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EMBRYO DONATION: UNRESOLVED LEGAL ISSUES IN THE TRANSFER OF SURPLUS CRYOPRESERVED EMBRYOS

CHARLES P. KINDREGAN, JR.*
& MAUREEN MCBRIEN**

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I. INTRODUCTION

A. Cryopreserved Embryos

HUNDREDS of thousands of cryopreserved embryos lie frozen in fertility banks throughout the United States. They are the by-products of infertility treatments that began in the early 1970s. Since 1978, infertile couples have been undergoing In Vitro Fertilization (IVF), a proce-

1. For convenience, this Article uses the term embryo to mean both pre-embryos and embryos. Typically the term embryo denotes a fertilized ovum at the stage of implantation. See Joshua S. Rubenstein, Posthumous Corporeal Rights: Is There Sex After Death? Practical Applications, Interpretations & Critical Analysis, in WHAT You NEED TO KNOW ABOUT THE NEW GENETIC LAWS 375, 390 (Suffolk U. L. Sch. ed. 2001) (explaining reproductive technology terms). A pre-embryo is a four-to-eight cell zygote that exists within fourteen days of creation. See id. Pre-embryos are what are cryopreserved. See id. Embryos exist when the cells differentiate, that is, a stage in the IVF procedure that comes after the point at which the fertilized ovum is cryopreserved and then thawed. See id.

The courts are by no means uniform in their use of terminology for embryos existing at different stages of development. The Supreme Court of Tennessee used the term "embryo" to describe cryopreserved embryos. See Davis v. Davis, 842 S.W.2d 588, 589 (Tenn. 1992) (involving divorce dispute over which party should control use of cryopreserved fertilized ova). The Supreme Judicial Court of Massachusetts, however, elected to use the term "pre-embryo." See A.Z. v. B.Z., 725 N.E.2d 1051, 1052, 1059 (Mass. 2000) (enforcing male's choice in post-divorce dispute to prohibit use of cryopreserved fertilized ova by wife). The New Jersey court also used the term "pre-embryo." See J.B. v. M.B., 783 A.2d 707, 710 (N.J. 2001) (involving post-divorce dispute over disposition of cryopreserved fertilized ova produced from IVF). The Court of Appeals of New York used the term "prezygote." See Kass v. Kass, 696 N.E.2d 174, 175 (N.Y. 1998) (holding that control of cryopreserved fertilized ova should be resolved by reference to agreement of parties).

In this Article, we refer to embryos during the cryopreserved fertilized ova stage and during the subsequent implantation in the body of the "adopting" female stage. Therefore, we use the term "embryo" consistently regardless of the stage of development.

2. Melanie Blum, Embryos and the New Reproductive Technologies, at http://www.surrogacy.com/legals/embryotech.html (last visited Oct. 31, 2003) ("[H]undreds of thousands of embryos remain in storage . . . ."). The American Society for Reproductive Medicine is conducting a study to quantify how many frozen embryos exist. Sheryl Gay Stolberg, Some See New Route to Adoption in Clinics Full of Frozen Embryos, N.Y. TIMES, Feb. 25, 2001, at 1 (stating American Society for Reproductive Medicine is conducting study in part to advise its members on how, or whether, to become involved in stem cell research). According to one estimate, nearly 400,000 embryos are in storage, of which about three percent have been earmarked for medical research and two percent are intended for donation to recipients other than the genetic parents. Debra Rosenberg, The War over Fetal Rights, NEWSWEEK, June 9, 2003, at 44 (stating findings of new study focused on how many embryos are in storage).

3. In the early 1970's, scientific research was being conducted on the potential use of IVF at Columbia University and Columbia-Presbyterian Hospital in New York City. Dr. Landrum B. Shettles was attempting to use the gametes of a Florida couple to produce an embryo when his superior at the hospital intentionally destroyed them. The destruction resulted in a much-publicized lawsuit. See Stuart Lavietes, Dr. L.B. Shettles, 93, Pioneer in Human Fertility, N.Y. TIMES, Feb. 16, 2003, at 31 (telling story of Dr. Shettles).
Embryo donation is a procedure in which eggs from ovaries are extracted and fertilized with sperm in a petri dish to create embryos. In the hopes of producing a pregnancy, embryos are then implanted in the woman’s uterus. For two decades, cryopreservation technology has enabled couples to freeze extra embryos resulting from their IVF treatments. Couples typically fertilize about a dozen eggs in vitro and freeze the extra embryos that are not immediately implanted. Freezing the extra embryos allows couples to avoid having to repeat egg extraction and fertilization each time they attempt pregnancy.

When the number of cryopreserved embryos exceeds the needs of the couple, legal issues sometimes arise regarding who may make decisions about disposing of the surplus embryos. The problem may be brought to a court in a dispute between a man and a woman, or between a clinic and a couple. A dispute can arise about the disposition of gametes or embryos.

4. Hormonal injections are used to produce multiple oocytes (ova or eggs) within the woman’s body. The oocytes are then removed from the woman’s body and fertilized in a petri dish. This procedure results in embryos that can be transferred into the uterus. The first recorded child of this procedure was Louise Brown, born in England in 1978. Emily McAllister, Defining the Parent-Child Relationship in an Age of Reproductive Technology: Implications for Inheritance, 29 REAL PROP. PROB. & TR. J. 60-61 (1994) (explaining IVF); see also Andrea L. Bonnicksen, In Vitro Fertilization 147-51 (1989) (containing in depth explanation of IVF).

5. See McAllister, supra note 4, at 62 (providing reasons for cryopreservation). Cryopreservation is necessary when ovarian stimulation results in retrieving multiple eggs that are fertilized with sperm, creating several embryos. See id. Cryopreservation eliminates the need to transfer all fertilized embryos, thus avoiding an increased chance of multiple pregnancies. See id. Cryopreservation involves cooling and dehydrating the embryo, treating it with cryoprotectant and storing it in this frozen state. See id. When needed, the embryo is thawed and rinsed of the chemical protectant before transfer. See id. at 63. Although cryopreservation may decrease an embryo’s viability, live births have occurred from embryos that have been cryopreserved for a decade. See id. Cryopreservation even permits a child’s birth after the death of its genetic parents by implantation of the embryo in another woman’s uterus. See id.

6. Jennifer Kornreich, Souls on Ice, REDBOOK, Jan. 1, 2000, at 104 (explaining that harvesting many eggs at once prevents multiple procedures). Because IVF procedures typically cost between $7,000 and $20,000, and because few insurance companies cover it, doctors stimulate the ovaries with drugs and harvest as many eggs as possible at one time. See id. The result of this practice is that couples often end up with many extra embryos. See id.


bryos even after the death of a person, or the death of the genetic parents.10

In order to avoid such disputes, clinics typically require couples undergoing IVF to sign an agreement memorializing what the couples want done with their surplus cryopreserved embryos.12 Options include indefinite storage, donating them to research or destroying the embryos.13 To some couples, however, none of these options is acceptable, and in some jurisdictions these options may even be illegal.14 Enter what is now referred to as “embryo adoption,” the latest alternative in the reproductive technology world.

B. What Is Embryo Adoption?

In addition to either donating embryos to research or destroying them, couples now have the option of donating their surplus embryos to other infertile couples. This new option is commonly referred to as embryo adoption. The donated embryos are implanted in the female of the donee couple. The genetically unrelated donee couple raises any resulting child.15 In essence, embryo adoption provides a means by which a woman can give birth to an “adopted” child. Unlike traditional adoption, however, embryo adoption permits an otherwise infertile couple to experi-

10. See Hecht v. Kane, 20 Cal. Rptr. 2d 275, 279 (Cal. Dist. Ct. App. 1993) (explaining that former wife and children of deceased man opposed release of his cryopreserved sperm to his mistress, to whom he had willed his gametes); see also Woodward v. Comm'r of Social Sec., 760 N.E.2d 257, 259-60, 272 (Mass. 2002) (addressing Social Security Administration's argument that children born more than two years after death of their father who had banked his sperm for his wife's future use were not his children). The Massachusetts court ruled that the children were the man's legal heirs under state law. See id. (providing holding of case).

11. See State of Victoria, supra note 7, at 741 (noting dilemma as to disposition of cryopreserved embryos after death of genetic parents).


13. See id.; see also Kass, 696 N.E.2d at 175 (enforcing agreement to donate cryopreserved embryos for research).


ence pregnancy, control prenatal care and get to know the child's genetic parents.16

C. A Report of an Embryo "Adoption"

Bob and Suzanne Gray had twenty-three embryos left over from their fertility treatments.17 The Grays are Christians who believe that life begins at conception.18 They believe that they have the moral obligation to find their cryopreserved embryos suitable families in order to give them the best future possible.19 In order to give each embryo a chance to be born, the Grays intend to donate each embryo to infertile couples for implantation.

The Christian Snowflake Embryo Adoption Program (the "Snowflake Agency") matched and coordinated an embryo transfer between the Grays and the Vests. Cara Vest gave birth to the Grays' genetic baby boy in May of 2002, and, since that time, the two families have been in frequent contact.20

Embryo adoption is becoming an attractive option for couples like the Grays, who are uncomfortable with destroying their embryos or donating them for research.21 An added feature for donation is that on the receiving end, gestating donated embryos is less expensive, and less complicated, than going through a traditional cycle of IVF or paying an egg donor for her donation.22


18. See id. (stating Grays' dilemma).

19. See id. (discussing moral obligation to find family for embryos). The Grays also had moral objections to abortion, and the husband stated that destroying an embryo or using it for experimentation would not be different from abortion. See id. (stating arguments in case). "'Snowflake babies' are some of the multiple unused embryos resulting from in-vitro fertilization and other alternative reproductive technologies." John Crouch, Adoption in the 21st Century, 25 FAM. ADVOC., Fall 2002, at 32. The word "Snowflake" reflects each embryo's individuality. See id.

20. See id. (stating that families had reunion at beach three months after child was born).

21. News reports indicate that the Bush administration developed plans to distribute nearly one million dollars to promote embryo donation, noting that there are "tens of thousands of embryos" in fertility clinics. See Bush To Promote "Embryo Adoption", supra note 15 (quoting Bush as stating "if any of those embryos could produce life, I think they ought to produce life.").

22. See Milandria King, Cold Shoulder Treatment: The Disposition of Frozen Embryos Post-Divorce, 25 T. MARSHALL L. REV. 99, 131 (1999). Costs per IVF cycle alone average around $10,500. See id. Egg donors are sometimes paid $15,000. See Stolberg, supra note 16, at 01G (declaring embryo adoption inexpensive alternative to IVF); see also Mary Lyndon Shanley, Collaboration and Commodification in Assisted Pro-
The idea of donating a couple's cryopreserved embryos to another couple seems simple. The process, however, raises several legal hurdles that should be addressed before this new reproductive option becomes commonplace. This Article explores how the law could treat embryo donation for purposes of "adoption" and considers potential problems the practice raises.

