



PennState
Dickinson Law

DICKINSON LAW REVIEW
PUBLISHED SINCE 1897

Volume 98
Issue 1 *Dickinson Law Review - Volume 98,*
1993-1994

10-1-1993

In Vitro Fertilization: Problems and Solutions

John Dwight Ingram

Follow this and additional works at: <https://ideas.dickinsonlaw.psu.edu/dlra>

Recommended Citation

John D. Ingram, *In Vitro Fertilization: Problems and Solutions*, 98 DICK. L. REV. 67 (1993).
Available at: <https://ideas.dickinsonlaw.psu.edu/dlra/vol98/iss1/4>

This Article is brought to you for free and open access by the Law Reviews at Dickinson Law IDEAS. It has been accepted for inclusion in Dickinson Law Review by an authorized editor of Dickinson Law IDEAS. For more information, please contact lja10@psu.edu.

In Vitro Fertilization: Problems and Solutions

By John Dwight Ingram*

I. Introduction

In recent decades sex without reproduction has become common and widely accepted, and more recently medical science has made it increasingly possible to have reproduction without sex. The former is much more enjoyable than the latter for most of us and, while it does entail some moral and legal issues, it is a great deal less complex than the latter.¹ In this article I will present many of the social, ethical and legal issues involved in *in vitro*² fertilization (hereafter IVF), and discuss the possible and preferable resolution of these questions.

II. Medical Background

It is now possible to extract ova from a woman and fertilize them with male sperm in a laboratory container.³ The fertilized ova may then be reimplanted into the woman, or frozen for later implantation.⁴ This technique often makes it possible for apparently infertile couples to conceive and produce their own biological children.

Different medical facilities may vary the IVF process to some extent, but the basic technique is essentially the same. Normally, a woman produces only one egg during each menstrual cycle. To start the IVF procedure, the woman is "given hormones to stimulate her ovaries to produce multiple eggs."⁵ The eggs are then removed from her body in a minor surgical procedure, and are placed in an appropriate growth

* Professor of Law, John Marshall Law School; A.B., Harvard, 1950; J.D., John Marshall Law School, 1966.

I acknowledge with thanks the excellent support of my capable research assistants, Heather Brooks, Patricia Holland, Shari Kalik, Ann Lawrence, and Tina Lazich, and the helpful input of Christine Crum and my wife Ginnie.

1. See generally Alexander Morgan Capron, *Alternative Birth Technologies: Legal Challenges*, 20 U.C. DAVIS L. REV. 679, 686 (1987).

2. Literally: "in glass"; "outside the living body and in an artificial environment." WEBSTER'S NEW COLLEGIATE DICTIONARY (1981).

3. Julia T. Bielawski, *Custody of the Cryopreserved In Vitro Fertilized Embryo: The Minnesota Perspective*, 12 HAMLIN J. PUB. L. & POL., 259, 259 (1991).

4. *Id.*

5. Phyllis L. Bean, Note, *Taking the Frozen Embryo to Court in Virginia: A Proposed Statute*, 13 GEO. MASON U. L. REV. 127, 129 (1990).

medium.⁶ When the egg has matured, it is placed in a container with a man's sperm, in hopes that fertilization will take place.⁷ In most cases, one or more fertilized eggs will be transferred to the woman's uterus soon after fertilization.⁸ One study indicates that this will result in pregnancy about 17% of the time, and a live birth about 11% of the time.⁹

The product of human conception is ordinarily called an "embryo" from the time of fertilization until about eight weeks thereafter.¹⁰ Usually, after the embryos have reached the four- or eight-cell stage, several are simultaneously inserted into the woman's body¹¹ to increase the likelihood of successful implantation. As a general rule, no more than three embryos are inserted at one time, "to reduce the risk of multiple pregnancies."¹² The unused embryos may then either be discarded or frozen for later use.¹³

Cryopreservation,¹⁴ or freezing, of embryos allows a woman to attempt implantation during several reproductive cycles without undergoing the physical and financial burden of ovarian stimulation and egg retrieval each time.¹⁵ Because cryogenic storage of human embryos is relatively new and experimental, there is some uncertainty and disagreement as to how long an embryo may remain frozen and still remain viable. Some sources suggest that there is no proof of viability

6. *Id.*

7. *Id.* Fertilization does not take place in over 90% of cases. John A. Robertson, *Prior Agreements for Disposition of Frozen Embryos*, 51 OHIO ST. L.J. 407, 407, n.3 (1990).

8. *Id.*

9. Kim Schaefer, *In Vitro Fertilization, Frozen Embryos, and the Right to Privacy — Are Mandatory Donation Laws Constitutional?*, 22 PAC. L.J. 87, 91 (1990).

