GROWING PAINS: DISPUTES SURROUNDING HUMAN REPRODUCTIVE INTERESTS STRETCH THE BOUNDARIES OF TRADITIONAL LEGAL CONCEPTS

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I. Introduction

In the last twenty years, human reproductive technology has advanced more briskly than the ability of the law to address the unique and complex issues involved. Each technological

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development has created novel disputes over ownership interests in human reproductive material.² As a result, little statutory and case law exists to address reproductive material ownership and its permitted uses, distribution, and disposal.³

Legislative inaction caused largely by social, ethical, and legal concerns has left the task of creating a new legal paradigm to the judiciary. Courts have thus far proved to be an inadequate forum in which to address some of the legal and policy implications surrounding this new area of the law. Attempts by the courts to provide guidance and achieve equity have at times resulted in confusion due to a lack of consensus as to what principles of traditional or statutory law should apply.

Lacking specific guidance from the legislature, the judiciary has reacted to new technological developments by applying the traditional concepts of property, contract, and probate law.⁷ The courts admit that applying these legal

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¹ See Colleen M. Browne & Brian J. Hynes, The Legal Status of Frozen Embryos: Analysis and Proposed Guidelines for a Uniform Law, 17 J. LEGIS. 97 (1990) (hereinafter Proposed Guidelines); see also John A. Robertson, Embryos, Families, and Procreative Liberty: The Legal Structure of the New Reproduction, 59 S. CAL. L. REV. 939, 949, 952 (1986) (hereinafter The New Reproduction).

² See id.

³ See generally WALTER WADLINGTON, REPRODUCTIVE TECHNOLOGIES: ARTIFICIAL INSEMINATION IN ENCYCLOPEDIA OF BIOETHICS 2217 (Warren Thomas Reich, ed., MacMillan Library Reference USA, 1995).

⁴ See id. Legislators have avoided enacting legislation because of their "aversion to controversy, the perception that the practice was limited, and a sense of futility because the legal problems seemed insoluble without broad reform of legitimacy and paternity laws at a time when family law reform was not a pressing issue." Id. But scientific, social, and legal developments since the 1970's have demanded more attention to these technologies and the ethical issues that they raise. See id.

⁵ See generally Shirley J. Paine and Patrick K. Moore, Ethical Dilemmas in Reproductive Medicine, 18 WHITTIER L.REV. 62 (1996) (suggesting that many problems in this new area of the law can be resolved by looking at existing case law, but most cannot); see also Proposed Guidelines, supra note 1, at 122.

⁶ See, e.g., Davis v. Davis, No. E-14496, 1989 WL 140495 (Tenn. Cir. Ct., Sept. 21, 1989), rev'd No. 180, 1990 WL 130807 (Tenn. Ct. App. Sept. 13, 1990), aff'd, 842 S.W.2d 588 (Tenn. 1992), partial reh'g granted, No. 34, 1992 WL 341632 (Tenn. Nov. 23, 1992), cert. denied, 61 U.S.L.W. 3437 (U.S. Feb. 22, 1993). See also Proposed Guidelines, supra note 1, at 122.

⁷ See, e.g., Hecht v. Superior Court, 16 Cal. App. 4th 836 (Cal. Ct. App. 1993); see also Davis v. Davis, 842 S.W.2d 588 (Tenn. 1992), partial reh'g granted, No. 34, 1992

traditions to parties with ownership interests in reproductive material might not be the most effective avenue to legal equity. In instances where the courts have effectively relied on these concepts to address reproductive technology issues, rapid changes in social values and technological advancements have often made such progress short-lived. 9

The purpose of this article is to examine existing laws surrounding ownership rights in reproductive material. The evolution of ownership rights are discussed in Part II of this article. Part III examines the statutory steps taken to address this new area of law and constitutional issues that affect its development. Part IV analyzes the involvement of the courts in addressing this subject. Part V analyzes various legal concepts that may be used to establish the foundation for future comprehensive legislation. Based on this analysis, this article concludes that the legislature must proactively develop legislation that addresses reproductive material ownership issues to provide much-needed guidance to the judiciary, the medical community, and those seeking reproductive assistance. To accomplish this, both traditional legal concepts and modern legal developments must be effectively incorporated into a comprehensive manner to guide affected parties in their actions and limit future litigation in this area.