II. ANALYSIS

A. Legal Theories

The term "embryo adoption" is misleading because it suggests that adoption laws govern the procedure for donating one's embryos to an infertile couple for implantation and gestation. Also misleading is the frequent practice of donee couples' voluntarily submitting to criminal background checks and home studies to determine their parental fitness, as they would do if they were adopting children. Furthermore, the media also falsely portrays embryo adoption as "legal adoption," when no legal guarantees can or should be made. Even some IVF physicians seem to believe that, apart from the fact that embryo adoption occurs far earlier than baby adoption, the processes are similar.

The word "adoption" creates a false sense of security for couples who believe that they are voluntarily and legally terminating their parental rights when they donate their embryos to another couple. No court has to date resolved a contested embryo adoption dispute. The parties involved, therefore, should not simply assume that an embryo can be legally adopted, thus terminating the donor's legal rights and interests. The legal risk of unintentionally maintaining parental interests and rights may complicate the process of donating embryos.

It is apparent that terminology plays a role in the debate over embryo adoption. Some supporters of "embryo adoption" might opt for a change in the name to "embryo donation" or "embryo transfer" if it becomes clear that the adoption concept is not achieving public support. In order to...
soften criticism of the adoption analogy, the term “embryo donation” could be used to suggest a non-commercial transfer of ownership for which no express statutory authority is needed. “Donation,” however, is a property concept, and some may resist the substitution of property law categories for traditional parentage concepts as a means of legally protecting the parties to the transaction. “Embryo transfer” is a broader term, which could encompass both traditional family law concepts and property transactions. Perhaps “embryo donation for transfer” is the clearest terminology.27 Viewed as a mere cosmetic change, the use of these terms will not affect the reality of what is happening, but could impact public acceptance or rejection of the procedure.

Regardless of what terminology is used to explain the procedure, adoption law does not and cannot really apply to donating embryos because many state statutes specifically invalidate biological parents’ consent to adoption that is given prior to childbirth. A Massachusetts statute, for example, states that parental consent to adoption must be in writing and is not valid until four days after the child’s birth.28 Similarly, under the Uniform Adoption Act, valid surrender and consent to adoption can be given only after the child’s birth.29 It logically follows that because embryos are not children, adoption statutes cannot apply to their donation.

Even in the absence of such a statute, courts refuse to honor pre-birth agreements to surrender a child for adoption.30 For example, the famous New Jersey In re Baby M31 decision, which recognized the parental rights of a gestational surrogate mother was based in substantial part on the court’s belief that the pre-conception and pre-birth agreement to surrender a child constituted a “contractual system of termination and adoption designed to circumvent our statutes.”32


30. See 2 HOMER H. CLARK, JR., THE LAW OF DOMESTIC RELATIONS IN THE UNITED STATES § 21.5 (2d ed. 1987) (noting many state statutes validate only consent given during specified period after child’s birth and, even in absence of such statute, courts have ruled prenatal consent to adoption invalid).


32. Id. at 1246 (stating pre-conception and pre-birth agreement creates system of termination and adoption that ignores New Jersey law).
Apparently physicians have been transferring embryos between consenting parties for a number of years without concern for legal considerations, or even a contract between the parties. As the practice of embryo adoption is currently evolving, however, the use of contractual arrangements is becoming characteristic of the practice. These contracts address embryo disposition in terms of parental rights and visitation issues in the contingencies of death, separation or divorce of the parties. Such provisions are adopted from egg-donation and surrogacy contracts, contracts that a number of commentators now advocate.

The use of a pre-birth contract to determine parental rights and interests in an embryo donation scenario, however, presents its own problems. Pre-birth contractual attempts that only express the donors’ consent to surrendering custody of the embryo, and that remain silent on adoption, may not be valid and enforceable. As the court decided in the Baby M case, a pre-birth contract that does not address adoption may be held unenforceable if the court construes it as an attempt to evade the purpose of the adoption statute.

The Supreme Judicial Court of Massachusetts addressed this issue in R.R. v. M.H. In that case, a surrogate mother decided to renounce the pre-birth contract to give up custody of any resulting child conceived and, in the sixth month of pregnancy, announced that she intended to keep the baby. The Massachusetts court held that “although a consent to surrender custody has less permanency than a consent to adoption, the legislative judgment that a mother should have time after a child’s birth . . . [to decide whether to consent to adoption] weighs heavily in our consideration whether to . . . [enforce] a prenatal custody agreement.” Similar to surrogacy, the enforceability of contractual agreements in embryo donation cases remains uncertain. Can either of the genetic parents revoke the contract after the birth of the child and seek custody?

Although attractive, the use of an adoption or contract model is likely to encounter legal pitfalls in the absence of a statute that specifically au-

33. See Zitner, supra note 24, at A1 (“Doctors have been quietly transferring embryos between willing couples for years . . . .”)
35. 689 N.E.2d 790, 791-93 (Mass. 1998) (discussing how surrogate contracted to give husband custody of child if one was born, inseminated herself with sperm of husband and then renounced agreement during her pregnancy).
36. See id. (stating facts of case).
37. Id. at 796 (stating court’s reasoning).
thorizes embryo donation and that identifies the respective rights and liabilities of the parties. Adopting children was not permitted under the early common law of either England or America, meaning that adoption is purely a creature of statute. Given the intensity of the recent debate over stem-cell research, abortion, sales of ova, cloning and other similar controversies, it is not likely that a legislative consensus on embryo adoption is going to develop in the near future.

If a state were to enact a statute for embryo adoption, it might consider reviewing the Louisiana statute. Louisiana authorizes "adoptive implantation of fertilized human ovum" when genetic progenitors renounce their parental rights over their cryopreserved embryos in favor of another married couple. The statute requires the donee couple to consent to the adoption of the embryo by executing a notarial act of adoption. Louisiana is not a common law state, and much of its code is premised on French law. Indeed, this statute appears to be premised in part on French law, which accords dignity to the human embryo. The Louisiana statute, however, does not follow the French model of exempting embryos conceived in vitro from legal protection.

Where French law provides for destruction of excess embryos that are not used for IVF implantation, Louisiana law treats the embryo as a judicial person, a biological human being, and allows the embryo to be adopted. The Louisiana statute does not authorize destruction of the excess embryos; rather, the statute favors the use of extra embryos for pregnancies. Also, the Louisiana statute does not address the multiple legal issues associated with embryo adoption, presumably leaving those issues for the courts to resolve on a case-by-case basis. Such issues include tort liability, resolution of support and custody disputes, embryo theft and fraud.

38. See Adoption Child Act, 1926, 16 Geo. 5, c. 29 (Eng.) (authorizing adoption in England after history of forbidding adoption).
40. See Adoption of Tammy, 619 N.E.2d 315, 317-18 (Mass. 1993) ("The law of adoption is purely statutory . . . .") (citing Davis v. McGraw, 92 N.E. 392 (Mass. 1910)).
42. See id. ("Constructive fulfillment of the statutory provisions of this state shall occur when a married couple executes a notarial act of adoption of the in vitro fertilized ovum and birth occurs.").
45. See id. § 9:130 (authorizing adoptive implantation of fertilized human ovum).
B. Applying Gestational Surrogacy Law

Given the difficulties that exist in applying adoption law to embryo adoption, another legal analogy might be considered. Rather than attempting to analogize traditional adoption law to the practice, the law governing gestational surrogacy arrangements may be more suitable. In a gestational surrogacy arrangement, a woman gestates an embryo that is created from the gametes of another couple. Similar to embryo adoption, in gestational surrogacy the birth mother is unrelated to any resulting child. The only difference is that in gestational surrogacy the birth mother intends to relinquish any resulting child upon its birth, whereas in embryo adoption the birth mother intends to keep and raise any resulting child. Applying the law that governs gestational surrogacy arrangements to embryo adoption scenarios would circumvent the problem with applying adoption law by minimizing the difficulties associated with pre-conception and pre-birth consent to “adoption” of embryos.

The theory of treating gestational surrogacy and embryo adoption as legally analogous is consistent with the holdings in noteworthy decisions of the courts in California and Massachusetts. In Johnson v. Calvert and Culliton v. Beth Israel Deaconess Medical Center, the courts determined that adoption law is inapplicable to gestational surrogacy arrangements. In Johnson, the California court ruled that “gestational surrogacy differs in crucial respects from adoption.” In Culliton, the Massachusetts court in Culliton ruled that adoption law applies only when the birth mother has a genetic

46. For a discussion of the inapplicability of adoption law to the donation of embryos, see supra notes 24-45 and accompanying text.

47. A Massachusetts court has described the process as one in which “the birth mother has had transferred to her uterus an embryo formed through in vitro fertilization of the intended parents’ sperm and egg.” R.R. v. M.H., 689 N.E.2d 790, 795 n.10 (Mass. 1998) (noting different considerations concerning IVF and surrogacy).

48. In a gestational surrogacy arrangement, the birth mother and child are not genetically related except in the situation where one of the genetic parents is a blood relative of the birth mother. See id.

49. 851 P.2d 776, 784 (Cal. 1993) (finding legal parents to be genetic parents, not birth mother who was not genetically related to child, and rejecting birth mother’s argument that adoption statute prohibited arrangement).

50. 756 N.E.2d 1133, 1136 (Mass. 2001) (ruling that genetic parents are legal parents of child being carried by pregnant surrogate who had no genetic connection to child in her womb and that adoption laws do not bar arrangement). Culliton was an uncontested case where the court employed its equity jurisdiction. See id.

51. See Johnson, 851 P.2d at 784 (ruling that gestational surrogacy is different from adoption and therefore adoption statute does not apply); see also Culliton, 756 N.E.2d at 1137-38 (distinguishing gestational surrogacy arrangements in which birth mother is unrelated to child from traditional surrogacy arrangements in which birth mother is also genetic mother of child).

52. Johnson, 851 P.2d at 784 (stating that gestational surrogacy is not subject to adoption laws because it differs significantly from adoption).
relationship to the child. These cases suggest that in the reproductive technology arena, adoption law only applies to traditional surrogates who have a genetic relationship to the child. It does not apply in cases of gestational surrogacy, where the birth mother is genetically unrelated to the child. Because a woman gestating an “adopted” embryo also bears no genetic relationship to the resulting child, the situation should be treated like gestational surrogacy arrangements instead of like traditional adoption arrangements. In other words, if embryo “adoption” and gestational surrogacy are basically the same reality, they ought to be treated similarly and independently from traditional adoption law concepts. If embryo adoptions are treated the same as gestational surrogacies, then embryo adoption arrangements should also be governed by the terms of the contract that the parties execute.

