro} literally means “outside the body,” thus, IVF attempts to simulate \textit{in vivo} fertilization in a laboratory setting.\textsuperscript{42}

IVF begins with the use of hormonal medication to hyperstimulate a woman's ovaries into producing a large number of eggs.\textsuperscript{43} The mature eggs then are retrieved surgically through one of two ways.\textsuperscript{44} The first, and more popular, method of retrieval is ultrasound-guided transvaginal aspiration of the eggs from the woman's body.\textsuperscript{45} Ultrasound-guided transvaginal aspiration generally is an office-based procedure, for which the patient is sedated with intravenous medications to make the procedure as comfortable as possible.\textsuperscript{46} The vaginal ultrasound is a probe that sends an ultrasound image to a monitor, guiding the physician to the ovary-containing eggs, or follicles.\textsuperscript{47} A hollow needle is directed through the vaginal wall into the ovary and the eggs are removed via aspiration (suction).\textsuperscript{48} The second method of egg extraction is laparoscopic surgery, a minimally invasive method of surgery utilizing a laparoscope or camera placed through a small incision in the abdominal wall (usually through the umbilicus, or “belly-button”), allowing visualization of the internal organs.\textsuperscript{49}

Upon retrieval, the eggs are fertilized with sperm in vitro or, more simply, in a petri dish, creating embryos.\textsuperscript{50} The IVF laboratory usually fertilizes more eggs than can be implanted safely on a single try, in an attempt to prevent the intrusive process of egg retrieval from being repeated.\textsuperscript{51} After the embryo has been created, an IVF team of technicians cultures (grows) the embryos, closely observing the division progress.\textsuperscript{52} This process simulates the \textit{in vivo} process to the extent modern science allows.\textsuperscript{53}

\textsuperscript{39} \textit{ld.} Available statistics are several years old.
\textsuperscript{40} \textit{ld.}
\textsuperscript{41} Interview with Victoria M. Sopelak, Ph.D., Associate Professor of Obstetrics and Gynecology at University of Mississippi Medical Center (UMC), in Jackson, MS (June 11, 2002) [hereinafter Sopelak Interview]. Dr. Sopelak supervises the In Vitro Fertilization Clinic at the UMC; Brandimarte, \textit{supra} note 2, at 771.
\textsuperscript{42} \textit{Dorland's}, \textit{supra} note 13, at 856; Brandimarte, \textit{supra} note 2, at 771-72.
\textsuperscript{43} Sopelak Interview, \textit{supra} note 41; Brandimarte, \textit{supra} note 2, at 771.
\textsuperscript{44} Sopelak Interview, \textit{supra} note 41; Brandimarte, \textit{supra} note 2, at 771.
\textsuperscript{45} Sopelak Interview, \textit{supra} note 41; Brandimarte, \textit{supra} note 2, at 771.
\textsuperscript{46} Sopelak Interview, \textit{supra} note 41; University of Mississippi Medical Center, In Vitro Fertilization Program, Unpublished Consent Forms (on file with the UMC) [hereinafter UMC Consent Forms].
\textsuperscript{47} Sopelak Interview, \textit{supra} note 41; UMC Consent Forms, \textit{supra} note 46.
\textsuperscript{48} Sopelak Interview, \textit{supra} note 41; UMC Consent Forms, \textit{supra} note 46.
\textsuperscript{49} \textit{Stedman's}, \textit{supra} note 14, at 966.
\textsuperscript{50} Sopelak Interview, \textit{supra} note 41; Brandimarte, \textit{supra} note 2, at 771-72.
\textsuperscript{51} Sopelak Interview, \textit{supra} note 41; Brandimarte, \textit{supra} note 2, at 772.
\textsuperscript{52} Sopelak Interview, \textit{supra} note 41.
\textsuperscript{53} \textit{ld.}
has divided into approximately eight cells, it is ready for either implantation or cryopreservation. Like in vivo fertilization, this stage of cell division takes anywhere from one to three days.

Generally, only three to four embryos can be implanted safely at one time. Implantation of a greater number of embryos increases the risk of multifetal pregnancies. The physician implants the embryo into the woman's uterus at the appropriate point of her menstrual cycle. At this point, the process becomes exactly the same as the in vivo process, where pregnancy results if the embryo successfully implants into the uterus. The physician can determine if the IVF procedure was successful at a later date, by measuring beta human chorionic gonadotropin hormone levels naturally produced by the woman in a pregnant state.

C. Cryopreservation

Embryo cryopreservation has become standard practice in IVF programs because of its ability to enhance both the safety and efficiency of the IVF procedure. Any embryos not implanted can be frozen in liquid nitrogen, allowing the embryos to be safely preserved in a suspended biological state. Once frozen, the embryos are stored in special containers until such time that implantation, destruction, or donation becomes desirable or necessary. Theoretically, embryos could be suspended in a cryopreserved state indefinitely. However, there are considerable data suggesting the potential viability of embryos is significantly weakened after approximately five years of being cryopreserved.

Cryopreservation creates options and benefits for the IVF patients and physician. These are:

1. Postponing embryo implantation until the optimal time in the woman's cycle for pregnancy;

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54 Id. A description of cryopreservation is found in section I (C).
55 Sopelak Interview, supra note 41; Brandimarte, supra note 2, at 772.
56 Sopelak Interview, supra note 41; Brandimarte, supra note 2, at 772.
57 Sopelak Interview, supra note 41; Brandimarte, supra note 2, at 772.
58 Sopelak Interview, supra note 41; Brandimarte, supra note 2, at 772.
59 Sopelak Interview, supra note 41; Guyton, supra note 15, at 945.
60 Sopelak Interview, supra note 41; Brandimarte, supra note 2, at 772.
61 Sopelak Interview, supra note 41; Brandimarte, supra note 2, at 773; Waldman, supra note 4, at 904-05; Ethics Comm., Am. Fertility Soc’y, Ethical Considerations of Assisted Reproductive Technologies, 62 FERTILITY & STERILITY 58S (1994) [hereinafter AFS] (finding cryopreservation an “essential component of all programs offering IVF”). The AFS became the American Society of Reproductive Medicine in 1994.
62 Sopelak Interview, supra note 40; Brandimarte, supra note 2, at 773.
63 Sopelak Interview, supra note 41; Brandimarte, supra note 2, at 773-74.
64 Sopelak Interview, supra note 41; Andrew Worek, Examining the Uncertain Legal Status of Preembryonic Human Cells, 19 MED. MALPRACTICE L. & STRATEGY 1, 1 (Feb. 2002).
65 Sopelak Interview, supra note 41.
2. Postponing embryo implantation until the negative effects of the hormone drug treatment has passed, thus decreasing the possibility of multifetal pregnancies; and

3. Eliminating the need for the woman to repeatedly undergo hormonal manipulation and intrusive egg retrieval process.66

In addition to enhancing the safety of the IVF process, cryopreservation also reduces the expense and time of repeating the entire IVF process each time a pregnancy fails to occur or a patient desires another attempt at implantation.67

II. CASE LAW AND THE COURTS’ INCONSISTENT VIEWS

Over the years, at least seven courts have been faced directly with deciding the fate of cryopreserved embryos. The courts have been forced to rely on various legal, moral, and ethical principles when deciding these cases. The courts have ruled on the issue without any apparent governing legislation. They have come to the following conclusions, discussed in chronological order.

A. York v. Jones

1. Facts

This case involved a husband and wife who sought to transfer their cryopreserved embryos from the Virginia IVF facility that had performed all the IVF procedures to a new IVF clinic in California.68 The Virginia IVF clinic refused plaintiffs’ request for transfer.69 Thus, the present action ensued. Plaintiffs sought declaratory, injunctive, and compensatory relief, arguing defendant’s denial of transfer constituted a breach of contract, quasi-contract, detinue, and a violation of the couple’s right to reproductive privacy as protected by the First, Fourth, Ninth, and Fourteenth Amendments.70

Plaintiffs had undergone implantation through IVF on four occasions since entering the program and by 1986 all attempts had proven unsuccessful. There was only one embryo in dispute in this action, remaining cryopreserved with the Virginia IVF clinic. When plaintiffs entered the program in 1984, they were residents of New Jersey and had traveled to Virginia for all IVF procedures necessary to be involved in the program. Later, plaintiffs

66 Sopelak Interview, supra note 41; Brandimarte, supra note 2, at 773-74; Waldman, supra note 4, at 904-06.
67 Sopelak Interview, supra note 41; Brandimarte, supra note 2, at 773-74; Waldman, supra note 4, at 904-06.
69 Id. at 422.
70 Id. at 423. The plaintiffs’ constitutional claims were brought pursuant to 42 U.S.C. § 1983.
moved to California and requested the one remaining embryo be transferred
to a California IVF clinic. The Virginia clinic promptly denied the plaint-
iffs’ request, arguing they had signed a cryopreservation agreement in 1987,
providing in part:

We [the couple] have the principle responsibility to decide the disposition of our
pre-zygotes. . . . In the event of divorce, we understand legal ownership of any stored
pre-zygotes must be determined in a property settlement and will be released as
directed by order of a court of competent jurisdiction. Should we for any reason no
longer wish to attempt to initiate a pregnancy, we understand we may choose one of
three fates for our pre-zygotes that remain in frozen storage. Our pre-zygotes may be:
1) donated to another infertile couple 2) donated for approved research investigation
3) thawed, but not allowed to undergo further development.\footnote{71}