II. The Evolution of Reproductive Assistance

Human reproduction has special meaning and strong intrinsic value for people. 10 It is the biological means by which

WL 341632 (Tenn. Nov. 23, 1992) cert. denied, 61 U.S.L.W. 3427 (U.S. Feb. 22, 1993); York v. Jones, 717 F. Supp. 421 (E.D. Va. 1989).

⁸ Sooid

⁹ See generally Proposed Guidelines, supra note 1, at 97. For purposes of this paper, the term "reproductive material" is limited to gametes and embryonic material, terms usually used to define a zygote, preembryo, or fertilized egg that has not been implanted in a woman's uterus. See The New Reproduction, supra note 1, at 952 n.45. A gamete is defined as "a reproductive element; one of two cells produced by a gametocyte, male (spermatozoon) and female (ovum)... The conjugation of male and female gametes produces a zygote." DORLAND'S ILLUSTRATED MEDICAL DICTIONARY 536 (26th ed. 1985).

See generally Lori B. Andrews and Lisa Douglass, Symposium on Biomedical Technology and Health Care: Social and Conceptual Transformations: Alternative

we pass on our genetic and social identities to the next generation.¹¹ It is also an intimate, sacred act by which people create a family.¹²

Infertility excludes many people from fulfilling their desire to reproduce biologically.¹³ Currently, infertility in the United States is at its highest level ever.¹⁴ The large population of infertile people, coupled with the creation of new, alternative forms of reproductive technology has prompted substantial growth in the assisted reproductive services market.¹⁵ Through an explosion of remarkable technological advances, scientists

Reproduction, 65 S. CAL. L. REV. 623, 626-28 (1991) (hereinafter Alternative Reproduction).

¹¹ See id. The reproduction process is an extremely complicated process. See Philip Elmer-DeWitt, Making Babies, TIME, Sept. 30, 1991, at 56-58.

¹² See generally Alternative Reproduction, supra note 10, at 626-29.

¹³ See generally Elmer-DeWitt, supra note 11, at 58.

¹⁴ See Elmer-DeWitt, supra note 11, at 56, 58; see also The New Reproduction, supra note 1, at 945-46. Both environmental and social factors contribute to the high level of modern infertility in the United States. See Elmer-DeWitt, supra note 11, at 58; see also The New Reproduction, supra note 1, at 945-46. Some of the social factors that contribute to infertility include the epidemic spread of sexual diseases, cultural pressures that compel people to reproduce later in life, the misuse of drugs, and the misuse of contraceptives. See id. In addition, social forces have pushed women into the work force during their most fertile years causing many to wait too long to have children. See Elmer-DeWitt, supra note 11, at 56. Thousands of women were born with defective reproductive systems because of their mothers' use in the 1940's and 1950's of DES (diethylstilbestrol), which was prescribed to prevent miscarriages. See id. In 1991, approximately 14% of couples in their thirties, in the United States, had infertility problems, and presently, approximately one-million new patients seek infertility treatment each year. See id. at 56, 58.