Contracts memorializing the intent of the parties in connection with embryo “adoption” should spell out the parental rights of the donor and donee couples. In Culliton, the Massachusetts court upheld the parental rights portion of a contract by holding that when all parties agree, the genetic parents in a gestational carrier arrangement could be placed on the child’s birth certificate as the legal parents. This decision could apply to embryo adoption arrangements by allowing courts to enter a declaratory judgment rendering the intended parents (the donee couple) the legal parents of any resulting child, as long as all parties agree. As discussed in Culliton, delays in declaring the intended parents the legal parents increase the risk of interference with a child’s access to medical treatment during or shortly after birth. Delays could also preclude a child from inheriting from the child’s legal parents should a legal parent die intestate before a declaration of parentage, perhaps leaving support and rights in limbo.

53. See id. (finding that adoption law applies when there is genetic connection but does not when there is no genetic connection, as in gestational surrogacy arrangement).

54. See Culliton, 756 N.E.2d at 1137-38 (stating adoption law only applies when birth mother is related to child).

55. See id. at 1135 (ordering hospital to place genetic parents on birth certificate); see also Belsito v. Clark, 644 N.E.2d 760, 768 (Ohio 1994) (authorizing placement of names of intended parents on birth certificate of child carried by gestational surrogate). In Smith v. Brown, a case involving similar issues, the court was asked to rule on the parenthood issue in an uncontested gestational surrogacy case in which all relevant parties sought a declaration of their rights, but the court discharged the trial judge’s report of the case on procedural grounds. 718 N.E.2d 844, 845-46 (Mass. 1999).

C. Legal Parenthood—The Case for an Intent-Based Approach

Parentage issues become convoluted when couples decide to donate their extra embryos. The purpose of a couple undergoing IVF treatments is to create embryos and produce children to raise. Initially, the couple intends to retain parental rights over children resulting from the IVF treatments. When a couple completes its family, however, both anticipated and unanticipated decisions need to be made about any extra cryopreserved embryos. When a couple decides to donate surplus embryos to another infertile couple, the intent to retain parental rights logically ceases. This change of intent of the progenitor couple should be memorialized in a contract that explains and protects the rights of all involved parties.

Prior to the development of assisted conception techniques, the birth mother was considered the legal mother of any child she bore and, if she was married, her husband was presumed to be the legal father. Although this traditional model happens to coincide with the intent of the parties in an embryo donation scenario (because the birth/intended mother would be considered the legal mother) it does not coincide with most assisted reproductive scenarios. Under the traditional model, for example, a traditional surrogate is considered the legal mother because she bears the child, even though it is not her intention to be the legal mother. A traditional adoption follows, permitting the surrogate to relinquish her parental rights after the birth for the benefit of the intended parents.

In a gestational surrogacy arrangement, a woman serves as the “carrier” of a child conceived in vitro with the fertilized ovum of another woman and gives birth to a child that is not biologically related to her. The intent of this arrangement is that any resulting child is for the benefit of a donee couple, and is not intended to be the child of the birth mother. The intended parents can be the genetic parents. Alternatively, the intended parents might have no genetic connection with the embryo, if that embryo was produced in vitro with gametes provided by donors other than the intended parents. In gestational surrogacy arrangements, the birth mother and genetic mother are not the same woman, forcing the courts to decide who the legal parents are. The existence of gestational surrogacy arrangements forced the law to reconsider the application of the traditional birth mother rule, which only serves to frustrate the intentions of the parties in many assisted reproduction scenarios. The new Uniform

57. See In re Baby M, 537 A.2d 1227, 1253 (N.J. 1988) (holding that genetic mother surrogate was legal mother of child).
58. See Johnson, 851 P.2d at 789 (explaining that embryo implanted in uterus of surrogate was produced in vitro using gametes of intended parents).
59. See In re Marriage of Buzzanca, 72 Cal. Rptr. 2d 280, 284 (Cal. Dist. Ct. App. 1998) (ruling that intended parents were legal parents even though neither had genetic connection to child and wife was not birth mother). In that case, the ovum and sperm of third-party donors were used to produce an embryo in vitro to be implanted in the surrogate. See id.
Parentage Act (U.P.A.) carves out exceptions for establishing parentage in assisted reproduction.

The U.P.A. recites the traditional rule that a woman giving birth to a child establishes maternity, but creates an exception for a child conceived through an approved and legally recognized gestational surrogacy agreement. A state statute that presumes a child born of a surrogate is the legal child of the intended parents would partially achieve the goal of the U.P.A., but of itself does not create a comprehensive method of resolving all the problems that surrogacy can create. Even if a state does not enact the U.P.A., however, the courts will have to carve out an exception to the traditional birth mother rule in gestational surrogacy litigation on a case-by-case basis. It is likely that the exception will be framed in light of the parties' intent in entering the arrangement.

Several decades ago, some commentators predicted that advanced reproductive technology would someday present major challenges to the law. That day has now arrived, and issues created by the no longer theoretical debate are now being litigated in the courts and discussed in the legislatures. The various forms of assisted reproduction now available have essentially nullified former legal perceptions of parenthood based on biology or gestation alone. An intent-based model toward legal parenthood is the only model that survives as reproductive science fast outpaces the law. Under the intent-based theory to legal parenthood, the parties who intend to rear the child are the legal parents. The theory cannot be defeated if the parties' intentions are stipulated in a carefully drafted, legally binding contract that is recognized by applicable law.


61. See id. § 201(a)(4) (illustrating exception to § 201(a)(1)). Article 8 of the U.P.A. suggests a hearing to validate a gestational agreement to declare the intended parents the legal parents of a child born pursuant to the agreement. See id. § 802; see also Michael Morgan, The New Uniform Parentage Act, 25 Fam. Advoc., Fall 2002, at 11, 13 (commenting on gestational agreements in new U.P.A.). The drafters of the new U.P.A. eliminated the word "surrogacy" as being confusing and proposed the use of the term "gestational agreement." Unif. Parentage Act prefatory cmt. to Article 8, 9B U.L.A. 360 (2002). A few states have enacted statutes that exempt surrogacy agreements from the adoption law provision, which makes it a crime to receive compensation for child selling. See, e.g., Ala. Code § 26-10A-34 (1991) ("Surrogate motherhood is not intended to be covered by this section."); Iowa Code § 710.11 (1989) (excluding surrogate mothers from punishment); W. Va. Code § 48-22-803(e)(3) (2001) (excluding fees paid to woman to be surrogate mother).


The intent-based model toward legal parenthood has already been applied in several noteworthy decisions. In *Johnson*, the California court honored the intent of the parties. The court declared that the parents who intended to rear the child were the legal parents even though the wife was not the birth mother.64 The *Johnson* court confronted a parent-age contest between the Calverts, the gamete providers, and Johnson, the gestational surrogate mother who contractually agreed to carry the child for them.65 The court considered the intent of the parties the critical factor in resolving the dispute because the parties intended for the Calverts to rear any resulting child and but for that surrogacy plan the child would not have been born.66 It followed that the intent of the Calverts to have a child trumped any parental right Johnson may have acquired due to the bond she formed with the child during gestation.67 The *Johnson* court determined that under California law, she who intends to raise the child is the natural mother:

Although the Act recognizes both “genetic consanguinity and giving birth as a means of establishing a mother and child relationship, when the two means do not coincide in one woman, she who intended to procreate the child—that is, she who intended to bring about the birth of a child that she intended to raise as her own—is the natural mother under California law.”68

In the opinion of the authors, *Johnson* was correctly decided and the intent theory should also apply to an embryo donation scenario. The transfer of an embryo creates a biological mother and a birth mother. They are two different women, but both cannot be the legal mother.69 In
the context of a gestational surrogacy situation, the intended mother should be considered the legal mother because she intended to raise the resulting child as her own. Likewise, in an embryo adoption scenario, the embryo recipient/birth mother should be considered the legal mother to remain consistent with the intent-based model of legal parenthood.

In addition to protecting the rights of the parents, the application of the intent-based model also protects the child. In *In re Marriage of Buzzanca*, for example, a California court ruled against an intended father who tried to avoid his child support obligation. The man and his wife arranged to have an embryo that was genetically unrelated to either of them implanted in a gestational surrogate. When the child was born, the husband and wife were divorcing and the husband disclaimed any financial responsibility for the child. He argued that an absence of a biological connection to the child relieved him of any support obligation. Reversing the trial judge who had (remarkably) ruled that the child had no parent, the California Court of Appeals identified the couple who had planned to rear the child as the legal parents, emphasizing "the intelligence and utility of a rule that looks to intentions." The need for some rule in embryo donation cases is apparent because, as the California court commented, "[t]hese cases will not go away." Certainly, a strong argument can be made that the rule should require that parental status should "depend upon the preconception intent of the parties."

A New York appellate court decided *Perry-Rogers v. Fasano*, which grew out of a tragic mistake involving an embryo transfer. Two couples were participating in IVF. An embryo of an African-American couple was mistakenly implanted in the uterus of a Caucasian woman. The Caucasian woman delivered two children; one African-American and the other Caucasian. The Caucasian child was the birth mother's genetic offspring; the times. See 1 *Kings* 3:25-26 (describing controversy between two mothers over one child). King Solomon's solution to the dispute was effective, but would not work in a modern court.


71. See id. at 283 (explaining that wife accepted parental responsibility for child and surrogate birth mother appeared in case and disclaimed any interest in child).

72. Id. at 290; see also Appleton, supra note 65, at 89 (discussing *Buzzanca*).

73. *Buzzanca*, 72 Cal. Rptr. 2d at 293 (referring to legal cases growing out of use of modern reproductive technology).

74. John Lawrence Hill, *What Does It Mean to Be a "Parent"? The Claims of Biology as the Basis for Parental Rights*, 66 N.Y.U. L. Rev. 353, 415 (1991). Hill argues that the law refers to intent in many areas and that it is especially useful to do so when the intended parents are the "first cause, or prime movers, of the procreative relationship." Id.

75. 715 N.Y.S.2d 19 (App. Div. 2000) (holding that birth mother did not have visitation rights to child that was accidentally placed in her womb during an IVF procedure).

other child was produced from the embryo of the African-American couple. After considerable dispute between the couples, the African-American child was delivered to its genetic parents, but the Caucasian couple wanted legal visitation with the child. The court ruled for the genetic African-American parents in denying visitation, essentially ruling that the genetic parents were the intended parents. The court, however, did not rely primarily on the genetic connection.\textsuperscript{77} The court noted that if this had been a custody dispute rather than a visitation dispute, it would have awarded custody to the African-American parents because they had arranged for their genetic material to be taken and cryopreserved in an attempt to produce a child of their own.\textsuperscript{78}

An earlier New York decision illustrates the greater importance of intent over genetics as a basis for legal parenthood. A woman became pregnant with a donor ovum fertilized with her husband’s sperm. When the couple divorced, the husband argued that he had a superior right to custody of the child because he was the genetic parent while his wife had no genetic connection to the child. The court rejected this argument. Because both husband and wife intended to become parents, they had equal standing as parents even though the wife was not the biological mother of the child.\textsuperscript{79}

The authors advocate applying the intent-based model to legal parenthood, which emerged in gestational surrogacy cases, to embryo donation cases. Although the traditional birth mother rule coincidentally works for embryo donation, an intent-based model should apply across the board to protect the rights of all parties involved, including the children.\textsuperscript{80} As in gestational surrogacy cases, and pursuant to the Massachusetts holding in \textit{Culliton}, all parties involved could document their intentions in a contract and obtain a declaration of legal parentage prior to the birth of any resulting child.\textsuperscript{81} Such a declaratory judgment would resolve the

\textsuperscript{77} The court noted, however, that genetics are not entirely irrelevant and that with “current reproductive technology, the term ‘genetic stranger’ can no longer be enough to end a discussion.” \textit{Perry-Rogers}, 715 N.Y.S.2d at 23.