10. Joseph J. Saltarelli, *Genesis Retold: Legal Issues Raised by the Cryopreservation of Preimplantation Human Embryos*, 36 SYRACUSE L. REV. 1021, 1023 n.8 (1985). Developmental stages from that time until birth are usually called "fetal." David G. Dickman, *Social Values in a Brave New World: Toward a Public Policy Regarding Embryo Status and In Vitro Fertilization*, 29 ST. LOUIS U. L.J. 817, 818 n.5 (1985). Although some writers refer to the conceptus as a "preembryo" or "early embryo" prior to implantation, I will refer to it as an "embryo" when discussing the pre-implantation stage. See, e.g., Patricia A. Martin & Martin L. Lagod, *The Human Embryo, The Progenitors, and The State: Toward a Dynamic Theory of Status, Rights, and Research Policy*, 5 HIGH TECH. L.J. 257, 258 (1990); John A. Robertson, *In The Beginning: The Legal Status of Early Embryos*, 76 VA. L. REV. 437, 437 (1990).

11. Mario J. Trespalacios, *Frozen Embryos: Towards an Equitable Solution*, 46 U. MIAMI L. REV. 803, 806 (1992). The embryos are inserted into either the uterus or the fallopian tubes. *Id.* at 806 n.15.

12. *Id.*

13. *Id.*

14. It is well known that cryopreservation of embryos has been used successfully in cattle breeding for many years. Marcia Joy Wurmbrand, *Frozen Embryos: Moral, Social and Legal Implications*, 59 S. CAL. L. REV. 1079, 1082 (1986).

15. Schaefer, *supra* note 9, at 87 n.4.

beyond two years.¹⁶ Others state that, with proper maintenance, there is no reason to expect deterioration for an unlimited time,¹⁷ and that “the embryo could remain frozen indefinitely.”¹⁸ This view is supported by the fact that the Howard and Georgeanna Jones Institute for Reproductive Medicine in Norfolk, Virginia “allows embryos to stay frozen throughout the woman’s reproductive years.”¹⁹

The increasing use of cryopreservation will inevitably cause a large number of embryos to be stored in clinics and other repositories throughout the country, often for long periods of time. This will lead to a number of difficult questions regarding control over use and disposition of the embryos.

Couples most often use IVF “to overcome the man’s low sperm count or to bypass the woman’s blocked or damaged fallopian tubes.”²⁰ Cryopreservation is used not only to facilitate future attempts at pregnancy by these couples, as noted above, but for a number of other reasons as well. Frozen embryos can be insurance for those who expect exposure to radiation or other hazards.²¹ It can also give people much greater “latitude in decisions of timing and family planning.”²² For example, young couples can create genetically healthy embryos, which can be stored for use after education, career and financial goals are completed or farther along the road.

III. Rights of Embryos, Creating Couple, and Medical Treatment Facility

A. *What Do We Mean By “Life”?*

Much of the problem society has in trying to agree on “when life begins” is derived from our failure to distinguish between “life”, “human life”, and “a human life.” Most people would agree that sperm, ova, embryos, and fetuses are a form of “life” and probably “human life.” In these preliminary forms such matter holds the *potential* of becoming “a

16. See, e.g., Trespalacios, *supra* note 11, at 811 n.51.

17. Bielawski, *supra* note 3, at 261.

18. Bean, *supra* note 5, at 130.

19. Bean, *supra* note 5, at 130 n.36.

20. Wurmbrand, *supra* note 14, at 1082.

21. For example, an individual undergoing cancer therapy may wish to preserve reproductive material before undergoing treatment. In the 1960s the Apollo astronauts banked their sperm before missions in case space travel damaged their reproductive systems. E. Donald Shapiro, *New Innovations in Conception and Their Effects Upon Our Law and Morality*, 31 N.Y.L. SCH. L. REV. 37, 44 (1986).

22. Schaefer, *supra* note 9, at 87.

human being," or part thereof, just as an acorn has the potential to become an oak tree.²³ However, even the most ardent environmentalist would probably not insist that all acorns receive the same respect and protection as we usually give to oak trees.

To some extent, there seems to be a consensus that, at least in its earliest forms, the potential for human life does not require societal protection. Anti-abortion zealots have shown no interest in preventing the destruction or abandonment of sperm or ova. Their efforts have been directed only at embryos and fetuses.

As to embryos, at least at the early stage where they would be prospects for cryopreservation, there is considerable doubt whether a scientifically identifiable human being exists at the time of fertilization.²⁴ The development of twins after fertilization suggests that while an embryo may well constitute "human life," it does not constitute "a human life" in measurable scientific terms.²⁵ And as with an acorn, whose loss does not concern us, the loss of an embryo or very early miscarriage, if noticed at all,²⁶ causes little if any grief.²⁷

There simply "is no generally accepted list of characteristics which define a 'human being.'"²⁸ Most people, especially those who believe that "a human being" exists prior to birth, derive their belief from religious dogma. In most religions, "a human life" exists when a "soul" is present.²⁹ However, there is a wide spectrum of views as to when this vital event occurs.