The Virginia clinic argued plaintiffs’ property rights in the embryos
(which they called pre-zygotes) were limited to the three itemized fates, and
transfer was not among them. Thus, the Virginia clinic moved to dismiss this
action for failure to state a claim on which relief could be granted.\footnote{72}

2. Reasoning of the Court

The court began its analysis by noting the “Cryopreservation Agree-
ment created a bailor-bailee relationship” between the couple and the Virginia
clinic. Although the parties never expressed their intent to create a bailment
agreement under formal contractual principles (that is, there was no meet-
ing of the minds), the agreement in essence granted temporary possession
of, and a duty to account for, property of another. Thus, the court inferred a
bailment agreement had been created. It further found this bailment contract
should be “more strictly construed against the Virginia clinic, which drafted
the agreement.” The court concluded the provisions of the agreement created
the inference that the Virginia clinic fully recognized the couple’s property
rights in the embryos, hence the contract limited the clinic’s rights as a bailee
to “exercise dominion and control” over the embryos. Therefore, the court
denied the Virginia clinic’s Motion to Dismiss.\footnote{73}

3. Analysis

This is one of the very few cases dealing directly with the disposition
of embryos outside of the context of divorce. This is a particularly interesting
case because it was not a disagreement between the IVF participants over
the disposition of the embryos. Instead, this was a disagreement between the
couple participating in the IVF program and the IVF facility.

\footnote{71 York, 717 F. Supp. at 423-24.}
\footnote{72 Id. at 422-25.}
\footnote{73 Id. at 425-27.}
The York court properly used basic property and contract law because it was without the guidance of precedent or legislation to tell it to do otherwise.\textsuperscript{74} Although IVF has advanced considerably since this decision, the courts instigate confusion when other terminology is used synonymously with the term "embryo." This court adopted the term "pre-zygote" in its opinion, which also was the terminology used by the Virginia IVF facility in the consent forms disputed in this case.\textsuperscript{75} Regardless of the term chosen, it is clear both the Virginia IVF facility and the court were addressing embryos, a fertilized egg prior to implantation.\textsuperscript{76}

B. Davis v. Davis

1. Facts

Mr. and Ms. Davis were involved in IVF and then, post-divorce, disputed the disposition of their embryos. The couple entered the IVF program in 1985 after Ms. Davis continued having tubal pregnancies. The couple made six attempts to get pregnant through IVF but all attempts proved unsuccessful. In 1988, Mr. and Ms. Davis re-entered the IVF program and nine embryos resulted. Two of these embryos were implanted and the remaining seven were cryopreserved. After the implantation failed, Mr. and Ms. Davis filed for divorce in 1989. All aspects of the divorce were agreed to, except for the disposition of the seven remaining cryopreserved embryos.\textsuperscript{77}

The Davises never signed an agreement addressing the future disposition of the cryopreserved embryos. Initially, Mr. Davis wished the embryos to remain cryopreserved until such time as he acquiesced to their being implanted. Ms. Davis wished to have sole custody over the embryos for implantation, arguing they were her last chance to have children. Ultimately, both parties changed their desired disposition of the embryos, but still did not agree.\textsuperscript{78}

2. Reasoning of the Court

The trial court awarded the embryos to Ms. Davis and Mr. Davis appealed. On appeal, the Tennessee Court of Appeals decided the embryos were joint property and should be equally divided between Mr. and Ms. Davis. However, by the time the case reached the Tennessee Supreme Court, both Mr. and Ms. Davis changed their positions about disposition of the embryos. Mr. Davis now wanted the embryos destroyed, and Ms. Davis wanted them donated to an infertile and childless couple.\textsuperscript{79}

\textsuperscript{74} Id. at 422.
\textsuperscript{75} Id.
\textsuperscript{76} DORLAND'S, supra note 13, at 542; see also STEDMAN'S, supra note 14, at 581 (defining embryo as "the developing organism from conception until approximately the end of the second month").
\textsuperscript{77} Davis v. Davis, 842 S.W.2d 588, 589-92 (Tenn. 1992).
\textsuperscript{78} Id.
\textsuperscript{79} Id. at 589-90.
The Tennessee Supreme Court decided the embryos were neither legal persons nor a form of property. Instead it held embryos "occupy a special category that entitled them to special respect because of their potential for human life." The court found this characterization did not create a "true property interest" in the embryos, but rather created "an interest in the nature of ownership." However, this was an ownership interest only to the extent that Mr. and Ms. Davis had decision making authority concerning disposition of the embryos within the "scope of policy set by law."

After deciding how to view the embryos, the Davis court held prior agreements regarding the disposition of embryos should be upheld. Because there was no agreement in this particular case, the court had to go further in its analysis. The court created a balancing of interests test to use when parties disputing the disposition of cryopreserved embryos had never executed a prior agreement establishing such disposition. It ruled the balance fell in Mr. Davis’ favor, concluding his interest in avoiding procreation outweighed Ms. Davis’ right to procreate via donation of the frozen embryos to another couple. The court found Ms. Davis’ right to procreate could be met through alternatives such as adoption, further IVF cycles, or donation from donors where both parties mutually consent to the donation.

3. Analysis

This landmark case set the stage for the media-driven debate over the fate of cryopreserved embryos. American Fertility Society joined 19 other national organizations as amicus curiae in requesting the Davis court to respond to the issues of when human life begins and whether frozen embryos comprised of four to eight cells had a right to be born. The Davis court frustrated AFS’s efforts by just adopting the language used in the Ethics Committee report issued by AFS in 1990.

This court and future courts, when considering whether embryos are people or property, were reluctant to define how embryos should be characterized. The Davis court chose to take the middle ground, relying on guidelines

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80 Id. at 597. The court went through a long analysis regarding terminology and agreed with the expert testimony and AFS’s argument that embryos technically should be called preembryos in the early stages of embryonic development. Thus, the Davis court used the term preembryo throughout its opinion.
81 Id.
82 Id.
83 Id. at 590.
84 Id. at 590-604.
85 Id. at 594.
86 Id. The Davis court cited the AFS Ethics Committee report: "The preembryo is due greater respect than other human tissue because of its potential to become a person and because of its symbolic meaning for many people. Yet, it should not be treated as a person, because it has not yet developed the features of personhood, is not yet established as developmentally individual, and may never realize its biological potential." Id. at 596; see also Am. Fertility Soc’y, supra note 13, at 34S-35S.
87 Davis, 842 S.W.2d at 594-95.
set out by AFS.\textsuperscript{88} By taking the middle ground, the court avoided taking an extreme position without the advantage of legislative support.

Ultimately, the \textit{Davis} court held, if the preferences of the parties could be ascertained, they should be carried out. If the parties later could not agree as to the fate of any remaining stored embryos, or if their preferences could not be ascertained (by virtue of death or incapacitation of the parties), then any prior written agreement executed by the parties should control.\textsuperscript{89}

This case was crucial to the development of the law in this area in many respects. First, the \textit{Davis} court concluded the disposition of embryos could be dealt with contractually and these contracts should be enforced when the parties’ current preferences could not be ascertained.\textsuperscript{90} However, the \textit{Davis} court limited its holding to the preferences of the progenitors, not taking into account parties who initiate the IVF process but must use donor egg or sperm to create the embryos.\textsuperscript{91} Thus, non-progenitors who have initiated the IVF process in an attempt to become parents are left without dispositional rights to the embryos.

Also, the \textit{Davis} court adopted the “preembryo” language established by the AFS, creating a misleading distinction that was not scientifically valid.\textsuperscript{92} Using such language created a pseudo-distinction among the various stages of cell division.\textsuperscript{93} This kind of semantics suggested there was some magical difference between the various stages of embryonic development.\textsuperscript{94} In reality, from the moment of fertilization, all chromosomes necessary for the embryo to develop into a human being are present and do not alter throughout cell division.\textsuperscript{95} Thus, the supposed distinction is misleading and unnecessary.\textsuperscript{96}

\section*{C. \textit{Kass} v. \textit{Kass}}

\textbf{1. Facts}

Mr. and Ms. \textit{Kass} entered the IVF program in 1989 and were required by the clinic to execute lengthy consent forms, including the consent form at issue dealing with the disposition of cryopreserved embryos. The pertinent language of this form provided, if the couple divorced, the cryopreserved embryos would be considered property, with legal ownership rights to be

\textsuperscript{88} \textit{Id.} at 597.
\textsuperscript{89} \textit{Id.} at 604.
\textsuperscript{90} \textit{Id.} at 597.
\textsuperscript{91} \textit{Id.}
\textsuperscript{92} See generally \textit{id.}, at 588 (using “preembryo” throughout the decision).
\textsuperscript{93} Hollowell, \textit{supra} note 15, at 323.
\textsuperscript{94} See \textit{id.}
\textsuperscript{95} \textit{Gutten}, \textit{supra} note 15, at 944.
\textsuperscript{96} Hollowell, \textit{supra} note 15, at 324-33 (discussing the \textit{Davis} court’s adoption of the AFS’s embryo/preembryo distinction and how that distinction was developed).
delineated in a property settlement agreement. This form further asked the couple to choose a dispositional selection should they no longer wish to initiate pregnancy or they were unable to make a decision regarding the disposition of the cryopreserved embryos. In this instance, Mr. and Ms. Kass selected the option that released their embryos to the IVF program for approved research purposes.97

After several failed attempts to get pregnant via implantation in Ms. Kass, the couple decided to attempt implantation in a surrogate mother. To effectuate this, Ms. Kass underwent egg retrieval in May, 1993, with nine embryos resulting. Five of these were cryopreserved and four were implanted in a surrogate mother. The implantation proved unsuccessful and Mr. and Ms. Kass executed an uncontested divorce document stating the embryos “should be disposed of in the manner outlined in [the] consent form[s]” and neither party would lay individual claim to the embryos.