\textsuperscript{78} See \textit{id.} at 24 (stating that even if Fasano sought custody, child would be in custody of Rogers).


\textsuperscript{81} See \textit{Culliton} v. Beth Israel Deaconess Med. Ctr., 756 N.E.2d 1133, 1139 (Mass. 2001) (stating that parenthood can be determined in pre-birth declaratory action and that genetic/intended parents in gestational surrogacy arrangements are legal parents). This determination should also apply in an embryo adoption scenario so that the intended parents (that is, the donee couple) can be adjudi-
problem of the donor couple potentially retaining parental rights when donating embryos. It is precisely at the time of donation of the embryo, when the parties are all in agreement, that an uncontested declaratory judgment action would be most effective. Resolving the respective rights and liabilities of the parties after a child is born would leave too many potential disputes to be resolved.82

While the authors advocate the intent-based model of legal parenthood to assisted conception scenarios, it is important to note that only the traditional birth mother model should apply to natural conception. For example, a man who mistakenly impregnates a woman should not be able to invoke his lack of intent to bring a child into the world to avoid support obligations.83 In such circumstances, the intent of the parties is irrelevant and the traditional birth mother rule and presumption that her husband is the legal father should apply. The intent-based model to legal parenthood is appropriately applied to assisted reproduction scenarios, but not to natural forms of conception. Existing case law does, and any new statutes should, reflect the fundamental differences and purposes in natural versus assisted conception.

D. Are Embryos Property, Persons or in an Interim Category?

Property rights include the rights to control, possess, use, exclude, profit from and dispose of assets.84 Property rights complicate an analysis of embryo donation. While blood, hair, semen, eggs, teeth and skin are routinely donated without causing legal problems, the issue becomes more complicated when dealing with an embryo because two people, rather than one, have equal rights to it.85 The law treating human body cated the legal parents prior to birth, even though they are not the genetic parents.

82. 82. See Jaeger, supra note 12, at 10 (clarifying that legal parentage prior to child’s birth provides stability for that child from moment of birth by establishing custodial rights and determining who may make medical decisions on behalf of child).

83. See id. at 8 (stating that boundaries must be drawn to combat attempted application of new law to accidental pregnancies; see also Pamela P. v. Frank S., 449 N.E.2d 713, 714 (N.Y. 1983) (stating that father cannot raise as defense in paternity matter that mother had defrauded him into believing she was using contraception prior to their having sexual intercourse during which child was conceived).

84. See BLACK'S LAW DICTIONARY 1233 (7th ed. 1999) (defining property); see also Barry Brown, Reconciling Property Law with Advances in Reproductive Science, 6 STAN. L. & POL'Y REV. 73, 75 (1995) (discussing property rights in organs and tissues); Roosevelt, supra note 80, at 80 (analyzing body as property).

85. See Roosevelt, supra note 80, at 82 (noting body parts that can be transferred); see also Brown, supra note 84, at 77 (questioning whether embryos should be treated as property of one or other of decedent’s estates or whether embryos should be divided as if each decedent was tenant in common whether both gamete providers die simultaneously).
parts, tissues and fluids as property is less than clear. The American Society for Reproductive Medicine has taken the position that gametes and concepti are the property of the donors. But while the law allows some right of donation in the products of one’s body, it does not treat human reproductive material as mere property. One commentator distinguishes a couple’s right to sell its gametes from its right to sell other types of personal property:

The fact that it is appropriate for people to regard gametes as the possession of the provider in the sense that no one (including the government and medical research facilities) may commandeer them does not mean, however, that a gamete provider has the right to sell that material . . . . The liberal ideal of “self-ownership” does not mean that we can do whatever we like with all our body parts.

Accordingly, at least one commentator believes that treating gametes as “commodities” is the “wrong way to conceptualize human beings’ relationships to their genetic material.”

In Davis v. Davis, a Tennessee divorce appeal, the court grappled with how to decide a contest between a divorced couple over the disposition of its cryogenically preserved embryos. The court did not classify embryos as persons because embryos have not been born, or even implanted, or developed to the stage of viability. This accords with the United States Supreme Court’s interpretation of personhood in a constitu-

86. See generally Rubenstein, supra note 1 (containing extensive analysis of inconsistent attempts to resolve disputes over body parts, fluids, tissues, etc.).

87. See Ethical Statement on In Vitro Fertilization, 46 FERTILITY & STERILITY 89S, App. E (1986) (discussing ethical requirements couples must follow when choosing in vitro fertilization). The right of a person to sell property is an ordinary incident of ownership, but the American Society for Reproductive Medicine limits payment to ova donors to compensation for inconvenience, time, discomfort and risk, not the value of the donated ova. See Jay A. Soled, The State of Donors’ Eggs: A Case of Why Congress Must Modify the Capital Asset Definition, 32 U.C. Davis L. Rev. 919, 949 (1999) (noting that in reality ova donors are paid for their eggs and they should receive preferential tax treatment under capital asset definition of tax code).

88. See Unif. ANATOMICAL GIFTS ACT § 2, 8A U.L.A. 33 (1987) (providing for organ donation, but stopping short of endorsing property concept in human body parts through restrictions and prohibiting sales); see also Nat’l Organ Transplant Act, 42 U.S.C. §§ 273-74 (1944) (supporting organ donation, but prohibiting sales); Rubenstein, supra note 1, at 386-88 (analyzing posthumous corporeal rights).

89. Shanley, supra note 22, at 271 (arguing that gametes should not be treated as individual marketable property).

90. Id. at 272 (concluding that conceptual model should be altered from one of ownership of gametes to one of stewardship).

91. 842 S.W.2d 588, 589 (Tenn. 1992) (discussing disposition of cryopreserved embryos represents question of first impression).

92. See id. (stating issue).
tional sense as promulgated in Roe v. Wade. In Roe, the Supreme Court interpreted the word person as used in the Constitution to exclude the unborn. The Tennessee court in Davis also declined to consider embryos as property because treating embryos as property would belittle their potential for human life. The court created an “interim category” that entitled the embryos “to special respect because of their potential for human life.” In deciding Davis, the court permitted the donors who provided the genetic material that created the embryos to “retain decision-making authority as to their disposition.” While Davis rejected an outright property analysis, it held that the husband and wife whose gametes were used to produce the embryo had an ownership interest at least to the extent of having the right to determine disposition of the embryo.

93. 410 U.S. 113 (1973) (finding that fetus does not constitute “person” for purposes of Fourteenth Amendment).


95. See Davis, 842 S.W.2d at 595 (“[A]s embryos develop, they are accorded more respect than mere human cells because of their burgeoning potential for life. But, even after viability, they are not given legal status equivalent to that of a person already born.”); see also Moore v. Regents of Univ. of Cal., 793 P.2d 479 (Cal. 1990) (holding that man did not have property interest in his removed spleen); Haslett, supra note 94, at 203 (finding most commentators believe that embryos are neither persons nor property). Confusion over the property/person distinction is reflected in the view of one commentator who wrote that “[a]lthough embryos are legally chattel[,] the prenatal transfer of property is supplemented by a home study and other processes that are characteristic of adoption.” Crouch, supra note 19, at 32.

96. Davis, 842 S.W.2d at 597 (holding pre-embryos are entitled to special respect because of their potential for human life).

97. Id. at 597. The court concluded that in determining the disposition of pre-embryos: (1) the first choice is the preferences of the progenitors, (2) if those choices are in conflict or cannot be ascertained, a pre-existing agreement should be consulted and honored, and (3) only if such an agreement does not exist should the relative interests of the parties be considered, with the interest of the party seeking to avoid procreation favored, unless the other party cannot achieve parenthood by means other than utilization of the pre-embryos in question. See id. at 604 (applying disposition analysis in finding that pre-embryos were to be disposed of and neither party could use them to achieve parenthood).

98. See Samantha Hayden, The Ambiguous State of Cryogenically Preserved Embryos: The Legacy of Davis v. Davis, 15 Mass. Fam. L.J. 91, 96 (1997) (summarizing decision in Davis). While the embryos are frozen, both gamete donors have the same level of interest in them. Haslett, supra note 94, at 211 (analyzing difference between birth mother’s relationship and donor’s relationship to embryo).
The Tennessee court declined to treat the product of human conception as mere property subject to division, and it appears unlikely that any court will ever treat embryos simply as property subject to division under a community property or equitable property divorce statute. Indeed, the proponents of embryo adoption who believe that the products of conception have human existence are likely to raise the strongest objections to treating embryos as mere property.

In A.Z. v. B.Z., a Massachusetts court agreed with the Davis analysis, at least with respect to the classification of cryopreserved embryos in an interim category between personhood and property, ruling that embryos are deserving of special respect. According to the Massachusetts court, the law treats cryopreserved embryos as something between persons and property. An interim category is necessary because it enables the courts to avoid having to apply two inapplicable areas of the law: the law of custody, which applies only to children, and the law of personal property. There are only a few decisions on the status of cryopreserved embryos, of which A.Z. v. B.Z. reflects the prevailing view.