B. When Does "Life" Begin?

In order to determine the status of embryos, and the rights and protections that should apply to them, we must determine not only whether they are "life" or "a human being," but also when they enter each stage of development along the way from conception to birth. At one end of the spectrum is the position of the Roman Catholic Church

23. Stephen C. Hicks, *The Right to Life in Law: The Embryo and Fetus, the Body and Soul, the Family and Society*, 19 FLA. ST. U. L. REV. 805, 815 (1991).

24. *Id.* at 820.

25. *Id.* at 814.

26. Most such happenings in the first week or so of pregnancy are probably not even known to the woman involved.

27. Hicks, *supra* note 23, at 820. I have never heard of a funeral being held or an obituary being written following miscarriage, although when one occurs after the early weeks of pregnancy, it will often cause sadness and frustration for the prospective parents.

28. Colleen M. Browne & Brian J. Hynes, *The Legal Status of Frozen Embryos: Analysis and Proposed Guidelines for a Uniform Law*, 17 J. LEGIS. 97, 115 (1990).

29. *Id.* at 114-15.

that life begins at conception.³⁰ At the other extreme is the belief of most Jews that only at birth is there a new human life “of equal value to the life of the mother.”³¹ Protestant theologians, adherents of other religions, and those without a religious view on the subject have beliefs that run the gamut from conception to birth.³²

Both the legislative and judicial branches of one or more state governments have taken the position that embryos are “human beings”³³ and that the “life of each human being begins at conception.”³⁴ While the former position was reversed on appeal and the latter was held to be extraneous to the abortion-restriction issues in *Webster v. Reproductive Health Services*,³⁵ there have been and will continue to be attempts to put the force of law behind certain views on the beginning of life.³⁶ In *Roe v. Wade*,³⁷ the United States Supreme Court declined “to speculate as to the answer”³⁸ to when life begins, finding it necessary only to recognize that “potential life” merits protection at some point.³⁹

There does not seem to be any scientific basis for the belief that human “life” begins at the moment of conception. Since a “person” is usually thought to be a multicellular individual, it would be difficult to argue that a “person” exists before the embryo reaches the eight-cell stage, even though there may be genetic individuality before that time.⁴⁰

C. What If “Life” Begins at Conception as a Matter of Law?

If it becomes the law that “life” with legal rights begins at conception, embryos could not be destroyed, and perhaps it would even be unlawful to allow embryos to die passively.⁴¹ It would also mean “that any form of experimentation on a human embryo . . . that is likely

30. Shapiro, *supra* note 21, at 38.

31. *Id.*

32. *See generally, id.*

33. *See, e.g.,* Davis v. Davis, No. E-14496, 1989 Tenn. App. LEXIS 641 (Cir. Ct. Sept. 21, 1989), *rev'd*, No. 180, 1990 Tenn. App. LEXIS 642 (Ct. App. Sept. 13, 1990).

34. MO. REV. STAT. § 1.205.1 (1989).

35. 492 U.S. 490 (1989). The statement was in the preamble of the statute and did not by its terms regulate abortion. *Id.* at 491.

36. *See, e.g.,* LA. REV. STAT. ANN. § 9:129 (West 1986). “A viable in vitro fertilized human ovum is a juridical person which shall not be intentionally destroyed by any natural or other juridical person or through the actions of any other such person.” *Id.*

37. 410 U.S. 113 (1973).

38. *Id.* at 159.

39. *Id.* at 162.

40. Barbara Gregoratos, Note, *Tempest in the Laboratory: Medical Research on Spare Embryos from In Vitro Fertilization*, 37 HASTINGS L.J. 977, 985 (1986).

41. This might constitute “child neglect.”

to damage or endanger that embryo"⁴² would be prohibited.⁴³ Either IVF would have to be banned, or all embryos would have to be implanted in a uterus. But the latter would be a futility, because as long as the right to abortion is constitutionally protected, a woman could simply implant the embryo and then abort it.

Even most of those who believe that life begins at conception do not take an absolute position against *any* destruction of an embryo or fetus. The 1991 Louisiana abortion statute,⁴⁴ for example, provides for an exception where pregnancy is the result of rape or incest. If an embryo or fetus is really "a human being", its destruction could not be permitted for any reasons except to save the life of the mother. Therefore, unless we as a society adopt the position of the ultra-extremists as to when life begins and the consequences thereof, we should leave most decisions regarding IVF to the participating couple, and to the medical facility and medical professionals who are involved with them.

D. *Appropriate Statutory Provisions*

The force of law, in the form of statutory regulation, should be employed only: (1) as a back-up to provide for situations where the parties directly involved have not made their own contractual arrangements; (2) to expressly authorize arrangements that may have been considered illegal in the past; (3) to relieve involved parties from parental or other responsibilities, where that is appropriate; and (4) to provide for problems of inheritance.