Notwithstanding the divorce agreement, Ms. Kass later changed her mind and opposed destruction or release of the embryos, as would have been their agreed-on fate. Instead, she sought to recover the remaining embryos for future self-implantation. On the other side, Mr. Kass wanted the prior agreement to be enforced, thus releasing the embryos to the IVF program for research. He argued this as his preference because he objected to becoming a genetic parent outside the boundaries of his marriage to Ms. Kass.98

2. Reasoning of the Court

The New York trial court followed the “special respect” rule laid out by Davis, but did not enforce the prior agreement. Instead, the trial court found women carry a larger burden than men in the IVF process. Therefore, the trial court did not view the rights of the couple members equally. The court awarded the embryos to Ms. Kass on the condition that she implant them within a medically reasonable time.99

The Appellate Division reversed the trial court, but the Appellate Division was split over the proper resolution of the case. All five justices agreed, when parties enter a joint agreement about the disposition of the embryos with an IVF clinic, that prior joint agreement is enforceable and should govern. The dispute here was over how clear the agreement had been and whether it was enforceable under contract principles. The plurality held this dispute was to be resolved based on contract law and the agreement satisfied contractual principles.100

98 Id. at 177.
99 Id. at 177-78.
100 Id.
New York's highest court, the New York Court of Appeals, issued a unanimous decision in 1998 affirming the plurality's decision. The court held agreements regarding the disposition of embryos should be presumed valid, binding, and enforceable in any dispute. The court granted Mr. Kass' request and upheld the agreement, releasing the embryos to the IVF facility for research purposes.\textsuperscript{101}

3. Analysis

This court followed Davis, deciding the prior agreement should be enforced and binding on the parties. Kass held that parties entering IVF and cryopreservation should anticipate all possible contingencies and specify their particular wishes for the embryos in those contingencies. The court reasoned express and detailed written documentation of the parties' wishes at the time they entered into the IVF process would "minimize misunderstandings and maximize procreative liberty by reserving to the progenitors the authority to make what is in the first instance a quintessentially personal, private decision." Such written declaration of the parties' wishes could be amended later, if changes were mutually agreed upon by the parties.\textsuperscript{102}

The court did not address how embryos should be characterized—as persons, property, or placed in a special respect category. It just relied on Davis and concluded, because a prior agreement existed, the agreement should be binding and no further analysis was necessary. The court relied solely on contract law, clearly concluding that embryos were not persons with all the rights that come with being a person.\textsuperscript{103}

This decision was helpful because it confirmed that legal contracts will be upheld. However, the decision was flawed because the court adopted the term "pre-zygotes" (which was used in the consent forms) when referring to embryos, furthering the confusion surrounding the concept of embryos.\textsuperscript{104} Also, this court, like the court in Davis, limited its language to "progenitors," detracting from the rights of non-progenitors who are equally involved in initiating the IVF process and should enjoy the same rights as progenitors.\textsuperscript{105}

D. A.Z. v. B.Z.

1. Facts

The couple in this case realized it suffered fertility problems after several failed attempts to get pregnant. It entered the IVF program in 1988. The husband and wife participated in the IVF program until 1991. The IVF clinic

\textsuperscript{101} Id. at 178-83.
\textsuperscript{102} Id. at 180.
\textsuperscript{103} Id. at 178-82.
\textsuperscript{104} See generally id. at 174 (using "pre-zygotes" throughout).
\textsuperscript{105} Id. at 180.
required a consent form be executed by the couple directing the disposition of cryopreserved embryos. The wife waited until after the husband signed the document, then incorporated additional language stating: "Should [the couple] become separated, they both agreed to have the embryos ... returned to the wife for implant[ation]."106

As a result of IVF treatment in 1991, the couple had twin daughters in 1992. In addition to the embryos implanted into the wife, two vials of embryos (each containing four embryos) were cryopreserved. In Spring, 1995, the wife unilaterally chose to thaw one vial of embryos and implanted them without informing her husband, thus leaving one vial of four embryos cryopreserved. The husband learned of her deceit through his insurance company. Subsequently, the couple separated and the husband initiated divorce proceedings. In the divorce, the husband sought to obtain a permanent injunction prohibiting the wife from using the remaining vial of embryos. The wife, however, sought enforcement of the language she had incorporated into the agreement, thus asking she be awarded the remaining vial of embryos for implantation.107

2. Reasoning of the Court

The probate court found that couples generally are free to agree as to the disposition of their cryopreserved embryos, but that the agreement at issue in this case was unenforceable. The court objected to agreements that do not contemplate the "actual situation facing the parties." Thus, the court decided there was no binding agreement, and therefore used a balancing of interests analysis. In doing so, it concluded the husband’s interest in avoiding procreation superceded the wife’s interest in having additional children. Therefore, the probate court granted the permanent injunction sought by the husband.108

The highest court in Massachusetts affirmed the lower court’s decision finding the agreement to be unenforceable. The appellate court objected to this agreement for several reasons. First, it found the agreement only defined the relationship between the couple and the clinic and was not a genuine expression of the parties’ intention to enter into a binding agreement. Second, the court objected to the agreement’s lack of a duration provision, thus failing to create mutual agreement of the parties on how long this agreement would be in existence. Third, the court found the agreement did not represent the true intent of the parties and lacked any concept of a meeting of the minds. Finally, it concluded the agreement lacked the minimal amount of completeness necessary to be a binding agreement between a husband and a wife.109

107 Id. at 1053-55.
108 Id. at 1054-55.
109 Id. at 1056-57.
In addition to these deficiencies, the court determined, even if the agreement had been unambiguous, it would be against Massachusetts public policy to enforce an agreement that would compel one party to become a parent involuntarily. For all of these reasons, the court found this agreement unenforceable. It affirmed the probate court’s decision to grant the husband a permanent injunction against the wife forbidding her from using the remaining cryopreserved embryos.\(^\text{110}\)

3. Analysis

This case appears to be a classic example of hard facts making bad law. The opinion spent only a paragraph analyzing the actual consent form, but devoted several pages to a public policy argument invalidating this type of agreement.\(^\text{111}\) It was clear the court found it undesirable to award the disputed embryos to the wife for future implantation. This result seemingly was so distasteful that, instead of deciding the case on general contract principles that would invalidate an agreement that did not represent a meeting of the minds, the court issued a holding that would invalidate any future agreements that seek to create such a disposition for cryopreserved embryos. This opinion was further flawed because, like Davis, the court adopted the term “preembryo” from the AFS article, furthering the confusion that previous courts had caused with such misleading distinctions.\(^\text{112}\)

E. J.B. v. M.B.

1. Facts

This was another case involving an anonymous couple, J.B. (the wife) and M.B. (the husband). The couple married in 1992. Soon thereafter, J.B. discovered she had a condition preventing her from becoming pregnant. The couple sought help from a fertility clinic and became involved with IVF. Upon becoming involved in the IVF program, the couple was asked to review and execute consent forms that described IVF procedures and incorporated a legal statement regarding control and disposition of the couple’s cryopreserved embryos. The form included the following relevant language:

[We] agree that all control, direction, and ownership of our tissues will be relinquished to the IVF Program under the following circumstances . . . . A dissolution of our marriage by court order, unless the court specifies who takes control and direction of the tissues . . . .\(^\text{113}\)

\(^{110}\) Id. at 1057-59.

\(^{111}\) Id. at 1055-58.

\(^{112}\) Id. at 1052 n.1. The AFS article relied on by this court was the same article cited above. See AFS, supra note 61.