E. Embryo Adoption and the Implications for Abortion Rights

The use of the phrase "embryo adoption" might suggest that embryos are persons with full legal rights like post-natal babies who are adopted in the traditional manner. The Snowflake Agency promotes embryo adoption and embraces its Christian pro-life stance in using the phrase embryo adoption, in part, to elevate the status of the embryo to that of a person. Such a view, however, is not consistent with the legal status of the embryo. Affording embryos the status of persons would erode the legal theory on which the Supreme Court's abortion decisions are based. The longer the process is called embryo adoption, and the more common the phrase becomes, the more society may view embryos as persons enti-

99. See Davis, 842 S.W.2d at 591 (holding excess embryos resulting from IVF procedure are not property subject to equitable division).
100. 725 N.E.2d 1051, 1059 (Mass. 2000) (holding in divorce case that husband could obtain injunction preventing wife from using or donating cryopreserved embryos).
101. See id. at 1059 (discussing policy rationales behind holding); see also King, supra note 22, at 113 (noting that use of "special respect" category in A.Z. v. B.Z. eliminated need to resolve dispute over embryos by using custody or property law analysis).
102. See King, supra note 22, at 124 ("[T]he 'special respect' perspective is the currently prevailing view on the legal status of frozen embryos . . . .").
103. The Snowflake program is run by an organization known as Nightlight Christian Adoptions. See A Tale of Two Families, supra note 17 (explaining operation of Snowflake program).
104. For a discussion of the prevailing legal view on the status of the embryo, see supra notes 84-102 and accompanying text.
105. See Bush To Promote "Embryo Adoption", supra note 15 (explaining that elevating status of embryo could support effort to roll back abortion rights by undermining theory of Roe v. Wade).
EMBRYO DONATION

F. Ensuring the Dignity of the Embryo

A continuous increase in the practice of embryo adoption will force the development of legislative or court protocols to govern the adoption procedure. For reasons discussed previously in this Article, the standards developed should be consistent with the dignity or special respect concepts and should not be based on existing adoption law, property law or child custody/personhood law. Under such standards, couples with embryos that were not used in their IVF treatments would be able to donate them for use by an “adopting” couple, or person, as long as the innate dignity of the embryos is preserved. In order to promote this dignity, the donee couple must agree to assume responsibility for any child produced by the IVF and adoption procedure. This includes assuming responsibility for children born with genetic and/or physical abnormalities.

The law should also require a judicially pre-approved contract spelling out such issues as the responsibility of the donee couple for child support. If the donor couple is to be allowed visitation with any resulting child, this should also be covered in the agreement. As to both child support and visitation, however, a court (not the contract) will have final power to resolve any disputes.

The argument might be made that the dignity of the embryo should preclude commercial sales. While embryos are not children in the legal sense, some will be offended by the idea that businesses could participate in the selling of human embryos. Nevertheless, the reality is that commercialization of the embryo market is inevitable, given the already common practice of selling ova and sperm.106 But even aside from the reality that simple demand for embryos will inevitably invite commercialization in a free market is the practical impossibility of drafting and enforcing laws that would prevent it. Clinics would find ways to compensate donors for their time, pain, inconvenience, travel, medical and other expenses and charge “service fees” that in total would amount to considerable amounts and, thus, avoid the stigma associated with outright sales of embryos. The

106. See Shanley, supra note 22, at 257 (citing payments to egg providers); Karen Springen & David Noonan, Sperm Banks Go Online, NEWSWEEK, Apr. 21, 2003, at E14 (citing sales of sperm over Internet). One example of the commercialization of assisted reproduction technology is a radio commercial used in Washington, D.C. area traffic reports that proclaims, “Genetics and IVF Institute of Virginia. Have a baby or your money back. Guaranteed.” Alvare, supra note 80, at 2 (discussing frequent use of new reproductive technologies).
Snowflake Agency, for example, promotes embryo adoption, and it collects a fee from the adopting parents. The Agency claims on its website that the adopting parents' fee includes a home study, the matching of couples, maintenance of files and preparation of legal documents. Such justification for fees avoids the stigma that the Agency is involved in facilitating the sale of embryos between one couple and another. Justifying fees also permits clinics to avoid the language in some state statutes that might be interpreted to prohibit the payment of money for the transfer of cryopreserved embryos.

While egg-donation and surrogacy agreements routinely and justifiably provide reimbursement for “inconvenience, time, discomfort, and for the risk undertaken,” any payment transactions involved in the transfer of donated embryos might be considered suspect. In comparison to egg donations, which involve medical care and inconvenience to the donor, arguably justifying payment of fees, donation of already-produced cryopreserved embryos requires no further medical treatment for the donors. Therefore, anything other than a reasonable fee for matching couples in an embryo donation might be considered highly suspect and violative of statutes prohibiting the sale of embryos. Even if anti-commercialization legislation was drafted and enforced, however, it would likely encounter constitutional problems as constituting a restriction on the “presumptive primacy of procreative liberty.”

Certainly there are many that would argue that any governmental attempt to prevent access to reproductive technology capable of being marketed to infertile couples intrudes on fundamental liberty interests.

107. For a detailed story of an embryo match made by the Snowflake Agency, see supra notes 17-20 and accompanying text.


109. See id. (listing reasons for program fees).

110. See ADOPTION AND REPRODUCTIVE TECHNOLOGY LAW IN MASSACHUSETTS § 10.3.8 (Susan Crockin ed., 2000) [hereinafter CROCKIN] (commenting that some state statutes might be interpreted to prohibit sales of embryos).

111. Rubenstein, supra note 1, at 387 (discussing American Society for Reproductive Medicine’s position on fee arrangements for egg donors); see also Susan L. Crockin, Collaborative Reproduction: An Invitation to Legislate?, 72 FERTILITY & STERILITY 5 (1999); Stolberg, supra note 16, at 01G (noting that egg donors are paid up to $15,000, but donee of embryo has to pay only cost of embryo transfer, i.e., about $3,000). Similar issues arise with respect to commercial sales of sperm on the Internet. See Springen & Noonan, supra note 106, at E14 (discussing sale of gametes on websites offering sperm produced by donors with certain physical appearances, employment or religion).

G. Potential Obstacles to Embryo Donation

Even if there is no money or sale involved, some statutes might even preclude the mere donation of embryos. For example, the Massachusetts statute prohibits the sale, transfer, distribution or donation of embryos for experimental purposes.\footnote{See Mass. Gen. Laws Ann. ch. 112, § 12J (West 1996) ("No person shall knowingly sell, transfer, distribute or give away any fetus for a use which is in violation of the provisions of this section."). For purposes of this statute the word "fetus" includes an embryo or neonate. See id. Conviction for violation of the statute can be punished both by fine and imprisonment. See id. For a list of state laws prohibiting research on embryos and payments for embryos, see Table III: State Laws on Embryo Research and Commercialization, at http://www.kentlaw.edu/islt/TABLEIII.htm (last visited May 24, 2003).} Whether such statutes apply to embryo donation depends on whether the donation of embryos to treat infertility amounts to "experimentation." Such a question is a specific statutory interpretation for the courts to decide,\footnote{See Crockin, supra note 110, § 10.3.5 (discussing different interpretation of statutes prohibiting experimentation on embryos).} although as IVF becomes more accepted as a common medical procedure rather than an experimental one, it becomes less and less likely that such treatment for infertility will be considered "experimentation." Furthermore, in Massachusetts, some protection is offered to those experimenting with embryos. When a medical procedure using embryos is contemplated, the institutional review board can approve and document it. The protocol and approval can then be submitted to the district attorney, where the documentation can serve as a defense in any criminal action brought under the experimentation statute.\footnote{See Mass. Gen Laws Ann. ch. 112, § 12J(a)(VI) (1996).}

As long as some states maintain criminal statutes that arguably could apply to IVF and embryo adoption, persons considering being embryo donors, donees or intermediaries must carefully consider the potential criminal liability.

H. Who Is Eligible to Receive Donated Embryos?

It is blackletter law that the legal system should promote the best interests of children. It must therefore be asked who should qualify as a potential donee parent of surplus cryopreserved embryos. As a point of reference, when an embryo donation issue reaches a court, judges might initially apply the same principles that govern qualifying potential parents in traditional adoptions.

In some jurisdictions, an unmarried person can legally adopt, and by the same token, a single woman should be eligible for embryo "adoption." Single women who want to parent alone now routinely employ artificial insemination by donor sperm to get pregnant. Following this trend, it is likely that single women will have a legally recognized right to gestate an "adopted" embryo. There is no longer a stigma attached to nonmarital children being raised in single-parent homes, and it is unlikely that legisla-
tures will intervene in fruitless attempts to prohibit use of donated embryos by unmarried women.\textsuperscript{116}

When IVF first emerged, only couples medically proven to be infertile could use the service.\textsuperscript{117} Now the standards are more lenient and a showing of idiopathic infertility should suffice.\textsuperscript{118} The law is unlikely to impose an infertility standard as a prerequisite to “adopting” surplus embryos. Given the trend with IVF, it is unlikely that the service will be limited to a certain genre of people. In many states, such as Massachusetts, same-gender couples can adopt, and, therefore, same-gender couples would be eligible embryo donees.\textsuperscript{119} An attempt to exclude same-gender couples and/or singles from adopting embryos is unlikely to withstand judicial scrutiny. A legal requirement for racial matching between donors and donees would be constitutionally unenforceable, as would a judicial enforcement of a racial-matching contract governing embryo transfer. However, even if not specifically enforceable in a court of law, a private arrangement to provide a racial match would presumably not offend the law.\textsuperscript{120}

I. Embryo Creation

Another consideration is whether couples will be able to intentionally create embryos for other couples. Initially, embryo donation surfaced as a solution for the existence of thousands of surplus cryopreserved embryos.\textsuperscript{121} Now, however, couples can create custom-made embryos.\textsuperscript{122}

\textsuperscript{116} See Ralph C. Brashier, \textit{Children and Inheritance in the Nontraditional Family}, 92 \textit{Utah L. Rev.} 158, 189 (1996) (“With more than one in four children born out of wedlock, society today attaches little if any stigma to one’s status as a nonmarital child.”).

\textsuperscript{117} See George J. Annas, Commentaries, \textit{Human Cloning: A Choice or an Echo?}, 23 \textit{Dayton L. Rev.} 247, 260 (1998); see also International Council on Infertility Information Dissemination, \textit{A Glossary of Infertility Terms and Acronyms}, at \url{http://www.inciid.org/glossaryijk.html} (last visited Oct. 25, 2001). Infertility is “[t]he inability to conceive after a year of unprotected intercourse in women under 35, or after six months in women over 35, or the inability to carry a pregnancy to term. Also included are diagnosed problems such as an ovulation, tubal blockage, low sperm count, etc.” \textit{Id}.

\textsuperscript{118} See \textit{A Glossary of Infertility Terms and Acronyms}, supra note 117 (defining infertility). A few states, including Florida, New Hampshire and Virginia, continue to limit the use of surrogacy to infertile couples. For a complete list of surrogacy laws, see \textit{Table IV: State Laws on Surrogacy}, at \url{http://www.kentlaw.edu/islt/TABLEIV.htm} (last visited May 24, 2003).

\textsuperscript{119} See Adoption of Tammy, 619 N.E.2d 315, 318 (Mass. 1993) (holding that adoption statute does not preclude same-gender joint adoption).

\textsuperscript{120} For a discussion of private eugenic arrangements, see infra notes 166-79 and accompanying text.

\textsuperscript{121} Some patients were notified that clinics no longer wanted to store their embryos and some patients who had religious or moral objections to discarding them chose to donate them to other infertile couples. See generally Cooper & Glazer, \textit{supra} note 15 (discussing how embryo adoption started).