¹⁵ See Elmer-DeWitt, supra note 11, at 56. Although the various means of reproductive technologies vary in their complexity, all are common in that they separate the act of coitus from human reproduction. See DOROTHY C. WERTZ, REPRODUCTIVE TECHNOLOGIES: ARTIFICIAL INSEMINATION, ENCYCLOPEDIA OF BIOETHICS 2207 (Warren Thomas Reich, ed. MacMillan Library Reference USA, 1995). In 1990, studies showed that each year over 10,000 preembryos were frozen by women for future use, and historically as many as 500,000 couples have used third party donated gametes or preembryos to bear children. See Seth Mydans, Science and the Courts Take a New Look at Motherhood, N.Y. TIMES, Nov. 4, 1990, § 4 at 6. By 1992, infertility care was a \$2-billion per year business. See Glenn Kramon, Infertility Chain: The Good and Bad in Medicine, N.Y. TIMES, June 19, 1992, at D1. By 1994, there were 350 infertility clinics in the United States, including two multi-state chains. See Nancy Wartik, The Boom in the Infertility Business is Raising Hopes and Increasing Criticism, L.A. TIMES MAG., Mar. 6, 1994, at 20. Last year alone, over one million new patients sought medical treatment for fertility problems, ten times the number of reported AIDS cases and six times more than the number of many people treated for lung cancer. See Elmer DeWitt, supra note 11, at 58.

have opened the door to the mystery of fertilization and what can be done when it fails to work naturally. Many infertile individuals regard these techniques as answers to their prayers. Such techniques include artificial insemination, in vitro fertilization, and cryopreservation. Such techniques include artificial insemination, in vitro fertilization, and cryopreservation.

One of the first assisted reproduction techniques used was artificial insemination (AI). AI aids in the fertilization of the egg by delivering the sperm into the uterus or vagina. Delivering the sperm into the uterus or vagina.

In some cases, medications may be used to assist ovaries to release eggs properly or stimulate eggs. See id. at 60. Additionally, hormone treatments can be administered and blocked Fallopian tubes can be cleared via laser beam technology or by surgery, where a balloon is inserted to open up the blocked area. See id. These technologies have further evolved to artificial insemination (AI), in vitro fertilization (IVF), and others. See Elmer-DeWitt, supra note 11, at 60.

The willingness of people to pay for their chance to reproduce, and the availability of health insurance in some instances to help defray the costs, has caused the medical community to mix business with medicine. See generally Kramon, supra note 15, at D1. The mixing of business with the emotional and medical aspects of reproductive technology has led to both positive and negative results for our society. See id.

¹⁸ See generally The New Reproduction, supra note 1, at 942-43; see also Wartik, supra note 15, at 20; John A. Robertson, Reproductive Technologies: Cryopreservation of Sperm, Ova, and Emeryos, Encyclopedia of Bioethics 2229-32 (Warren Thomas Reich ed., MacMillan Library Reference 1995) (hereinafter *Cryopreservation*).

¹⁹ See The New Reproduction, supra note 1, at 942-43. Humans have practiced artificial insemination for centuries. See id. Artificial insemination assists men with low sperm counts by putting the limited sperm they do have either directly into the cervix of the woman or via microinjection, directly into the egg. See Elmer-DeWitt, supra note 11, at 60.

Complicating the use of AI is the relatively new and controversial practice of extracting sperm of deceased people for use in others. See generally Scott Sonner, Woman Hopes Sperm from her Dead Son Produces Grandchild, BUFFALO NEWS, Oct. 2, 1998, at A6. A mother whose son was dying and on life support had his sperm removed because its use by a surrogate mother would be the only way she would become a grandmother. See id. Such requests are becoming more and more common. See id.

²⁰ See Elmer-DeWitt, supra note 11, at 58, 60. Though this procedure has been traditionally used by married couples, it is often used today by single women who desire to have a child but do not have a heterosexual partner and by women in life partnerships with other women. See WADLINGTON, supra note 3, at 2216.

¹⁶ See Elmer-DeWitt, supra note 11, at 58. "Doctors can manipulate virtually every aspect of the reproductive cycle, from artificially ripening eggs in the ovary to inserting sperm directly into the egg's inner membrane." *Id.*

¹⁷ See Elmer-DeWitt, supra note 11, at 58. "Families can be pieced together with borrowed sperm, borrowed eggs and borrowed wombs." Id. For example, a forty-two year old woman plans to give birth to her own grandchild, having served as a surrogate for her daughter who was born without a uterus. See id.