The IVF procedures were carried out in 1995 and resulted in 11 embryos. Four of the embryos were transferred into J.B.'s uterus and the remaining seven were cryopreserved. The procedure was successful and J.B. gave birth in 1996. Later that year, the couple separated. J.B. informed her husband she wished the remaining cryopreserved embryos to be discarded, but M.B. objected. When divorce proceedings began, J.B. expressed her request the remaining embryos be discarded, while M.B. expressed his wish to have them donated to an infertile couple.\(^\text{114}\)

2. **Reasoning of the Court**

The divorce litigation took two years and was a very involved process, including several claims and cross-claims regarding disposition of the embryos. The final judgment of divorce was entered in 1998, but disposition of the cryopreserved embryos remained unresolved. Finally, the trial court granted J.B.'s Motion for Summary Judgment on that issue, concluding the parties entered the IVF program to achieve parenthood as a married couple. Because they no longer existed as a married couple, the court found M.B.'s interest in donating the embryos was outweighed by J.B.'s interest in avoiding parenthood.\(^\text{115}\)

On appeal, the intermediate appellate court opined the issue was a constitutional question involving a person's right to procreate versus the right not to procreate. The court was not truly forced to weigh these rights against one another in this case, however, as it held M.B.'s right to procreate was not being infringed because he was not infertile. Although J.B. was not being asked to contribute financially or emotionally to any donated embryos, she still would be a genetic mother to any children that resulted from donation of the embryos to an infertile couple, thus infringing on her right not to procreate. The appellate court affirmed the lower court's decision granting J.B.'s request to destroy the embryos.\(^\text{116}\)

M.B. appealed the intermediate appellate court's decision, and the New Jersey Supreme Court granted certiorari. The court evaluated the consent form and corresponding attachment to discern whether there was an enforceable agreement. When the consent form was viewed in its entirety, the court concluded the IVF facility was to obtain control of the embryos unless the parties expressly chose otherwise or there was a court order to the contrary. The court then compared this agreement to that in *Kass* and distinguished the language. In making this comparison, the court agreed that the language in the *Kass* agreement was enforceable because it was unambiguous. However, in *J.B. v. M.B.*, the court found the language of the agreement far more ambiguous.

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\(^{114}\) *Id.* at 710.

\(^{115}\) *Id.* at 711.

\(^{116}\) *Id.* at 711-12.
and read the agreement to say, in case of divorce, the couple would relinquish the embryos to the IVF facility unless they solicited a court for a different disposition. Clearly, the couple solicited a court to make the final determination, because neither party advocated that the embryos be relinquished to the facility as the consent form dictated. Therefore, the court found the parties had never entered into a binding contract providing for the disposition of the cryopreserved embryos.\textsuperscript{117}

Without a binding contract, the court decided the case on a \textit{Davis}-like balancing of interests analysis. The New Jersey Supreme Court agreed with the intermediate appellate court’s analysis that the conflict between the parties was more apparent than real, meaning that M.B.’s right to procreate was not actually being infringed, because he was not infertile. The court found enforcement of the wife’s right to avoid procreation would not seriously impair the husband’s right to procreate. The husband still could have children without the use of the cryopreserved embryos, thus he would not lose his right to procreate by the court granting the wife’s wish to destroy the embryos. In short, the court disregarded the agreement in this case because of its vagueness, and instead balanced the interests of the parties, finding the party seeking to avoid procreation should prevail.\textsuperscript{118}

\textbf{3. Analysis}

The court found there was not a binding agreement between the parties and balanced the parties’ interests to determine the embryos should be destroyed to avoid forced genetic parenthood. The court analyzed the usefulness of agreements between parties and issued a rule that agreements entered into at the time IVF was initiated would be enforceable, but either participant retained the right to change his or her mind about the disposition of the embryos up to the point of their use or destruction. The court held, for it to give the agreement any force, the parties would need to have the ability to rely on the agreement. The court determined the parties needed to notify the clinic in writing of their change in intention. The court also suggested which agreements would be upheld. It found that, if the agreement is to be enforceable, it must be written in plain language and a qualified person should be present to explain its terms to the parties entering the contract.\textsuperscript{119}

The court’s decision was flawed. It undermined the utility of dispositional agreements by holding that, even if there were an enforceable agreement, if the parties later disagreed, the interests of the parties would have to be weighed in court. Nevertheless, this court’s opinion was helpful in furthering the concept of potentially enforceable agreements in the realm of IVF.

\textsuperscript{117} \textit{Id.} at 712-15.
\textsuperscript{118} \textit{Id.} at 714-17.
\textsuperscript{119} \textit{Id.} at 714-19.
Furthermore, the court gave some vague clues that should prove helpful in determining the criteria for an enforceable agreement.\textsuperscript{120}

This court, like several before it, used the term preembryo throughout its analysis. It justified its use of this term, as opposed to embryo, based on a definition in The American Heritage Stedman’s Medical Dictionary published in 1995.\textsuperscript{121} However, the more recent version of Stedman’s Medical Dictionary does not include a definition of preembryo.\textsuperscript{122} The court specifically chose to use preembryo over embryo “because preembryo is technically descriptive of the cells’ stage of development when they are cryopreserved.”\textsuperscript{123} In fact, the latest version of Stedman’s defines only embryo, and defines it as “an organism in the early stages of development … in humans, the developing organism from conception until approximately the end of the second month.”\textsuperscript{124}

F. Litowitz v. Litowitz

1. Facts

After successfully having one child with her husband in 1980, Ms. Litowitz had problems that required her to have a hysterectomy, thus leaving her infertile. In 1996, when the couple decided to have more children, they entered an IVF program, where five embryos were created with donor eggs and Mr. Litowitz’s sperm. Three of the embryos immediately were implanted into a surrogate mother, and the remaining two embryos were cryopreserved and stored at the fertility facility. The IVF attempt was successful on the first try and a female child was born in 1997.\textsuperscript{125}

The couple executed two separate agreements when entering the IVF program. One was a consent and authorization for embryo cryopreservation, dated March, 1996. The other was an agreement for cryogenic preservation (short-term preservation). In the pertinent part of these agreements, the parties indicated that their “ultimate disposition” for the embryos was that they be “thawed and not allowed to undergo further development.”\textsuperscript{126}

Before their child was born in 1997, the couple separated and initiated divorce proceedings. In the divorce proceeding, Ms. Litowitz wanted the remaining embryos to be implanted in another surrogate and brought to term. Mr. Litowitz opposed such implantation and wanted his prior agreement with Ms. Litowitz to destroy their embryos enforced. All aspects of the divorce were agreed upon except disposition of the embryos.\textsuperscript{127}

\textsuperscript{120} Id. at 719-20.
\textsuperscript{121} Id. at 708 (citing Stedman’s Medical Dictionary 667 (26th ed. 1995)).
\textsuperscript{122} See generally Stedman’s, supra note 14 (failing to include a definition for either “preembryo” or “prezygote”).
\textsuperscript{123} J.B., 783 A.2d at 708 n.1.
\textsuperscript{124} Stedman’s, supra note 14, at 581.
\textsuperscript{125} Litowitz v. Litowitz, 48 P.3d 261, 262-63 (Wash. 2002).
\textsuperscript{126} Id. at 263-64.
\textsuperscript{127} Id. at 264.
2. Reasoning of the Court

In the divorce proceeding, the trial court awarded the embryos to Mr. Litowitz, holding it was in the "best interests of the child" to do so. The court advocated a best interests analysis because, were it to award the embryos to Ms. Litowitz instead and a child resulted from implantation, that child would be raised in a single parent home. The trial court found this alternative not to be in the best interests of the child and awarded the embryos to Mr. Litowitz for the embryos' potential adoption.128

The intermediate appellate court affirmed the trial court's decision, stating the contract signed by the parties did not require Mr. Litowitz to continue with the couple's plan to have children. Mr. Litowitz's right to avoid procreation compelled the appellate court to grant his request that the embryos be awarded to him in the interest of a future adoption.129

Ms. Litowitz appealed to Washington's highest court. Although this court had all the previously discussed decisions as guidance, it struggled with the distinct facts of this case. Specifically, the court was concerned that Ms. Litowitz was not an actual gamete donor, or progenitor, to the embryos. It first addressed whether, without biological ties, Ms. Litowitz had any right to claim the embryos.130

The Washington Supreme Court reviewed the egg donor agreement. It found the eggs no longer existed in the same form as they did in the egg donor contract, because the eggs had been fertilized and now were embryos. Thus, the eggs had since lost the character of being eggs. The court ultimately looked to the intent of the agreement and concluded that both Mr. and Ms. Litowitz clearly intended to be the joint and equal parents to any children resulting from implantation of the embryos. Therefore, the couple had equal rights to determine the disposition of any embryos resulting from the IVF process they facilitated as a couple.131

As to the ultimate disposition of the embryos, the court upheld the agreement made prior to the divorce. The court found, according to the agreement, the embryos would have been destroyed after five years of being cryopreserved. Five years had passed. Therefore, the court concluded, if the embryos had not been destroyed already (the record did not indicate whether they had been), then they were to be destroyed in accordance with the prior agreement.132

128 Id. at 262-64.
129 Id. at 265.
130 Id. at 265-68.
131 Id. at 268-69.
132 Id. at 270-71.
3. Analysis

The United States Supreme Court denied certiorari in this case. The *Litowitz* decision stands for the principle that prior agreements should be enforceable. The court was faced with a disputing couple who had used donor gametes in creating embryos; thus, the parties were not equal progenitors. The court found both parties facilitating the IVF process should have equal rights to the embryos they had created. Still, this opinion was flawed because the court used the ever judicially popular “preembryo” terminology, adopted from *Kass*. However, the court admitted that the terms “preembryo” and “prezygote” were interchangeable, which suggested it understood there was not a practical distinction between the various terms.\(^{133}\)

G. *In re Marriage of Witten*

1. Facts

Ms. Witten was unable to conceive a child naturally. As a result, she and Mr. Witten attempted pregnancy through IVF. After several unsuccessful embryo transfers, the Wittens still were unable to conceive. Mr. Witten petitioned the court for divorce in April 2002. When divorce proceedings began, 17 embryos remained cryopreserved.\(^{134}\)

Before commencing the IVF process, both parties were required to execute informed consent documents, one of which was an “Embryo Storage Agreement.” The storage agreement had a provision for the “release of embryos,” which required approval of both parties before the embryos could be transferred, released, or disposed of. The agreement also contained clear exceptions to the joint approval provision, releasing the IVF facility from its responsibility to store the embryos under three different contingencies: the death of the client depositors; the failure of the client depositors to pay the annual storage fee; or the expiration of ten years from the date of the agreement.\(^{135}\)

During the divorce proceedings, Ms. Witten requested custody of the embryos, because she intended to have them implanted so she could bear a genetically linked child. She was adamantly opposed to having the embryos destroyed or donated to another couple. Mr. Whitten, too, did not wish the embryos destroyed, but did not want Ms. Witten to use them either. Unlike Ms. Witten, Mr. Witten was willing to donate the embryos to another couple. At the divorce proceedings, Mr. Witten sought a permanent injunction prohibiting

\(^{133}\) *Id.* at 261-66.