\textsuperscript{122} See \textit{Embryo Adoption}, \textit{supra} note 15 (explaining made-to-order embryos). A best-interests-of-the-parents approach will supersede a best-interests-of-the-child approach if eugenic embryo creation is permitted. See \textit{id}. But see Alvare, \textit{supra} note
While embryo donation refers to the donation of an existing embryo, embryo creation involves creating embryos with donated or purchased gametes.\textsuperscript{123} Embryo creation is attractive to couples who lack viable gametes and to those who may favor custom-making their embryos to enhance genetic selection. Embryo creation enables couples to create embryos from the gametes of hand-picked donors.\textsuperscript{124} Without a doubt, embryo creation will fuel heated ethical debates over whether the procedure is tantamount to creating children for adoption or whether it is merely a logical and inevitable extension of single gamete donation.\textsuperscript{125}

Documentation shows that couples have created embryos through IVF for the sole purpose of using the resulting child to save an existing child.\textsuperscript{126} Jack and Lisa Nash's first child, Molly, was born with Fanconi anemia (FA), a rare genetic disease that leaves the inflicted vulnerable to breakdown of bone marrow and at risk for infection and leukemia. The Nashes learned that they both carried a mutation for FA in the same gene and that their children would have a one-in-four chance of developing FA. They also learned that the only way to save Molly was to get her a bone marrow transplant. They underwent IVF with therapeutic intent. The procedure involved creating embryos with their gametes, genetically testing and discarding those embryos with the feared mutation and implanting only healthy embryos. As a result, Adam was born and Molly was cured using blood drained from Adam's umbilical cord. Creating Adam to save Molly raised an ethical debate, but the practice will no doubt be repeated. Presumably, couples like the Nashes have paved the way for future use of embryo creation as a means of addressing medical problems.\textsuperscript{127}

\textbf{J. Post-birth Contact Between Donor and Child}

In recent years there has been growing interest in the theory of "open adoption."\textsuperscript{128} This theory refers to the fact that subject to the right of

\textsuperscript{80} at 1 (arguing that potential to make pre-designed child by embryo selection is valid reason for government regulation of assisted reproduction, as distinguished from coital reproduction).

\textsuperscript{123} See generally Cooper & Glazer, supra note 15 (defining both embryo creation and embryo donation).

\textsuperscript{124} See generally id. (describing benefits of embryo creation).

\textsuperscript{125} See generally id. (describing controversy surrounding embryo creation).

\textsuperscript{126} See David Wasserman, Having One Child to Save Another: A Tale of Two Families, 23 PHIL. & PUB. POL. 'Q. 21 (2003) (explaining how some families use IVF to have child in order to save existing child from dying because IVF guarantees bearing child with compatible tissue); Gurney Williams III, Made to Order Baby, PARENTING, June/July 2001, at 100 (discussing conception of child to produce tissue donor to save earlier-born child).

\textsuperscript{127} See Williams, supra note 126, at 100 (detailing Nash's story).

\textsuperscript{128} See generally Annette Ruth Appell, Blending Families Through Adoption: Implications for Collaborative Adoption Law and Practice, 75 B.U. L. REV. 997, 1013-20 (1995) (discussing utility of open adoption); Lawrence W. Cook, Open Adoption:
final decision-making in the adoptive parents, legislation\textsuperscript{129} or court rulings,\textsuperscript{130} some form of post-adoption visitation exists between the child and its biological parents. The Snowflake Agency, for example, encourages open adoption and most likely leaves visitation arrangements up to the couples who use the service. Because embryo "adoption" is not legal adoption, statutes and case law applying open adoption rules do not expressly apply. Nothing bars the parties from entering into a visitation contract enabling the embryo donors to visit with any resulting child. A court, however, may decline to enforce such an agreement.\textsuperscript{131}

Open embryo adoption arrangements can be fraught with difficulty. Case law involving known sperm donors offers an analogous point of reference. Although donor insemination statutes exist in some states to protect the rights of donors, they usually only apply to anonymous donors and/or to married women or contemplate that the insemination be performed by a physician.\textsuperscript{132} Therefore, such statutes do not protect known sperm donors and they may not even apply when anonymous donors donate to unmarried women or when women inseminate themselves without the assistance of a physician.\textsuperscript{133} In addition to the known donor's rights being at stake, the donee's rights can also be compromised, as evidenced by cases where known donors have successfully asserted parental rights.\textsuperscript{134}

Courts have weighed factors such as the mother's marital status and the existence of an agreement between the parties when determining a do-

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\textsuperscript{130} See Adoption of Vito, 728 N.E.2d 292, 298-99 (Mass. 2000) (providing in dictum that court hearing adoption petition may employ its equity powers to provide for post-adoption visitation with biological parents).

\textsuperscript{131} For a story on open embryo adoption, see supra notes 17-23 and accompanying text.

\textsuperscript{132} See Brashier, supra note 116, at 191 n.326 (noting states allowing artificial insemination for married women, anonymous donors or by physician); \textit{Table I: Artificial Insemination Donation}, at http://www.kentlaw.edu/islt/TABLEI.htm (last visited May 24, 2003) [hereinafter \textit{Table I}] (listing states with donor insemination statutes).

\textsuperscript{133} See Brashier, supra note 116, at 191 n.326 (describing difficulty with absence of artificial insemination statutes). Prior to the enactment of New Jersey's artificial insemination statute, a known sperm donor who provided sperm to an unmarried woman was considered the legal father, even if that was not his original intention. See C.M. v. C.C., 377 A.2d 821, 824 (N.J. Juv. & Dom. Rel. Ct. 1977) (holding that friend of unmarried woman who donated sperm for artificial insemination is child's legal father).

nor's parental rights.\textsuperscript{135} Although the existence of an open embryo adoption contract would certainly help to clarify the interests of all the parties, there is no guarantee that the original intent of the parties will be honored in the event that one of the parties has a change of heart.

In the opinion of the authors, anonymous embryo donations resembling the closed adoption system are less risky than having an open arrangement. Some programs maintain the anonymity of embryo donors, providing adopting parents with the gamete providers' medical information only.\textsuperscript{136} The statutes that exist in some states to extinguish the rights and responsibilities of sperm donors could offer a point of reference for couples who anonymously donate their embryos. Many states, for example, have statutes that protect anonymous donors participating in artificial insemination by nonspousal donors (AID).\textsuperscript{137} Courts have construed these statutes to mean that donors have no parental responsibilities and that any resulting children have no right to inherit from their genetic father, even if his identity is later discovered.\textsuperscript{138} Such statutes were enacted to protect donors from the possibility of facing paternity suits as a result of their donations.\textsuperscript{139} Statutes similar to those that protect sperm donors could be enacted for embryo donors, insulating donors from any later claim by the donee parents or resulting children. In the absence of a statute governing the matter, a court faced with a dispute between donee parents or resulting children against the gamete providers could reference law dealing with anonymous sperm and egg donors. Although the determination of any outcome would be speculative at best, donors are more likely to be protected in anonymous situations than in situations where the donors are known.

If the legal status of the embryo donee is clarified by a post-birth adoption of the child and if the state recognizes open adoption, the court could construe that law to provide for visitation. While it would be ideal

\textsuperscript{135} See Brashier, supra note 116, at 191-92 (illustrating different factors that courts use in determining donor's parental rights).

\textsuperscript{136} See Embryo Adoption, supra note 15 (discussing anonymous embryo adoption).

\textsuperscript{137} See Brashier, supra note 116, at 189 (discussing AID statutes). The statutes were enacted to define the rights and obligations of the parties when the donor is anonymous. See id. For a list of states with donor insemination statutes, see Table I, supra note 132.

\textsuperscript{138} See Brashier, supra note 116, at 190-91 (discussing how courts construe AID statutes and extinguish all rights and responsibilities of anonymous donor); see also, e.g., In re R.C., 775 P.2d 27, 33 (Colo. 1989) (noting that: (1) agreement between mother and donor was not considered in determining parental rights and responsibilities where donor was anonymous; (2) anonymous donors likely would not have donated semen if they could have later been found liable for support obligations; and (3) women likely would not use anonymously donated semen if they might have to share parental rights and duties with donor/stranger). For a list of the twenty-two states where anonymous sperm donors are not the legal fathers, see Table I, supra note 132.

\textsuperscript{139} Brashier, supra note 116, at 190 (discussing rights and obligations of anonymous sperm donors as parents to resultant children).
for courts to honor the intent of the parties with regard to visitation as outlined in their pre-natal contract, it is doubtful that a court would enforce it to compel visitation over the objections of the adoptive parents. Moreover, requiring all recipient couples to proceed with traditional adoption processes to terminate the rights of biological parents would be administratively burdensome and could deter the development of embryo donation.

In an ideal world in which embryo adoption flourished, the donor’s parental rights would be legally terminated upon embryo transfer. Also in this ideal world, a declaration of legal parentage of the donees would be permitted, allowing the names of the intended parents to be placed on a birth certificate. Also, a hearing would be held to validate pre-birth contracts, as the new U.P.A. suggests, and such contracts would be enforceable. If such procedural steps were permitted by the law to ensure the enforceability of a pre-birth contract, it is more likely that a court would enforce any visitation arrangement stipulated in that contract. The problem is that these are ideal solutions, but in most jurisdictions there is little or no legal basis for them. It is unlikely that all state legislatures will move to provide a statutory basis for pre-birth embryo contracts. Accordingly, it will be left to the courts to gradually create procedures to deal with the matter.

K. Inheritance Considerations

The debate over whether the intended parents, the biological parents or the birth mother are the legal parents has obvious implications on the inheritance rights of children resulting from reproductive technologies. Before reproductive technologies existed, posthumously born children were always born within approximately nine months of their biological fathers’ deaths. Such children are considered legal heirs and are entitled to...


141. In Massachusetts, where same-gender co-parent and step-parent adoptions are becoming increasingly common, the Probate and Family Courts now permit motions to waive home studies and motions to waive the six month residency requirements administratively. See Amy Joy Galatis, Can We Have a “Happy Family”? Adoption by Same-Sex Parents in Massachusetts, 6 SUFFOLK J. TRIAL & APP. ADVOC. 7, 13 (2001) (noting that Massachusetts courts routinely grants motions to waive home study requirement). A Massachusetts state statute authorizes the court to waive the home study and residency requirement when one of the petitioners is the parent of the child being adopted, which is very common in same-gender adoptions and step-parent adoptions. See MASS. GEN. LAWS ANN. ch. 210, § 5A (West 1998).
inherit from their fathers' estates. Cryopreservation technology for embryos, however, permits the existence of "heirs" several years after the death of either one or both genetic parents. The inheritance rights of these children are far less certain than of those conceived through sexual intercourse and born within nine months of their fathers' deaths.

Inheritance issues of potential heirs were presented in 1984, when an American couple who had no will and a substantial fortune died in an airplane accident two years after depositing fertilized ova in a clinic in Australia.\textsuperscript{142} The clinic storing the embryos was inundated with calls from potential surrogates, attempting to cash in on potential inheritance rights of any resulting children.\textsuperscript{143} Since then, several cases have presented similar questions. For example, in the California case of \textit{Hecht v. Kane},\textsuperscript{144} the former wife and children of a deceased man opposed the release of his cryopreserved sperm to his mistress, to whom he had willed the gametes. Furthermore, they sought a judicial order to destroy the sperm. On appeal, the court ruled that no public policy prevented a single woman from using sperm for post-mortem conception even if it were to extend the administration of the estate pending possible conception and birth of afterborn children.