A statute should expressly require that the parties directly involved in IVF — the potential parental couple and the clinic or other medical facility — must enter into a complete and binding agreement covering every possible issue that can be foreseen.⁴⁵ The parties should be free to make any provisions they wish unless those provisions are clearly contrary to public policy, and no provision should be deemed contrary to public policy merely because it is offensive to the beliefs, religious or otherwise, of some people. It is important to make it clear that advance provisions concerning embryos will be legally binding and enforceable, so that all concerned will "know with reasonable certainty" what will happen "if certain contingencies occur."⁴⁶ Those who are involved in

42. Gregoratos, *supra* note 40, at 984.

43. *Id.* Research or experimentation intended to benefit the embryo should be permitted, however.

44. 1991 La. Acts 26.

45. See *infra* Part V for a discussion of the issues that should be addressed in the agreement.

46. Christi D. Ahnen, *Disputes Over Frozen Embryos: Who Wins, Who Loses, and How Do*

IVF procedures must be able to rely on the agreements that they make. If the parties know that the agreement is binding and enforceable, the number of disputes will be greatly diminished.⁴⁷

IV. Status of an Embryo

As discussed above, if a "human being" exists from conception onward, an embryo would be entitled to all the rights and protections afforded to other human beings.⁴⁸ However, since such a belief at present has no clear scientific basis, and is almost universally based on religious dogma, it would be improper to incorporate it into the law.⁴⁹ The decisions of the Supreme Court to date have denied to embryos and early fetuses the status of "a human being."⁵⁰

Some believe that an embryo should be treated essentially as a form of property.⁵¹ For those who adhere to this view, whoever "owns" an embryo could use or dispose of it in any way he or she chooses. Many people, however, would accord to an embryo a somewhat higher status because of its potential to become a human being.⁵² Yet although ova and sperm have the potential to become persons, or an acorn to become an oak, the mere potential for achieving personhood should not carry with it any rights or duties.⁵³ Only thirty to forty percent of embryos conceived by means of sexual intercourse will become live human infants.⁵⁴ We seldom give any thought to those embryos that fail to survive within a woman's body — indeed we are usually not even aware of them. There is no reason to extend any greater or different concern for those embryos which are outside a woman's body.

It can be argued that *Roe v. Wade* established "that the state does not have a compelling interest in protecting the life of a fetus until the fetus is considered viable."⁵⁵ Clearly, if one accepts this proposition, it would

We Decide?, 24 CREIGHTON L. REV. 1299, 1345 (1991).

47. *Id.*

48. See *supra* Part III.C.

49. An embryo lacks "the usual attributes of personhood" — "the cognitive ability to interact, be conscious, and experience emotions." Dena Beth Langley, *In Vitro Fertilization: Eliminating the Current State of Limbo Between Pre-embryonic Rights and the Fundamental Right to Procreate*, 26 WAKE FOREST L. REV. 1217, 1235 (1991).

50. See *Webster v. Reproductive Health Services*, 492 U.S. 490, 569, n.13 (1989) (Stevens, J., concurring & dissenting) ("No member of this Court has ever questioned the holding in *Roe* ... that a fetus is not a 'person' within the meaning of the Fourteenth Amendment.").

51. John A. Robertson, *Embryos, Families and Procreative Liberty: The Legal Structure of the New Reproduction*, 59 S. CAL. L. REV. 939, 972 (1986).

52. Schaefer, *supra* note 9, at 96.

53. Robertson, *supra* note 10, at 445-46.

54. Ahnen, *supra* note 46, at 1312.

55. Anthony John Cuva, *The Legal Dimensions of In Vitro Fertilization: Cryopreserved*

be difficult to argue that the state has any legitimate interest in the use or disposition of an embryo. However, it is doubtful if *Roe* can properly be considered authority for such a position. *Roe* simply said that whatever interest the state might have in a nonviable fetus was outweighed by the privacy interest of the woman bearing the fetus.⁵⁶

IVF is different from the abortion issue involved in *Roe*, because in IVF a woman's body, and her privacy right in the use of her body, is not involved prior to implantation of the embryo. However, another very important privacy interest *is* involved in the use and disposition of *in vitro* embryos — the same interest that has been consistently protected by the Supreme Court in cases involving contraception and abortion. This privacy interest involves the right to decide whether and when to have children, free from interference by the state.⁵⁷ It would be illogical to protect this interest as to abortion and contraception, but not as to IVF. Requiring implantation would also be an utter futility since, as previously stated, so long as abortion is legally available, an unwanted embryo could be promptly aborted.

Thus, it seems best for the state to allow maximum freedom of choice to those involved in IVF, and to limit itself to: (1) requiring that the parties have a clear and comprehensive agreement; (2) providing for situations where there is not an agreement; and (3) eliminating existing legal impediments to freedom of choice.