\(^{134}\) *In re Marriage of Witten*, 672 N.W.2d 768, 772 (Iowa 2003).

\(^{135}\) *Id.*
either party from transferring, releasing, or utilizing the embryos without the written consent of both parties.\textsuperscript{136}

2. \textit{Reasoning of the Court}

The Iowa trial court found the storage agreement enforceable. With the agreement in force, the court enjoined both parties from transferring, releasing, or utilizing the embryos, because approval required by the agreement had not been obtained from both parties regarding disposition of the embryos. Ms. Witten appealed to the Iowa Supreme Court, challenging the trial court’s resolution of the embryo issue. Ms. Witten argued the storage agreement was unenforceable because there was no provision specifically addressing a possible divorce of the parties. She argued further that, without the benefit of the contract, the court should apply the best interests test and award her custody of the embryos. In the alternative, Ms. Witten argued that she was entitled to the embryos because of her fundamental right to bear children, and that it violated public policy to allow Mr. Witten to "back out of his agreement to have children," which Ms. Witten claimed was evidenced by his participation in the IVF process.\textsuperscript{137}

On appeal, the Iowa Supreme Court rejected Ms. Witten’s argument that a best interests analysis was appropriate for determining disposition of the embryos. The court pointed out the public policy behind such an analysis arises from the context of child custody disputes. Although the court was not called on to determine the status of embryos, it acknowledged no other jurisdiction’s case law had concluded embryos were children who should be afforded the same rights and privileges as human beings. Concluding the best interests analysis was inappropriate in the embryo context, the court said: "[I]t would be premature to consider which parent can most effectively raise the child when the ‘child’ is still frozen in a storage facility."\textsuperscript{138}

The Iowa Supreme Court focused on the issue of enforceability of the storage agreement. The court analyzed the issue using the three primary approaches prior case law and literature had identified: (1) the contract approach; (2) the contemporaneous mutual consent model; and (3) the balancing test.\textsuperscript{139}

The contract approach is the one by which the court enforces the prior agreement entered into by the couple regarding disposition of the embryos, as long as the agreement does not violate public policy. The \textit{Witten} court first acknowledged the contract approach as the prevailing rule in current jurisprudence, then disagreed with this approach because it found, as have other critics, a contractual agreement about issues as intensely personal as two

\textsuperscript{136 \textit{Id.} at 772-73.}
\textsuperscript{137 \textit{Id.} at 773.}
\textsuperscript{138 \textit{Id.} at 774-75.}
\textsuperscript{139 \textit{Id.} at 774.}
people’s embryos insufficiently protects the individual and societal interests at stake.\textsuperscript{140}

The contemporaneous mutual consent approach, like the contract approach, is based on the premise that decisions regarding the disposition of frozen embryos belong to the couple that created the embryos, with each party having an equal say in the decision. However, this approach differs by emphasizing the emotional state of the parties and finding it possible, even probable, that they would be unable to “make a knowing and intelligent decision to relinquish a right in advance of the time the right is to be exercised.” Proponents of this approach argue that decisions about one’s reproductive capacity have lifelong consequences for a person’s identity and sense of self and, should a couple at some point become unable to agree on a disposition, the appropriate solution would be to keep the embryos in frozen storage until such time an agreement between the couple can be reached.\textsuperscript{141}

The final approach analyzed by the court was the balancing test. This approach views agreements entered into at the time IVF is initiated to be enforceable, subject to the right of either party to change his or her mind about the disposition, up to the point of use or destruction of any stored embryos. This analysis assumes certain public policy concerns with contracts involving family relationships. The court found this approach problematic because it requires courts to become too involved in making personal decisions that should be made by the couple.\textsuperscript{142}

Ultimately, the court found Iowa precedent and statutes reflected respect for the right of individuals to make family and reproductive decisions based on their current views and values. In the court’s opinion, such decisions are highly emotional in nature and subject to a later change of heart. For both of these reasons, the court concluded judicial enforcement of an agreement between a couple regarding their future family and reproductive choices would be against public policy.

The court acknowledged the need for storage agreements to define and govern the relationship between the couple and fertility clinic, so all parties would understand their respective rights and obligations. It found the need for couples to maintain decisional autonomy, on one hand, and the need for certainty and definitions, on the other, were competing. To balance these competing needs, the court concluded prior agreements could guide the actions of all parties, unless a later objection to any dispositional provision is asserted. This approach recognizes that, absent a change of heart by one member of the couple, an agreement governing disposition of embryos would not violate public policy. It is only when one person makes it known that the agreement no

\textsuperscript{140} \textit{ld. at} 776-77.

\textsuperscript{141} \textit{ld. at} 777-78.

\textsuperscript{142} \textit{ld. at} 779.
longer reflects his or her current values or wishes that public policy problems arise. If one or both partners change their minds and they cannot reach a mutual decision, the contemporaneous mutual consent approach should be applied. Thus, if the parties are no longer able to agree as to the disposition of the embryos, no transfer, release, disposition, or use of the embryos can occur without the signed authorization of both donors. The embryos should remain cryopreserved indefinitely until dispositional agreement occurs.¹⁴³

3. Analysis

_Witten_ is the most recent decision by a state’s highest court analyzing the disposition of cryopreserved embryos. The _Witten_ court applied both the balancing test and the contemporaneous mutual consent model. Although the court found prior agreements maintain their enforceability until the parties no longer agree, in practicality this ruling defies the very reason prior agreements are made. There is no certainty provided by a contract that is voidable the moment one party no longer agrees to its terms.

The court accepted the critics’ position that contracts are inappropriate in this context because of the heightened emotional state of the contracting parties and their need to be able to make these important decisions based on their current needs and values. First, parties have no idea what their rights and obligations are to each other, because the subsequent disagreement of the couple voids any prior agreement. Second, indefinite cryopreservation of embryos is a burden the court assumes the disagreeing party logically should be made to bear financially, but without an enforceable agreement in place mandating this expense there is no obligation. Third, any heightened emotional stress that may exist when IVF is being initiated still would exist after the parties actually undergo the IVF process and possibly suffer failed attempts at fertilization. In fact, divorce is equally, if not more, emotionally burdensome, especially a contested divorce that has been tried and appealed. Disputes over the disposition of embryos have, to date, mostly occurred in the context of divorce.

Lastly, although the court was very reluctant to be involved in making decisions that have such personal impacts on the individuals, courts do this sort of thing every day. Divorce and child custody cases are far more personal than disputes over cryopreserved embryos, which hold only a potential for life. The contract approach is by far the best way to relieve the court from becoming entangled in such personal decisions, while still allowing couples dispositional authority. When faced with a dispute, the court would only have to honor the prior agreement and not become involved in the personal details.

¹⁴³ _Id._ at 782-83. The court also found common sense dictated any expense associated with maintaining the status quo, by keeping the embryos cryopreserved, should be borne by the person opposing destruction. _Id._ at 783.
H. Overall Case Analysis

Regardless of the theory used, none of these courts allowed embryos to be awarded to a party seeking to implant them against the will of a party seeking to destroy the embryos or donate them to research. Also, none of these courts were willing to conclude that cryopreserved embryos are human beings entitled to all the rights and interests of human beings. The only court unwilling to analyze the dispute under contract principles was faced with difficult facts, where enforcing the agreement would compel a seemingly undesirable result. Even though there is not an agreed-on theory in present case law to dictate the resolution of disputes over the disposition of cryopreserved embryos, there appear to be at least two principles on which courts agree.

First, in situations where courts have balanced the interests of the parties in deciding the fate of embryos, they have been unwilling to force parties to become genetic parents against their will. Courts seem conflicted about the possibility of reaching a different result if one party were seeking implantation as their last and only available way to have a biological child.\textsuperscript{144} Nevertheless, courts have concluded, in disputes where one party seeks implantation and the other opposes it, the party seeking implantation still could achieve parenthood through available alternatives, such as adoption or repeating the IVF process with a different partner.\textsuperscript{145} Furthermore, courts have concluded that the cost, time, and burdens of suggested alternatives do not outweigh the rights of the party opposing implantation, because implantation would burden the opposing party with the possibility of becoming an unwilling genetic parent.\textsuperscript{146}

The second principle on which courts agree is that embryos are not human beings. The aforementioned appellate courts have refused to endorse the argument that embryos are human beings entitled to all the rights inherent in such a classification. Instead, courts that have addressed the issue have concluded that embryos should be governed either as if they are property or by the more complicated "special respect" doctrine.