In the Massachusetts case of \textit{Woodward v. Commissioner of Social Security},\textsuperscript{145} the court determined that artificially conceived children born more than nine months after their fathers' deaths may inherit under certain circumstances. The court ruled that a posthumously conceived child may inherit if the surviving parent or legal representative proves the decedent is the genetic father of the child, the decedent affirmatively consented to use of sperm for posthumous conception and the decedent consented to

\begin{itemize}
  \item \textsuperscript{142} See State of Victoria, supra note 7, at 741 (recommending restrictions on embryo cryopreservation and donation); see also Constance Holden, \textit{Two Fertilized Eggs Stir Global Furor}, 225 SCI. 35 (1984) (explaining that Maria and Elsa Rios died in plane crash, leaving significant fortune and no will).
  \item \textsuperscript{143} See Holden, supra note 142, at 35 (explaining issue was further complicated because sperm used was not husband's).
  \item \textsuperscript{144} 20 Cal. Rptr. 2d 275, 289-90 (Cal. Ct. App. 1993) (finding that artificial insemination with decedent's sperm does not violate public policy).
  \item \textsuperscript{145} 760 N.E.2d 257, 259-60 (Mass. 2002). After Lauren Woodward's husband, Warren, was diagnosed with leukemia, the childless couple had Warren's sperm medically withdrawn and preserved in case his leukemia treatment left him sterile. See \textit{id.} at 260. Warren died soon thereafter. See \textit{id.} Two years later, Lauren gave birth to twin girls conceived through artificial insemination using her deceased husband's preserved sperm. See \textit{id.} Subsequently, Lauren applied for Social Security survivor benefits for her children, but was denied. See \textit{id.} at 260-61. The administrative law judge ruled that the children were not "ascertainable heirs as defined by the intestacy laws of Massachusetts." See \textit{id.} at 259. On certified questions submitted by the federal court to the state supreme court it was determined that a posthumously conceived child may inherit from a decedent under certain circumstances. See \textit{id.}
\end{itemize}
the support of any resulting child.\textsuperscript{146} Even where such circumstances exist, however, time limitations may preclude a posthumously conceived child’s inheritance rights.\textsuperscript{147}

Clarification of inheritance rights of any resulting children is another benefit to obtaining a declaration of legal parentage prior to the child’s birth in an assisted reproduction scenario. If such a declaration can be obtained under applicable state procedure, legal parentage is established, extinguishing any rights of the child to the estate of the embryo donors’ estates. Nevertheless, it is advisable for embryo donors to establish in their wills their intent to exclude from inheritance any children resulting from their donated embryos (if that is in fact what they wish). If a will does not contain such language, it is possible that a resulting child could make a claim against its biological parents’ estates under a pretermitted child statute, which protects biological children who are not specifically provided for in their parents wills. The law presumes that such children were left out mistakenly and permits them to inherit, absent express language in the will excluding them from inheriting. Therefore, in order to avoid such claims, biological parents who donate their embryos should consider expressly excluding children conceived by embryo donation in their wills.

Intestacy laws govern the estates of those embryo donors who die without wills. For example, under the Massachusetts intestacy statute, if a decedent leaves issue, the issue inherits a fixed portion of his real and personal property, subject to debts and expenses, the rights of the surviving spouse and other statutory payments.\textsuperscript{148} The term “issue” means all lineal (genetic) descendants, which includes children resulting from the embryos produced by the gametes of the deceased person. Furthermore, the Massachusetts intestacy statute does not contain an express, affirmative requirement that posthumous children must “be in existence” as of the date of the decedent’s death.\textsuperscript{149} Arguably, children who come into existence after the deaths of their genetic parents could have a claim against the estates of their parents when legal adoption of the children has not occurred before their deaths. Furthermore, children born out of wedlock are for the most part treated equally with marital children, and because posthumous children born after their fathers’ deaths are technically not born in the marriage,\textsuperscript{150} they are entitled to the same rights and protec-

\textsuperscript{146}. See id. at 259 (stating surviving parent has to demonstrate genetic relationship between child and decedent, as well as demonstrate that decedent affirmatively consented to posthumous conception and subsequent support of child).

\textsuperscript{147}. See id. (explaining that time limitations are sufficient to bar inheritance rights even if surviving parent is able to demonstrate all requisite criteria for support).

\textsuperscript{148}. See Mass. Gen. Laws Ann. ch. 190, § 1 (West 1990) (discussing widow’s share of property not provided for in will).

\textsuperscript{149}. See id. § 8 (stating that posthumous children are considered living at death of parent).

\textsuperscript{150}. See Mass. Gen. Laws Ann. ch. 209C, § 5(a) (West 1998) (stating that when child’s birth occurs within three hundred days of termination of marriage by
tions of the law as children conceived before death.\textsuperscript{151} Although legislators did not anticipate such claims when they drafted intestacy statutes, applying such laws to embryo donation would leave embryo donors' estates subject to claims by any and all genetic children, except those adopted after birth. Although the success of these types of claims is not certain, couples considering donating their embryos should consider having a will to negate any such possibility.

L. \textit{Misappropriation of Embryos}

California has enacted a law making it a crime to misappropriate embryos.\textsuperscript{152} As a matter of first impression, one might think that imposition of criminal liability for misusing embryos is unnecessary. However, embryos have real financial value, and people desperate to have a birthed child may pay substantial amounts of money for IVF without knowing that the child they produce was actually generated by another couple. This situation actually occurred at a clinic at the University of California at Irvine. In 1995, it became public that ova produced by female patients were being transferred to other patients for profit.\textsuperscript{153} Later it was learned not only that ova were misused, but also that as many as five hundred couples were potential victims of embryo misappropriation at the University clinic.\textsuperscript{154}

M. \textit{Malpractice Liability}

Whenever medical services are engaged there is potential tort liability if those services are not performed at a level of due care and the patient is injured by the act or omission. No reported malpractice cases to date involve voluntary and consensual embryo adoption, but the potential for malpractice in such cases is illustrated by cases involving other reproductive technologies.

Obviously, a physician who implants in another patient an embryo produced by a couple without the couple's permission is exposed to financial liability. The lawsuits that grew out of the University of California at

\textsuperscript{151} See \textsc{Mass. Gen. Laws Ann.}, ch. 209C, § 1 (West 1998) (providing children born out of wedlock are entitled to same protections as all other children).

\textsuperscript{152} See \textsc{Cal. Penal Code} § 367g (1999) (making crime punishable by three, four or five years, a $50,000 fine or both). For a description of California legislation and regulation of Assisted Reproductive Technology ("ART") programs, see \textit{Section IV: Regulation and Oversight of ART Programs}, at http://www.ucop.edu/health affairs/reports/art/sec4.pdf (last visited May 24, 2003).

\textsuperscript{153} See Blum, \textit{supra} note 2 (describing University of California at Irvine embryo scandal).

\textsuperscript{154} See \textit{id.} (reporting study of inventory, tank logs and other documents by attorney for clinic patients).
Irvine scandal\textsuperscript{155} are testimony to that. Injuries to the couples whose eggs or embryos were misappropriated include a lost ability to have children, inability to raise the resulting child in their own religion when the embryos were given to couples practicing a different religion and depression from the belief that they have biological children they will never know.\textsuperscript{156}

A similar yet distinguishable situation exists when, without the knowledge of a female patient, medical personnel fertilize her eggs with sperm of a man other than her husband or male companion and then implant the resulting embryo. Although it did not involve embryos, the infamous case of Dr. Cecil Jacobson, who used his own sperm to impregnate his artificial insemination patients rather than that of donors or husbands,\textsuperscript{157} highlights a potential danger for misuse of gametes in the IVF process. An incident in Florida also illustrates this danger: a Caucasian woman and her African-American husband provided their eggs and sperm for the clinic to fertilize in vitro as part of the IVF procedure. Subsequent DNA testing showed that the twins born from this procedure were genetically related to the wife only. The clinic used the sperm of someone other than the husband to produce the embryos.\textsuperscript{158} This resulted in a lawsuit against the clinic, which was settled. Alleged damages included the loss of the chance to have a child that was genetically related to both the husband and wife, the consequent divorce of the couple and an agreement that the husband was not liable for support of the children.\textsuperscript{159} Negligence in producing and implanting embryos was also illustrated by the \textit{Perry-Rogers} case discussed earlier in this Article, where a woman gave birth to two children of different races.\textsuperscript{160}

Wrongful birth cases are also relevant. For example, in \textit{Viccaro v. Milunsky},\textsuperscript{161} a Massachusetts court ruled that a married couple who was given negligent preconception genetic counseling could recover damages for extraordinary medical and educational costs associated with the birth

\begin{itemize}
\item \textsuperscript{155} For a discussion of the embryo scandal at the University of California at Irvine, see \textit{supra} notes 152-54 and accompanying text.
\item \textsuperscript{156} See Liebler, \textit{supra} note 76, at 22 n.20 (summarizing various types of claims growing out of University of California at Irvine fertility scandals).
\item \textsuperscript{158} See Liebler, \textit{supra} note 76, at 37 (discussing details of Michael and Elizabeth Higgins).
\item \textsuperscript{159} See Liebler, \textit{supra} note 76, at 37-44 (detailing reasons for settlement); see also Sarah Lyall, \textit{British Judge Rules Sperm Donor Is Legal Father in Mix-Up Case}, N.Y. TIMES, Feb. 27, 2003, at A5 (requiring man whose sperm was mistakenly used to fertilize eggs of woman undergoing IVF treatment to pay child support and giving English couple custody of child, but granting sperm donor some input in raising child).
\item \textsuperscript{160} For a further discussion of the facts of \textit{Perry-Rogers v. Fasano}, see \textit{supra} notes 75-78 and accompanying text.
\item \textsuperscript{161} 551 N.E.2d 8 (Mass. 1990).
\end{itemize}
of a child with severe genetic defects. The court reasoned that the couple would not have had the child if the genetic counselors had informed them of the serious risks of having a child with such defects. There are clinics that provide embryos of anonymous donors for "adoption" by couples seeking to have a child, a scenario that raises the potential of clinic liability in the selection and screening of gamete providers. Case law suggests that reproductive clinics owe a duty of due care to screen donors in surrogacy cases and it follows that they would owe the same duty of care in embryo adoption cases.