V. Provisions for the Agreement of the Parties

The agreement between a couple and the medical facility which will administer the IVF procedure should anticipate and provide for as many future contingencies as possible. By now there has been enough experience in this field to foresee most of the problems that can arise. Among the most important are:

- (1) death, divorce, or disability of the creators of the embryos;
- (2) loss of interest by the creators in continuing to attempt pregnancy through IVF;
- (3) right of creators to remove embryos from the medical facility and transfer them to another medical facility; and
- (4) dispositional choices: implantation, discard, division, or donation to another couple or for research.

Embryos Frozen in Legal Limbo, VIII J. HUM. RTS. 383, 390 (1991).

56. *Roe v. Wade*, 410 U.S. 113, 162-64 (1973).

57. See Schaefer, *supra* note 9, at 102-03 and cases cited therein.

The agreement must be binding on all parties to it — the creating couple and the medical facility — and subject to modification only if all parties agree. Those involved will usually enter into the agreement and participate in the procedure only if they can rely with certainty that its provisions will be carried out. Some parties will have strong feelings about the discard of embryos, and must be able to insist on implantation. Others may want to ensure that their genetic offspring will not be born after their death or divorce. Since it is my belief that the state has no legitimate interest in deciding any of the questions involved in IVF, sound policy dictates that whatever provisions the parties agree to should be legally binding and enforceable just as with any other contract.

A. *Right of Control Over the Embryos*

Although frozen embryos are “not property in the traditional sense,”⁵⁸ there seems to be a growing consensus toward the view that they should at least be subject to the right of their creators to make all decisions as to their use and disposition.⁵⁹ IVF is an expensive proposition, with cost estimates ranging from \$5,000 to \$25,000,⁶⁰ and the creators of embryos have a legitimate interest in protecting and controlling their investment.

As Professor Robertson has pointed out,⁶¹ other than the creating couple, the only claimant to a right of ownership or dominion over the embryos would be the treating medical facility. And certainly the latter may demand partial or total control over the embryos as a condition of providing its services. But in most cases, control would best be left to the creators, just as we do with the production of other new products.⁶² When someone stores his or her blood, sperm, or ova, we are quite comfortable giving the creator control over its use or disposition. An embryo is simply a slightly more advanced form of genetic material.

We need not classify embryos as “property” in order to recognize a right in the creators that is comparable to the ownership of property. There should clearly be “a right of dominion: a right to possess, use or

58. Stanford P. Berenbaum, *Davis v. Davis: Frozen Embryos and the Thawing of Procreative Liberties*, 36 WAYNE L. REV. 1337, 1347 (1990).

59. Alise R. Panitch, *The Davis Dilemma: How to Prevent Battles Over Frozen Embryos*, 41 CASE W. RES. L. REV. 543, 553 (1991) (citing an ethical statement of the American Fertility Society).

60. Laurence E. Sweeney, “Chilling” *The Procreational Choice: Frozen Embryos — Who Gets What When the Donor Couple Divorce*, 25 NEW ENG. L. REV. 367, 377 n.56 (1990).

61. Robertson, *supra* note 10, at 458.

62. *Id.*

dispose of something to one's own pleasure."⁶³ The creators should be free to discard or destroy an embryo, just as they may destroy a fetus in an abortion. They should also be free to sell or donate an embryo, just as they may do with sperm or blood.

B. During the Marriage of the Creating Couple

A woman who has gone through the procedures to generate and remove ova from her body has more invested in the reproductive process than a man who merely provides his sperm by ejaculating. Despite this fact, the difference does not seem sufficient to warrant any inequality of interest in an embryo at the *in vitro* stage, since "the woman's bodily integrity is not at issue, and both have an equal genetic link" to the embryo.⁶⁴

Assuming the medical facility providing the treatment does not object, a couple commencing IVF procedures should be free to provide in the agreement that, if all of their embryos are not implanted in the woman's body with the consent of both, and the parties do not mutually agree to their continued preservation, any remaining embryos will be: (1) put in the sole custody of a specified member of the couple, to be used or disposed of at his or her sole discretion; (2) destroyed; (3) donated or sold to the medical facility to be used or disposed of at its sole discretion; or (4) donated or sold in a manner specified in the agreement. The parties will continue to be able to use or dispose of the embryo if they agree, but it is vitally important that they decide in advance what result they prefer in the event of a future failure to agree. They can then be sure that their initial wishes will be honored, and there will be certainty as to the consequences if they do not agree in the future.

One would hope that most couples engaging in IVF will share the same goals and philosophies about child-bearing, and will remain in agreement when choices or changes must be made along the way. Yet it is inevitable that some disagreements will arise, and a pre-existing binding agreement will provide an ultimate solution if all else fails. In many cases it may provide an incentive for a couple to come to an agreement where the option mandated by the agreement is undesirable to both.