III. LEGISLATION

A. Why Federal Legislation?

Disputes over the disposition of cryopreserved embryos in IVF programs likely have arisen in most states, even if such disputes have not culminated in litigation. Disputes concern, among other things, post-divorce ownership rights to cryopreserved embryos, orphaned embryos, and even posthumously

\textsuperscript{144} Yang, supra note 3, at 631.
\textsuperscript{145} Id. at 605-06; see also id. at 606 n.120.
\textsuperscript{146} Id. at 605-06.
conceived children. Due to unforeseen circumstances such as death or divorce, conflicts over cryopreserved embryos are inevitable. As the use of IVF and cryopreservation procedures increases, so will the controversy that surrounds it, creating a need for uniformity in the law to help deal with the ethical and social questions raised.

Given the widespread use of cryopreservation, yet another controversy has arisen about what should be done with the growing number of surplus embryos. Currently fertility clinics across the nation store more than 100,000 embryos. In the absence of consistent federal legislation, embryos will continue to stockpile at the current rate of 18.8% annually. Federal legislation defining embryos and requiring disposition agreements would cure the uncertainty and confusion courts have been faced with thus far and allow them to rule consistently. Additionally, federal legislation would resolve the present inconsistency resulting from differing legislation in the few states that have addressed issues of embryos and cryopreservation.

Legislators have the opportunity to create uniformity, to the extent that legislation can define what an embryo is and how it is to be treated, and to create principles to guide the fate of embryos in the countless possible contingencies that may arise. Because courts have been forced to make law on these issues in the legislature’s stead, they have done so with inconsistent results, creating confusion and uncertainty. Such confusion and uncertainty has left IVF facilities unable to discern when they are exposed to liability. Additionally, IVF patients are not clear about their rights and obligations when they enter an IVF program. Courts now are left with little guidance as to how such disputes should be resolved. Even the court in J.B. admitted: “Advances in medical technology have far outstripped the development of legal principles to resolve the inevitable disputes arising out of the new reproductive opportunities now available.” Federal legislation can supply badly needed, consistent legal principles to govern disputes that are going to arise as reproductive technology continues to advance.

B. Current State Legislation

Although many states have enacted legislation dealing with embryos in the context of human cloning and abortion, relatively few states have

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149 Id. at 100.

150 Gorny, supra note 147, at 460.

151 Id.

152 Id.

153 LaGatta, supra note 148, at 99.

legislation directly on the legal status of frozen embryos and their disposition in the context of IVF. States with such specific legislation are discussed below.

1. California

California enacted a statute, effective in 2004, requiring fertility patients be informed of their options regarding the disposition of embryos remaining following fertility treatment and execute an advanced directive that includes a time limit on the storage of the embryos and provides disposition for the following scenarios: (1) death of either the male or female participant; (2) death of both participants; (3) divorce; or (4) either the couple or single participant without a partner deciding to abandon the embryos by request or through failure to pay storage fees. In the event of death of only one of the partners, the court may choose one of the following dispositions of the embryo: (a) made available to the living partner; (b) donation for research purposes; (c) thawed with no further action taken; (d) donation to another couple or individual; or (e) other disposition that is clearly stated. In the event of divorce, the following embryo dispositions are available: (a) made available to the female partner; (b) made available to the male partner; (c) donation for research purposes; (d) thawed with no further action taken; (e) donation to another couple or individual; or (f) other disposition that is clearly stated. In the event no participant is left alive or the participant(s) abandon the embryo or fail to pay storage fees, the aforementioned options c-f are available.

Part C of the statute requires written informed consent if the participants elect to donate remaining embryos upon completion of their fertility treatment. In that event, the following information must be conveyed to the participants:

1. A statement that the early human embryos will be used to derive human pluripotent stem cells for research and the cells may be used, at some future time, for human transplantation research;
2. A statement that all identifiers associated with the embryos will be removed prior to the derivation of human pluripotent stem cells;
3. A statement that donors will not receive any information about subsequent testing on the embryo or the derived human pluripotent cells;
4. A statement that derived cells or cell lines, with all identifiers removed, may be kept for many years;
5. Disclosure of the possibility that the donated material may have commercial potential, and a statement that the donor will not receive financial or any other benefits from any future commercial development;
6. A statement that the human pluripotent stem cell research is not intended to provide direct medical benefit to the donor; and
7. A statement that early human embryos donated will not be transferred to a woman’s uterus, will not survive the human pluripotent stem cell derivation process, and will be handled respectfully, as is appropriate for all human tissue used in research.\textsuperscript{155}

This statute addresses the concerns articulated in this article and is used as a model for the proposed federal legislation discussed later.

2. \textit{Colorado}

Colorado has an assisted reproduction statute with a subsection addressing parentage of children resulting from post-divorce or posthumous embryo placement.\textsuperscript{156} If divorce occurs before the placement of eggs, sperm, or embryos, the former spouse is not the parent of the resulting child unless the former spouse expressly consented to such assisted reproduction for post-divorce use.\textsuperscript{157} The consent of a former spouse may be withdrawn at any time before placement of eggs, sperm, or embryos.\textsuperscript{158} The statute further provides, in the event of a spouse’s death before placement of eggs, sperm, or embryos, the deceased spouse is not a parent of the resulting child unless the deceased spouse expressly consented to such assisted reproduction in case of his or her death.\textsuperscript{159}

This statute is flawed because it allows one partner to bear the genetic child of the other without the latter’s consent. Although this statute absolves the party who no longer desires to participate of parental responsibilities, he or she still is genetically tied to the potential offspring and has become a genetic parent involuntarily. This statute also fails to address the disposition of remaining cryopreserved embryos and does not give the IVF facility or participants any assurances about embryo disposition.

3. \textit{Delaware}

Similar to Colorado, Delaware has a statute providing, if the marriage of IVF participants is dissolved prior to the placement of eggs, sperm, or embryos, the former spouse is not a parent of any resulting child unless consent has been given.\textsuperscript{160} Such consent can be withdrawn any time prior to implantation.\textsuperscript{161}

This statute has the same problems as the Colorado statute. Moreover, it is even narrower in that it fails to address the contingency of the death of one of the IVF partners.

\textsuperscript{157} \textit{Id.} § 19-4-106(7)(a).
\textsuperscript{158} \textit{Id.} § 19-4-106(7)(b).
\textsuperscript{159} \textit{Id.} § 19-4-106(8).
\textsuperscript{160} \textit{Del. Code Ann. tit. 13,} § 8-706(a).
\textsuperscript{161} \textit{Id.} § 8-706(b).
4. Florida

Florida requires couples pursuing fertility treatment to sign a written agreement providing for the disposition of the couple’s eggs, sperm, and embryos in the event of death, divorce, or other unforeseeable circumstances.162 The statute further provides, in the absence of an executed written agreement, the couple maintains joint decision making authority over the embryos.163 The statute fails to clarify whether contracts created under the statute would be binding between the couple themselves, as opposed to being binding between the couple and the treating IVF physician.164 The statute is flawed further in that it takes for granted that couples will be able to reach an agreement regarding disposition of the embryos.165

5. Louisiana

Louisiana has enacted legislation stating that embryos are human life entitled to all of the rights attributed to a person.166 The Louisiana legislature believed there is a need to protect embryos from harm. In an effort to protect embryos, human life proponents argue that embryos should be transferred immediately to a uterus upon creation, thus circumventing the cryopreservation process altogether.167 Louisiana is the only jurisdiction with legislation attempting to regulate the legal rights and status afforded to embryos in the IVF process.168

Louisiana’s statute declares in vitro fertilized embryos “juridical” persons entitled to all of the protections afforded to human beings.169 As a juridical person, embryos are not the property of the fertilization physician, the facility that employs the physician, or the donors of the sperm and ovum.170 However, the statute further provides “in vitro fertilized human ovum that fail to develop further over a thirty-six hour period except when the embryo is in a state of cryopreservation, [are] considered nonviable” and no longer are juridical persons.171 If the gamete providers choose to

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163 Id.
165 Id.
167 Brandimarte, supra note 2, at 779.
168 Id.
170 Id. § 9:126.
171 Id. § 9:129.
renounce their parental rights to the embryos, the embryos become available for adoption.\

Louisiana has the most far-reaching, radical statute with regard to its characterization of embryos. Louisiana has classified embryos as human beings without regard for the consequences to the parties and facilities participating in IVF programs. Thus far, Louisiana is the only state willing to take a stand on the specific legal status of embryos, but the status assigned seems to fly in the face of United States Supreme Court decisions in *Roe v. Wade* and *Planned Parenthood of Southeastern Pennsylvania v. Casey*. Although the Supreme Court has addressed the legal status of the unborn child only in the abortion context, its opinions suggest that states establishing cryopreserved embryos as "persons" would be unconstitutional. Both *Roe* and *Casey* stand for the principle that states do not have a significant enough interest in nonviable fetuses to outweigh a woman's reproductive decision to abort a fetus prior to viability. Thus, if a state's interest turns on viability and not conception, it would seem that a statute making cryopreserved embryos human beings would not pass constitutional scrutiny.