N. Eugenic Considerations

An argument could be made that state or federal regulations should be enacted to control the transfer of embryos. Such regulations could be based on the power to regulate health by requiring the testing of donors of eggs, sperm or embryos before they are used in assisted human reproduction procedures. Such regulations would be based on a negative eugenics theory, such as limiting the dangers of transmission of disease or genetically related disease to the donee and child. Initially, state law restricting HIV-infected couples from using assisted reproductive technologies to have a child may have seemed like a sensible form of negative eugenics given the danger of AIDS. The development of newer technologies for minimizing the chances of HIV transmissions, however, may now result in an inference that such laws are unduly burdensome and perhaps violative of the Americans with Disabilities Act. The government has a dismal record enacting legislation affecting human reproduction and the danger exists that once the government gets involved in eugenic choices,

162. See id. at 9 (asserting wrongful life action against physician).

163. See id. at 11 (explaining that parents are owed duty of care in genetic counseling and if that duty is breached, parents can recover in negligence). The parents may also recover damages for emotional distress offset by emotional benefits that the parents enjoy from the companionship of the child. See id. at 11-12.

164. See Embryo Adoption, supra note 15 (describing anonymous donor programs such as University of Iowa Health Center).

165. See Súver v. Parker, 975 F.2d 261, 264 (6th Cir. 1992) (holding for-profit surrogacy clinic liable for failure to screen sperm donors when sexually transmitted disease was foreseeable risk and child conceived by procedure contracted cytomegalis inclusion disease); see also Huddleston v. Infertility Ctr. of Am., Inc., 700 A.2d 453, 460 (Pa. Super. 1997) (holding clinic owes surrogate mother and child duty of protection from foreseeable risks).

166. New Hampshire became the first state to require by law that couples undergoing in vitro fertilization must first submit to medical examinations. See N.H. REV. STAT. ANN. § 168-B:14 (2001) ("No gamete shall be used in an in vitro fertilization or pre-embryo transfer procedure, unless the gamete donor has been medically evaluated.").

it will become manipulative to produce certain socially or politically desirable results.

In the first half of the twentieth century, the fear that the United States would be overrun by incompetent children being born to incompetent parents led many states to enact compulsory eugenic sterilization laws. Under these laws, mentally retarded persons of child-bearing age could be forcibly rendered infertile. Notwithstanding the fact that the Nuremberg War Crimes Tribunal denounced the Nazi practice of using compulsory sterilization to prevent the birth of undesirable persons, an earlier Supreme Court decision upholding this practice in the United States has never been overruled. While it is unlikely that a modern American legislature would enact a compulsory eugenics law regarding embryo transfer, even a law limiting who may donate embryos based on eugenic factors would be viewed by many as an unwarranted intrusion into an area where private choice had previously held sway.

It is likely, however, that private eugenic arrangements will be attractive to some people. These may be based on a desire for children of a particular gender, of a certain race or with other attractive characteristics. In traditional adoption scenarios, strong arguments have been made for and against racial or ethnic matching. These arguments offer a point of reference for embryo adoption. The Indian Child Welfare Act, for example, was enacted to limit the removal of Indian children from their families and the placement of such children with non-Indian families to prevent the deleterious effect of denying Indian children exposure to...
the ways of their people. Furthermore, the National Association of Black Social Workers opposes transracial adoption claiming it deprives black children of their heritage. It is uncertain whether such opposition will exist with embryos, as it does with children. While a best interest of the child approach may work for existing children, it might not be as easily applied to potential children.

Further complicating the eugenics concerns are couples who attempt to intentionally have a disabled child by using IVF and pre-implantation genetic testing to ensure their children’s genetic heritage reflects their parents’ disability. A dwarf couple, for example, could use genetic testing to implant only those embryos carrying the achondroplastic gene, so as to ensure that the couple would have a dwarf child. Likewise, a deaf couple could make hearing choices for children by using pre-implantation genetic diagnosis and embryo transfer. Such considerations present questions such as whether being a dwarf and being deaf are disabilities that compromise quality of life and, therefore, should not be purposefully selected. No matter what the law is or may be, some people will obviously make private attempts to achieve a eugenically desirable outcome in egg, sperm and embryo donation.

O. Legislative Regulation and Political Considerations

Once the state becomes involved in regulating human reproduction, the attractiveness of politically favored doctrines becomes a real danger. History demonstrates this all too amply. The Federal Comstock Law reflected the Victorian anti-contraceptive attitudes and banned the introduction of contraceptive devices and information into interstate commerce. The nineteenth century fear that the prevailing family order

[174. See 25 U.S.C. §§ 1901-63 (1978); see also ABRAMS & RAMSEY, supra note 173, at 93-94 (stating Congress has authority to control Native American affairs in light of special responsibility America owes to Native Americans). An effort is made to place Indian children in foster or adoptive homes that reflect Indian heritage. See id. at 94.

175. See ABRAMS & RAMSEY, supra note 173, at 718 (discussing position of National Association of Black Social Workers that allowing non-black parents to adopt black child is tantamount to cultural genocide).


177. See, e.g., id. (describing how deaf couple could implant only those embryos with genetic mutation).

178. See id. Connexin 26 is a recently discovered genetic mutation that is responsible for approximately half of all genetic deafness. See id. at 51. If both male and female have the Connexin 26 mutation, they have a one-in-four chance of having a deaf child naturally. See id. Through IVF and pre-implantation genetic diagnosis, however, a deaf couple can transfer into the woman’s uterus only deaf embryos, to ensure the couple will have a deaf child. See id.

179. See id. at 52-63 (discussing whether being deaf is “a harm”). Some deaf people argue that deafness is a linguistic and cultural identity rather than a disability. See id. at 52.

180. 18 U.S.C. § 1461 (1873) (overturned 1944).]
would be upset if women were able to assert control over their own reproductive choices was reflected in the fact that until 1944 federal law banned the use of mail to transmit information about contraception. 181

The politicization over the debate about whether the Food and Drug Administration should permit the use of mifepristone (RU-486) demonstrates how politics and the science of reproduction become embroiled in political controversies even today. 182 The history of state involvement in regulating human reproduction also provides a number of other illustrations of how reproductive choices can be made captive to a political viewpoint. Statutes that were based on prevailing morality and regulated private choices to limit reproduction are some such illustrations. Until the Supreme Court affirmed the right of a woman to terminate her pregnancy during the early stages without state interference, 183 states enacted a wide range of laws imposing criminal penalties to prohibit or strictly regulate the termination of pregnancy. 184 Some states criminalized the use or sale of contraceptives until the Supreme Court ruled that married couples, 185 unmarried persons 186 and minors 187 had a right to gain access to these common means of protection against unwanted pregnancy.

While the fear that attempts to legislate embryo donation could become entangled in political debates over morality and religion may prove unfounded, it is just as possible that the fear will be realized. Experience demonstrates that controversies over matters related to human reproduction in a democratic society tend to become highly political. Debates over such current issues as regulation of stem-cell research, prohibitions on re-

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181. See Consumers Union v. Walker, 145 F.2d 33, 35-36 (D.C. Cir. 1944) (overturning federal ban and ruling that consumer magazine could mail material dealing with contraceptives to married couples).


183. See Roe v. Wade, 410 U.S 113, 163-64 (1973) (ruling that right of privacy protects woman's right to choose abortion free from state prohibition during early stages of pregnancy as matter of due process).


185. See Griswold v. Connecticut, 381 U.S. 479, 485 (1965) (recognizing that right of privacy ensures that married couple can have access to contraception and contraceptive counseling free from state interference).


productive cloning and whether the use of RU-486 should be legalized suggest the nature of the problem. The famous maxim of Oliver Wendell Holmes that a “page of history is worth a volume of logic” is worth considering in the light of this history.

The absence of controlling legislation will leave resolution of complex issues involving embryos to the courts to be decided on a case-by-case basis. It has been suggested that the inability of the legislatures or the courts to develop a coherent body of law governing embryo donation will at some point in the future require the Supreme Court to decide the issue. Whether this is true or not, for the present, the matter of disposing of embryos is likely to come up in a number of different legal contexts and the courts will be hard-pressed to find common ground. This being so, judges will be inclined to look to various legal analogies, such as those discussed in this Article, including the law governing adoption, gestational surrogate parenting, sperm and egg donation, property and personhood. No one analogy fits embryo transfer perfectly, but some analogies are better than others. As expressed earlier in this Article, the intent-based formula towards legal parenthood developed in the gestational surrogacy cases seems most useful at this point in time.

III. CONCLUSION

Lawyers and judges are trained to think by analogy when they confront a new reality. This Article shows that the use of the adoption analogy to categorize the transfer of a cryopreserved embryo to a recipient is far from perfect. The authors believe that embryo “donation” is a more accurate term than embryo “adoption” because it is consistent with both reality and existing case law. Although some religious organizations advocate the term embryo adoption in order to elevate the legal status of the embryo, these organizations can advance their cause for saving embryonic life without pushing toward the legal consideration of embryos as persons.

The word “donation” defeats any implication that the law governing adoption controls the procedure. Donation implies something generous, that is, giving to another the potential of life, the ability to bear a child. This essentially is what is involved when one couple provides its embryos to another couple.

Some will argue that the law of the marketplace should prevail in embryo transfer. But if the practice is to become one of true donation, then


190. See Jill Madden Melchoir, Cryogenically Preserved Embryos in Dispositional Disputes and the Supreme Court: Breaking Impossible Ties, 68 U. Cin. L. Rev. 921, 945 (2000) (suggesting that lack of regulation and likely inability of courts to reach consensus on disposition of growing number of cryopreserved embryos makes it likely that Supreme Court will ultimately address matter).
at least ideally it should not become unduly entangled in commercial transactions based on the purchase and sale of embryos. The commercialization of ova and sperm banking provides a poor example for embryo donation, which is much more complicated because it involves two persons rather than one. Notwithstanding this, statutes that outlaw the payment of money for eggs, sperm or embryos are likely to prove unenforceable. The continued availability of large numbers of unused cryopreserved embryos suggests that the law of supply may control rather than the law of demand, reducing the attractiveness of widespread commercialization of the procedure.

As embryo donation becomes more common, the courts will be forced to confront the application of personal injury, property, contract and probate, and family law doctrines to the procedure. In the absence of legislation, the courts will have to do this on a common law basis or by developing equity doctrines. As the problems associated with the procedure become more prevalent in court cases, it is hoped that the legislatures of the various states will respond by enacting statutes that address embryo donation problems from the viewpoint of areas of the law in which an existing body of law already exists. Such areas include the law of custody, support and contract. The relatively new body of law governing gestational surrogacy is also helpful, especially as the law governing those cases has come to focus more on the intent of the parties in resolving disputes than on such static matters as who gave birth or who provided the gametes. The decisions that treat embryos in an interim category between property and personhood are also helpful.

Whatever one's views are about modern reproductive technology, an analysis of the law governing cryopreserved embryos ought not to become entangled with the fury of the debate over abortion because it deserves to be analyzed on its own merits. But the danger of asking the political branches of government to resolve embryo transfer issues by legislation is that they will become entangled in religious and political conflicts that will make the law either oppressive or unresponsive to the legitimate reproductive needs of people.