63. Martin & Lagod, *supra* note 10, at 268.

64. Martin & Lagod, *supra* note 10, at 289. This is in contrast to decisions concerning abortion, which do involve a woman's bodily integrity. *Id.*

C. Divorce

While disagreements may well arise during the time a couple is living together, it is even more likely that there will be disagreements if the couple separates or divorces.⁶⁵ It is quite possible that the default option which would apply in the event of disagreement while the couple was living together is not the option that they would elect in the event of disagreement at the time of divorce. In many cases the agreement will probably require discard or destruction of all embryos, as the parties will not want any future genetic offspring. However, some may want to provide that all embryos be given to the man, or the woman, or divided equally between them. Such a choice may depend in part on the likelihood of one or both wanting and being able to conceive a child with a future partner.

If the couple's agreement provides that, at the time of divorce, any remaining embryos will be sold or donated for adoption, given to one of the parties, or divided between them, the agreement (supported by appropriate legislation)⁶⁶ should provide that the non-rearing party or parties will be relieved of any responsibilities or burdens in regard to custody, financial support, and inheritance.⁶⁷

D. Death

Even with normal coital reproduction, it is not uncommon for a child to be born after the death of one parent, or to be orphaned at an early age. Thus there should be no valid objection to allowing an IVF embryo to be subject to use or disposition by a surviving member of the creating couple, or to pass by will or contract upon the death of both parents.

In most cases the creating couple will probably want the survivor of them, upon the death of the other, to have exclusive control over the use and disposition of the embryos, as would be true with an embryo *in utero* where birth occurs after the death of the father or shortly before the death of the mother. Whatever disposition the creating couple desires, legislation should allow the couple to specify their choice in the agreement they make with the treating medical facility.⁶⁸

Similarly, provisions should be made in the agreement for disposition of any *in vitro* embryos upon the death of both creators. In

65. It is likely that most couples involved in IVF will be married. However, in an age when many children are born out of wedlock, there is no reason to exclude unmarried couples from participating in IVF.

66. See *infra* Part VI.B.

67. Cuva, *supra* note 55, at 414.

68. See *infra* Part VI.B.

most cases the couple will agree to either destroy the embryo or to transfer it (by sale or donation) to another couple for implantation⁶⁹ or to the medical facility for research. Occasionally it may be desirable to provide that an embryo will pass by contract or will to a person or couple who will agree in advance to implant the embryo and raise the resulting child. In such a case, it may be the wish of the creating couple to leave some or all of their assets to their posthumous child. There should be no societal objection to this, so long as the agreement (and relevant statutes) require that the child-heir be born shortly after the death of the creating couple — perhaps within two years.⁷⁰

E. Agreement With Treating Medical Facility

As I have discussed above,⁷¹ there should be a clear and comprehensive agreement between the couple creating the embryos and the medical facility that provides the IVF treatment. The medical facility should be completely free to only allow the couple to choose the alternatives that the medical facility deems wise or desirable. The medical facility may have religious or other objections to certain options, such as discard or use for research.⁷²

Besides deciding what options it will make available such as transfer or withdrawal of embryos, sale or adoption, use for research, or destruction, the medical facility may also want to set time limits for preserving embryos. Another potential concern is providing for the disposition of the embryos if the couple fails to either pay the facility's fees or keep the facility informed of their address.

Within the framework of those options that the medical facility chooses to make available the participating couple should have complete control over the other aspects of the IVF process. In what was probably the first case directly dealing with a dispute between a participating couple and a medical facility over control of a frozen embryo, the court in *York v. Jones*⁷³ held that the couple had principal control over the embryo. Further, the court held that the couple's complaint alleging that

69. In such case the agreement and any relevant statutes should provide that any resulting child will not inherit from the creating couple. See *infra* Part VI.B.

70. See *infra* Part VI.B.

71. See *supra* Part III.D.

72. Many Roman Catholics, for example, would object to both. Also, some medical facilities might not make such options available because they wish to avoid the wrath of and conflict with anti-choice, or so-called "right-to-life," groups. Robertson, *supra* note 51, at 977.

73. 717 F. Supp. 421 (E.D. Va. 1989).

the clinic refused to allow them to transfer the embryo to another facility stated a cause of action for breach of contract and detinue.⁷⁴

In most cases, the creating couple should be free to transfer their embryos to another facility at any time. If this will result in some loss or disadvantage to the original facility, it can provide in the agreement for an appropriate transfer fee. Also, in most cases, the couple should have the right at any time to withdraw the embryos from the facility and dispose of them in any way they wish. While some facilities may try to require that all embryos be implanted in the creating woman or another, such a requirement is largely a practical futility. As I have said before, in that situation a woman could simply have the embryo implanted in her uterus and immediately have it aborted. It would not make sense to force a woman into unnecessary health risks and substantial expense.⁷⁵

The agreement should set a maximum length of time for cryopreservation of embryos. While some medical facilities have a policy of keeping frozen embryos indefinitely in order to avoid conflict with anti-abortion activists,⁷⁶ with present technology, a frozen embryo will deteriorate "over time to a point at which it can no longer survive implantation."⁷⁷ Except for this practical limitation, there is no reason not to provide for preservation for at least the lifetimes of both creating parents,⁷⁸ and probably for a short time thereafter,⁷⁹ if that is the couple's wish.