6. Other Legislation

In addition to the five states mentioned above, four other states have statutes indirectly dealing with embryos. These statutes still could have a major impact on IVF, possibly unintended.

Kentucky has a statute that prohibits the use of public funds for IVF treatment if the treatment would result in the intentional destruction of a human embryo. Missouri has a preamble to its abortion statute stating: "The life of

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172 *Id.* § 9:130. Specifically, this statute provides that the gamete providers can renounce their parental duties only by a notarized document and embryos are not available for adoptive implantation until such renunciation takes place. For the period between the gamete providers formally renouncing their parental rights and the time a guardian has been appointed by a court to act on behalf of the best interests of the embryo, the IVF physician is to act as the temporary guardian of the embryo and be responsible for the embryo's safekeeping. *Id.* § 9:126.


176 *Id.*

177 *Id.*

each human being begins at conception.” New Hampshire’s statute defines terms of eligibility for IVF treatment, limiting the use and storage of embryos and requiring judicial pre-authorization of all written consent agreements. Pennsylvania only has reporting requirements for IVF facilities regarding success rates.

C. Why These Statutes Are Inadequate

Although these states have legislated on the fate of embryos, most of the resulting statutes are too vague, leaving little to no guidance to courts on how they should rule on the enforceability of disposition agreements or the status of frozen embryos. On the other hand, Louisiana’s statutes are too specific and driven by a political agenda inconsistent with United States Supreme Court rulings and medical and legal principles set forth by experts. To resolve these statutory inadequacies, federal legislation should be enacted.

IV. PROPOSED FEDERAL LEGISLATION

A. Definitions

1. Embryo

For purposes of this article’s proposed legislation, the term “embryo” means the derivatives of the developing human fertilized ovum from conception until approximately the end of the second month. Embryos created by IVF shall be the common property of the couple participating in the IVF program.

2. Couple

There must be two participants to enter the IVF program. For purposes of this legislation, the term “couple” refers to the two IVF participants facilitating the creation of the embryos. All donors donating egg(s) or sperm shall waive and/or be released from any legal, financial, notice, and/or property rights and/or obligations to the donated egg(s) or sperm. All legal, financial, notice, and/or property rights and/or obligations shall be transferred to the IVF couple as if they were the actual gamete donors. The couple shall have equal rights over, and obligations to, all embryos resulting from IVF as if both participants were gamete donors, even if donor egg(s) and/or sperm have been used to comprise the embryos.

182 Dorland’s, supra note 13, at 542; Stedman’s, supra note 14, at 581.
183 Common property is “property that is held jointly by two or more persons.” Black’s, supra note 169, at 1233.
B. Mandatory Contract and Consent Form

Both IVF participants must sign informed consent documents for each IVF procedure, consistent with established medical informed consent principles, which clearly explain all procedures to be performed on the participants.\textsuperscript{184} These forms must be executed prior to any IVF procedure being performed and shall be signed by both participants in light of this joint goal.

Any couple desiring to cryopreserve embryos created while participating in the IVF program also must sign a contract, consistent with established contract principles, with the IVF facility. This contract shall clearly indicate the time limit on the storage and direct the disposition of all cryopreserved embryos for at least the following contingencies:

(1) In the event of the death of either the male or female partner, the embryos shall be disposed of by one of the following actions:
   
   a. Made available to the living partner;
   
   b. Donation for research purposes;
   
   c. Thawed with no further action taken;
   
   d. Donation to another couple or individual;
   
   e. Other disposition that is clearly stated and not prohibited by law.

(2) In the event of the death of both partners or the death of a patient whose partner pre-deceased him or her, the embryos shall be disposed of by one of the following actions:
   
   a. Donation for research purposes;
   
   b. Thawed with no further action taken;
   
   c. Donation to another couple or individual;
   
   d. Other disposition that is clearly stated and not prohibited by law.

(3) In the event of separation or divorce of the couple, the embryos shall be disposed of by one of the following actions:
   
   a. Made available to the female partner;
   
   b. Made available to the male partner;

\textsuperscript{184} BARRY R. FURROW ET AL., HEALTH LAW §§ 6.9-6.11 (2d ed. 2000) (discussing the doctrine of informed consent, standards of disclosure, and factors that must be disclosed to satisfy the elements of informed consent).
c. Donation for research purposes;

d. Thawed with no further action taken;

e. Donation to another couple or individual;

f. Other disposition that is clearly stated and not prohibited by law.

(4) In the event of either the couple's decision or a patient's decision who is without a partner, to abandon the embryos by request or a failure to pay storage fees, the embryos shall be disposed of by one of the following actions:

a. Donation for research purposes;

b. Thawed with no further action taken;

c. Donation to another couple or individual;

d. Other disposition that is clearly stated and not prohibited by law.\textsuperscript{185}

This contract shall be executed prior to cryopreservation of the embryos and will be binding on all contracting parties. This contract shall be a separate document from the required consent forms.

Should the IVF participants elect to donate their remaining embryos for research, the IVF facility shall obtain informed written consent conveying, to the participants, at a minimum, the following information:

(1) A statement that the early human embryos will be used to derive human pluripotent stem cells for research and that the cells may be used, at some future time, for human transplantation research;

(2) A statement that all identifiers associated with the embryos will be removed prior to the derivation of human pluripotent stem cells;

(3) A statement that donors will not receive any information about subsequent testing on the embryo or the derived human pluripotent cells;

(4) A statement that derived cells or cell lines, with all identifiers removed, may be kept for many years;

(5) Disclosure of the possibility that the donated material may have commercial potential, and a statement that the donor will not receive financial or any other benefits from any future commercial development;

\textsuperscript{185} \textit{Cal. Health & Safety Code} §§ 125315(b)(1)-(4) (West 2004). The entirety of the proposed federal legislation is modeled after California's statute governing informed consent for IVF participants.
(6) A statement that the human pluripotent stem cell research is not intended to provide direct medical benefit to the donor;

(7) A statement that early human embryos donated will not be transferred to a woman’s uterus, will not survive the human pluripotent stem cell derivation process, and will be handled respectfully, as is appropriate for all human tissue used in research.186

C. Applicability of the Statute

Embryos gleaned through IVF will not be regulated by any other provision of the United States Code. Use of the term “embryo” in any other provision of the United States Code shall not apply to any embryo, ovum, sperm, egg, zygote, preembryo, prezygote, or any other similar term used to describe human tissue organism or embryos maintained, fertilized, or manipulated by IVF personnel.

V. MERITS OF PROPOSED LEGISLATION

This legislation attempts to resolve the underlying inconsistencies found in case law and legislation among various jurisdictions. The proposed legislation is specific enough to delineate what an embryo is and how it should be treated, but flexible enough to allow future interpretation under contingencies that have not yet arisen. The statute provides a minimum standard to act as a guideline to medical facilities struggling with the prospect of detailed forms, because medical facilities tend to err on the side of excessive technical detail or simply have too many forms. Such errors feed the argument that laypersons are easily confused by lengthy paperwork, making the benefits to be derived from the forms a fallacy instead of a reality.

A. Definitions

1. Embryo as Property

This article has discussed the semantics involved in trying to draw legal distinctions among the various terms that have been used in lieu of embryo. As noted, there are various stages of cell division throughout embryonic development, but these stages are not conducive to making legal distinctions. After fertilization, the embryo undergoes rapid cell division. There are several stages of embryonic development, which is not confined to a strict timetable.187 The preembryo distinction is based on the premise that the earliest stage of embryonic development, the four-to-eight cell split, has less potential for life than later stages of embryo development in which major organs begin to

186 Id. §§ 125315(c)(1)-(7).
form. In short, the potential for life in a legal context essentially begins at the moment a complete set of forty-six chromosomes is introduced into an egg. The American Fertility Society (AFS) was the first organization to endorse the embryo/preembryo distinction, explaining that it did not intend to “imply a moral evaluation of the preembryo,” The AFS report gave an official definition of preembryo, finding the preembryonic stage to last until 14 days after fertilization. Yet, in a footnote, the report recognized: “It should be assumed that references to time are in developmental stages and represent a range of uncertainty of at least several days.” Thus, even the AFS recognized that its own definition was flawed because of the likelihood of a large number of embryos being mistakenly regarded as preembryos when, under its own definition, the preembryos would actually be embryos. Clearly, the science used to draw this distinction was not precise and any distinction based on that science would be equally imprecise. The AFS report admitted “the moral and legal status of the preembryo will determine the limits of actions and omissions of actions regarding preembryos and thus the freedom that physicians and patients have in activities concerning preembryos.” This admission suggested the AFS established the embryo/preembryo distinction in an effort to protect physicians and IVF facilities from the extreme pro-life view regarding embryos.

Many organizations adopting this distinction base it on the AFS report, despite the clear problems illustrated above. Therefore, the term “embryo” has been used consistently throughout this article and should be used consistently in legislation to avoid the use of semantics to legislate extreme pro-life viewpoints on the characterization embryos.

For legislation to serve its purpose, the definition of embryo must be included. There appear to be three potential approaches in defining embryos. In Louisiana, embryos are defined as human life. In Davis v. Davis, embryos are defined as occupying a category between persons and property deserving special respect because of their potential for becoming human life. Lastly, as in the legislation proposed in this article, embryos may be defined as property.

189 Hollowell, supra note 15, at 328-29.
190 Malo, supra note 188, at 312.
191 Am. Fertility Soc’y, supra note 14, at 32S.
192 Id. at 31S.
193 See id. at 31S (admitting in a footnote that ovulation time, time until fertilization cleavage rate note, time of implantation, and other parameters are all subject to variation and difficult to determine accurately in women).
194 Id. at 34S.
196 Davis v. Davis, 842 S.W.2d 588, 597 (Tenn. 1992).
It is preposterous to define embryos as human life, because there is no way to practically apply such a definition. Pro-life advocates adamantly argue they are trying to save babies, putting anyone arguing the opposite in a seemingly cold, heartless, and almost criminal light. Yet, the reality is that embryos are lost naturally every day in women who are never even aware they are carrying a fertilized embryo. There are legal methods of contraception that, in effect, destroy embryos. Methods such as morning-after pills and intrauterine devices (IUDs) prevent uterine implantation of fertilized embryos. These legal birth control methods cause embryos to be destroyed. Yet, none of these events are grieved over as a loss of a human being. It is inconsistent to advocate that embryos be given the same rights and protections as human beings in one context, while disregarding them in another.

AFS recognized the special respect doctrine in its 1990 Ethics Committee report.197 This report concluded embryos deserved greater respect than accorded to other human tissue, as embryos have the potential to become human persons, but they should not be accorded the respect and protections of a human being.198 The presence of human potential should impose limitations, such as constraints on the circumstances in which an embryo may be discarded or used in research.199

It is easy to understand why entities have been quick to jump on the special respect bandwagon. By classifying embryos in this special intermediate status, entities essentially are free to treat them like property in disposition disputes, yet can keep from offending morals by not actually deeming embryos to be property more generally.

Defining embryos as property generally is the only practical route. Parties jointly enter agreements with facilities to create embryos. The creating parties are financially, physically, and mentally burdened by this process and, therefore, should have the right to maintain dispositional autonomy over embryos as their common property. Such classification furthers enforceable agreements executed by parties with regard to their common property, as opposed to their cryopreserved unborn babies, and does so without the illusion of a special status to keep from offending pro-life advocates.

2. "Couple"

Embryos are not self-creating. There must be an egg from a woman and sperm from a man. There are at least two parties necessary to create an embryo, but that should not necessarily exclude parties who have to use donor egg, sperm, or both from having any rights to the embryo. Medical facilities have the right to determine who is eligible for a particular IVF program and

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197 See generally Am. Fertility Soc'y, supra note 4, at 17S-18S, 31S-36S (recognizing three views of preembryo legal status, including the intermediate special respect perspective).
198 Malo, supra note 188, at 312-13.
199 Id. at 312.
can define eligibility any way they see fit without being inconsistent with federal regulations or Supreme Court rulings. However, most facilities wish to encourage two-parent families. Thus, IVF programs tend to require participants to be a couple with the intention of raising the potentially resulting child together. Furthermore, the proposed legislation defines “couple” to incorporate both unmarried persons and married persons, in an effort to prevent unmarried persons from being disqualified from procreating via IVF.

As discussed, many courts have limited their language to progenitors, leaving parties participating in IVF who have used donor gametes vulnerable to the claim they do not have dispositional authority over the embryos they created. The “Couple” section of the proposed statute clearly identifies parties entering into IVF agreements and grants those parties the necessary rights to effectively create a binding agreement.

B. Contract and Consent

The proposed statute calls for a clear distinction between consent to procedures and a contract for services. Both the consent forms and the contract should be composed in language easily understood by laypersons and require the signatures of both participants as consenting and contracting parties.

1. Consent Form

The consent form needs to inform IVF participants of the risks, costs, and expectations of all the procedures to be performed on the parties. The forms should be detailed, but composed in language that is easily understood by laypersons. The purpose of informed consent is to provide patients with sufficient information with which to make a choice regarding procedures that IVF patients are asked to undergo.

Each procedure should have its own consent form. This would enable the IVF couple to question the physician about the respective procedures one at a time as they review them. The consent forms should require the signature of both participants, even though a specific procedure may be performed on only one of the participants. This is because each procedure is being done to effectuate a joint goal of the couple, namely, to achieve pregnancy. Ultimately, informed consent is intended to enable patients to determine the course of their own care. Consent forms are intended to encourage deliberate, thoughtful, and informed consent to IVF procedures.200

2. Contract

The contract provision is the more novel part of the proposed legislation. The obligations of a facility cryopreserving embryos generally have arisen as

200 Waldman, supra note 4, at 919-20.
a question in litigation involving disputes over the disposition of the embryos. The facility often is in the awkward position of being unclear about its responsibilities to continue banking cryopreserved embryos that have been, effectively, abandoned by the IVF participants. Therefore, the proposed contract requirement is designed to give the facility certainty as to its responsibilities, to both the couple and the embryos, when faced with a lack of agreement between the couple and/or when the embryos have been abandoned.

The requirement for a contract also gives the couple all dispositional rights to the embryos. It limits the available dispositions only when the couple can no longer agree about the chosen disposition. With a contract, the couple can be certain about the parties' responsibilities to both the facility and the embryos, so they can know the consequences under different contingencies.

The proposed legislation calls for the contract to be a separate document from the consent forms and to cover all relevant aspects of the IVF program. At this time, the only service suited to contract inclusion is the cryopreservation of the embryos.

Contracts generally should define the parties, detail the consideration being exchanged, and anticipate the various contingencies that may arise in cryopreservation situations. There are two reasons the contract should be separate from the consent forms. First, the contract is an agreement between the couple and the IVF facility for the cryopreservation of the couple's embryos. This is a contract for a service and should be contained in a document that addresses only that issue. Second, separating the documents keeps facilities from having contract-like information tucked into lengthy consent forms addressing procedures. The separateness of the contract is intended to enhance the couple's ability to focus and deliberate on the gravity of the agreement being made.\footnote{Id. at 925.}

The argument has been made that such an agreement cannot be binding, both because of the impossibility of conceptualizing the various contingencies being contracted for and the emotional state of the parties participating in IVF.\footnote{Id. at 922-24.} However, there is a very pressing need for the IVF facility and its professionals to have some level of certainty that, once they cryopreserve the embryos, the fate of the embryos has already been decided, even if that certainty is effectuated through a default provision. Facilities need to be able to operate with some level of security that they will not be faced with litigation when dispositional disputes arise over the cryopreserved embryos. As to the emotional state of the parties, it is illogical to argue that parties faced with a business-like transaction, though admittedly intensely personal in nature, would be more emotional than parties in the middle of a divorce or parties faced with the death of a significant other. Individual facilities should be encouraged to include a provision in their contracts transferring ownership of
the embryos to the facility in the event the parties cannot reach an agreement regarding disposition of the embryos. Such a provision would allow the couple all dispositional authority over their embryos as long as the couple can agree about the requested disposition.

Other provisions that facilities should consider for their contracts include a requirement that any contracting party who moves from the location listed in the contract take affirmative steps to update the address in the contract. With millions of IVF participants, it is unrealistic and overly burdensome to expect IVF facilities to be solely responsible for maintaining contact with contracting couples.

The required contract provides certainty to the IVF participants and those facilitating the IVF program. This mandatory contract should keep courts from having to delve reluctantly into matters considered to be intensely private, at the same time preserving the constitutionally protected idea of procreational autonomy. The contract allows the couple to determine the parties’ own procreational fate from the outset. Such autonomy protects parties from becoming parents without the consent of both participants, thus preventing forced parenthood. Furthermore, the contract prevents the possibility of couples using the disposition of embryos as a bargaining chip when divorces get hostile. Overall the contract is intended to lend security to the IVF facility, while maintaining the couple’s authority over the embryos.

CONCLUSION

Many issues regarding embryos are beyond the scope of this article, but the legislation proposed here is intended to resolve uncertainty in a specific context. The model legislation would give IVF medical professionals and participants the security of knowing the rights and responsibilities expected of them. It is specific enough to leave little room for mistaking or misinterpreting the meaning of the terms, yet flexible enough to respond to IVF technology as it continues to advance. This legislation is proposed on a national level to meet the need for certainty by creating uniformity among the states. Federal legislation would serve to pre-empt conflicting state law in this arena.

The legislation proposed in this article achieves the goals of maximizing the rights of the parties facilitating the creation of the subject embryos, granting certainty to all parties involved in the IVF process, and reducing or eliminating court involvement in personal, private matters. These goals are achieved by establishing a definition of both “embryo” and “couple,” along with requiring informed consent for medical procedures to be separate from the contract for cryopreservation. “Embryo” is defined in a realistic and constitutionally consistent manner that gives the couple participating in the IVF program important rights in the embryo(s) they have created. This model legislation is being proposed for the future benefit of science, health, and jurisprudence.