It is quite possible that many couples will choose to sell or donate embryos created in the IVF process if they decide not to or are unable to use the embryos themselves. Some creating couples might want to know the identity of the receiving couple, as is common in private adoptions. Others may prefer that their embryos be put in a pool of anonymous embryos for subsequent sale or donation.

The principal objection to sale or donation of unused embryos is that the creating couple will suffer emotional and psychological injury in knowing that they may have a genetic child somewhere whom they do not know. Those who fear such a reaction need not include this method of disposition in their agreement. For others, there will be little if any

74. *Id.*

75. Tzivia Schwartz, *Frozen Embryos: The Constitution on Ice*, 19 LOY. L.A. L. REV. 267, 280-81 (1985).

76. Browne & Hynes, *supra* note 28, at 101.

77. *Id.*

78. Some would limit storage to the period "equivalent to the natural reproductive capabilities of the couple." Schwartz, *supra* note 75, at 282. However, many men father children late in life, and women frequently bear children at fairly advanced ages.

79. A short posthumous period will avoid difficult problems of inheritance. See *supra* Part V.D.

concern over the possibility of an unknown genetic child.⁸⁰ Many people give up children for adoption without later pangs of remorse. And some men, especially in the armed forces overseas, know or suspect that they have fathered children and feel no harmful effects therefrom.

The other primary objections to the sale or donation of embryos are: (1) problems of inheritance, which can be dealt with in the agreement and by statute;⁸¹ and (2) having a child seek out his or her genetic parents in the future. As to the latter, most states now provide for nondisclosure of birth certificate information in adoption situations, and it should be even easier to assure nondisclosure of information about an embryo in an anonymous pool.⁸²

For those creating couples who cannot or will not use their own embryos, yet do not want them sold or donated for implantation, there is the option of selling or donating their embryos for use in research. While some will have religious or other objections to this option and will feel that destruction of the embryos is the only viable⁸³ alternative, others will recognize the substantial social value in providing research material.⁸⁴

There are many positive gains that can result from research with embryos, among which are: (1) improved IVF techniques; (2) more effective means of birth control; (3) learning about genetic defects and problems; and (4) detection and prevention of cancer.⁸⁵ Other possibilities include providing nervous tissue for transplants into humans, developing individual organs for transplants,⁸⁶ or "test[ing] the effects of toxic substances or new drugs on early fetal development."⁸⁷

F. Should the Agreement be Modifiable?

It should certainly be permissible to change any provision in the agreement if both members of the creating couple and the medical facility agree, assuming the provision when changed is not contrary to law. However, in the absence of such a three-way consensus, all provisions in

80. Many embryos, even if implanted, will not result in a live birth. See *supra* text accompanying note 9.

81. See, e.g., Bielawski, *supra* note 3, at 283, and statute cited therein.

82. Bielawski, *supra* note 3, at 283.

83. Pun intended.

84. The question of whether embryos should be created solely for research purposes is beyond the scope of this article. See Robertson, *supra* note 51, at 984-85. However, consistent with the other views expressed in this article, it should be acceptable for a couple to create embryos and give them to a research facility, just as they might give their blood, semen, or tissue.

85. Robertson, *supra* note 10, at 503.

86. Gregoratos, *supra* note 40, at 983.

87. *Id.*

the agreement should be final and binding because the parties have entered into the agreement in reliance on its being binding and irrevocable. In fact, to make it unlikely that the agreement will be later modified by a court under the doctrine of "fundamentally changed circumstances," it would probably be wise to include in the agreement an express statement that the parties recognize that circumstances may change in the future and that they waive any right they might have to seek modification of the agreement on that basis.⁸⁸

VI. Statutory Provisions

A. *If There is No Pre-Treatment Agreement*

Even though it may be required by statute that no IVF treatment or storing of embryos may be undertaken without an agreement between the couple and the medical facility, realistically we must recognize that some people will violate the law, and it will be necessary to determine the use and disposition of embryos when the parties themselves cannot agree. There should be a statute providing that when the creating couple is in agreement, their decision will override any disagreement by the medical facility. The creating couple starts with complete authority over their embryos, and they should retain that authority until they clearly relinquish it.⁸⁹ If the medical facility wanted to limit the rights of the couple, it could have done so before treatment was commenced.

The more difficult part of a default statute will deal with disputes between the couple. What if one wants to use or keep the embryos and the other wants to destroy them? There should be no problem regarding the financial obligation of an unwilling genetic parent since the statute can expressly provide that the unwilling parent will have no obligation to a resulting child in terms of financial support, inheritance, custody, or otherwise.⁹⁰ However, the unwilling parent is still exposed to the psychosocial burden of knowing that an unwanted child may exist,⁹¹ perhaps growing up in the same community where the unwilling parent lives.

If the member of the creating couple who wishes to use or keep the embryos has a reasonable opportunity and likelihood of being able to reproduce with a new partner, through IVF or otherwise, it seems best to

88. See Robertson, *supra* note 7, at 411.

89. See Robertson, *supra* note 10, at 473.

90. Similar statutory provisions apply to artificial insemination donors. See Robertson, *supra* note 10, at 477.

91. See *id.*

honor the wishes of the unwilling partner and destroy the embryos.⁹² However, because of the expense involved, and the physical burden in the case of the woman, it seems fair to impose perhaps half of the anticipated cost of future treatment on the unwilling partner.

If, on the other hand, the partner who wishes to use or keep the embryos has no reasonable likelihood of reproductive opportunity with a new partner, the interest of the person wishing to enjoy the pleasures and satisfactions of parenthood should outweigh any psychological discomfort of the unwilling partner,⁹³ especially if all financial obligations are statutorily negated.

Finally, if one partner wishes to sell or donate the embryos, either to another couple or for research, the wishes of the unwilling partner should prevail. There is no reason to impose even a slight psychological burden when the other person does not want to raise the child that will be produced.⁹⁴

B. Statutory Provisions Needed to Support a Pre-Treatment Agreement

1. *Inheritance.*—It is quite common for the probate law of a state to permit a person conceived before but born after a parent's death to inherit by will or intestacy.⁹⁵ In the case of a frozen embryo, this makes it theoretically possible for a child to assert an inheritance claim many years after the death of one or both parents, and this could impact severely on the orderly and efficient settlement of estates.⁹⁶ As I have discussed above,⁹⁷ there should not be any greater societal objection to inheritance by a posthumous child born as a result of IVF than there is to the posthumous inheritance of a child conceived coitally. However, to simplify the settlement of estates, it would be best to limit the inheritance rights of a posthumous child to a fairly short period, perhaps two years.⁹⁸

92. See Ahnen, *supra* note 46, at 1327-28.

93. As I have discussed previously in Part V.E, for many people this discomfort will be minimal or non-existent.

94. See Ahnen, *supra* note 46, at 1327; Robertson, *supra* note 10, at 481.

95. See, e.g., CAL. PROB. CODE § 6150 (West. Supp. 1990). But see LA. CIV. CODE ANN. art. 29 (West 1950), which provides that an embryo must be *in utero* when the parent dies for the resulting child to inherit.

96. Mark A. Pieper, *Frozen Embryos — Persons or Property?*: Davis v. Davis, 23 CREIGHTON L. REV. 807, 831 (1990).

97. See *supra* Part III.D.4.

98. The Rule Against Perpetuities allows an interest in property to vest up to 21 years after a life in being at the time of creation of the interest. BLACK'S LAW DICTIONARY 1331 (6th ed. 1990). Such a long period would be impractical in the *in vitro* situation.

2. *Relief From Parental Responsibility.*—Just as the law imposes no obligation of financial support on a sperm or egg donor,⁹⁹ a member of an embryo-creating couple who does not want the embryos used or saved should be statutorily relieved of any financial obligation if the other partner is permitted to use the embryos. The using partner is making a free choice, with full knowledge that he or she will bear the full responsibility for the support of the child, and in return it is only fair that the partner who wishes to avoid parenthood should be relieved of all parental responsibilities.¹⁰⁰ The same should be true if one or both partners wish to sell or donate the embryo for adoption or research. Just as the law protects genetic parents from any further obligations when a child is given up for adoption, a statute should relieve the creators of an embryo of responsibility when the embryo is sold or donated.

3. *Allow for Sale or Adoption.*—While most people do not consider embryos *in vitro* to be property, embryos should be subject to control by their creators as to their use and disposition.¹⁰¹ Statutes should allow for the adoption of embryos according to exactly the same rules that apply to the adoption of a child. And while there is some opposition to allowing the sale of embryos,¹⁰² there is no logical reason to treat embryos any differently from other renewable human matter, such as blood or sperm. In view of the very substantial expense involved in the *in vitro* creation of embryos, it seems quite reasonable to allow the creators to recoup all or part of their investment by selling unused embryos for implantation by others, or for research. Those who are opposed to selling embryos on religious or other grounds need not participate in such a transaction. But *the law* should permit sales for those who do not have religious or other objections.

VII. Conclusion

In vitro fertilization is providing wonderful new opportunities for otherwise infertile couples to have children, and for other couples to have children at the optimum time. In light of the experience we have gathered it is now possible, and highly desirable, to anticipate most of the problems that can arise, and to provide solutions and answers in advance, both by agreement of the parties involved and by supporting statutes.

99. See, e.g., UNIF. PARENTAGE ACT § 5(b), 9B U.L.A. 301 (1987).

100. Ahnen, *supra* note 46, at 1329.

101. See *supra* Part V.A.

102. See, e.g., LA. REV. STAT. ANN. 9:122 (West 1986).