In vitro fertilization (IVF) was the first "out-of-womb" conception technique perfected by reproduction scientists.²¹ IVF is a medical procedure that involves mixing sperm and eggs which are mixed in a test tube or petri dish to facilitate fertilization, thus the term "test tube baby."²² The preembryo is later transferred to a woman's womb or stored for later use.²³ The introduction of IVF was followed shortly thereafter by the introduction of other reproductive technologies such as cryopreservation.²⁴

Although this paper does not fully discuss the parental rights of those involved with IVF, the Supreme Court has held that a possible genetic father of a child born to another married couple (where the wife was allegedly the lover of the man claiming genetic ties to the child) has no standing to claim that he has rights towards a child born of the married couple. See Michael H. and Victoria D. v. Gerald D., 491 U.S. 110, 120 (1989).

²⁴ See Elmer-DeWitt, supra note 11, at 58. Advancements in IVF technology have resulted in the proliferation of many other alternative assisted reproductive technologies which implicate ownership interests in the reproductive material used in these technologies. See id. at 61. These technologies include: gamete intrafallopian transfer (GIFT) which is a new, simpler, and more natural variant of IVF where sperm and eggs are inserted and allowed to mix in the fallopian tube rather than a petri dish. See id. at 61. Zygote intra-fallopian transfer (ZIFT) is a procedure much like IVF, except that the zygote is inserted into the fallopian tube rather than

²¹ See The New Reproduction, supra note 1, at 942. The world witnessed the birth of the first in vitro fertilized (IVF) child in England in 1978. See id.; see also Elmer-DeWitt, supra note 11, at 58. IVF has been available in the United States for only the last seventeen years. See Wartik, supra note 15, at 20. After the first IVF birth in the United States in 1981, demand for assisted reproductive technology was swift, and the United States market for these technologies grew dramatically. See John A. Robertson, Assisted Reproductive Technology and the Family, 47 HASTINGS L.J. 911 (1996) (hereinafter Technology and the Family). IVF is now a common procedure in the United States, responsible for over 6,000 births per year. See id. at 911-12.

²² The New Reproduction, supra note 1, at 967. It is important to understand the basics of the creation and biological status of preembryos used in various IVF procedures. See generally id. The process allows physicians to perform many key reproductive events outside of a woman's body, bypassing many barriers to fertility. See Elmer-DeWitt, supra note 11, at 60. During the time between fertilization and transfer to a woman's womb, usually forty-eight to seventy-two hours, the fertilized egg cells divide into a two to eight cell zygote or preembryo. See generally The New Reproduction, supra note 1, at 967.

²³ See The New Reproduction, supra note 1, at 967. Preembryos created via IVF, and either used or cryogenically stored, need four to six more days of cellular development to reach a stage where successful implantation is possible. See id. at 968-69. Preembryos created and used for IVF procedures lack (1) the ability to implant, (2) a nervous system, and (3) any sentience. See id. at 970. Thus, it is incorrect to consider preembryos used during IVF procedures as either a biological or legal individual. See id.

Cryopreservation is a process whereby a donor's gametes or preembryos are frozen and stored or "banked" at very low temperatures for future use by the donor or by another. ²⁵ Cryogenics allow an infertile couple to experience biological reproduction for themselves by using one or both gametes from a sperm or egg bank. ²⁶

Although these modern technologies help thousands of people realize their goal of reproducing biologically, the United States lacks the legal tools necessary to resolve the inevitable legal disputes surrounding these new technologies.²⁷

the uterus. See id. at 61. "Zona drilling" removes a protective layer of the egg before IVF to enhance the chance that the sperm will fertilize the egg. See Elmer-DeWitt, supra note 11, at 58. GIFT and ZIFT clinics have reported higher success rates than those achieved in typical IVF facilities. See id. at 61. Rates of success range from 40% to 50%, as compared to a success rate of only 25% when a healthy couple uses natural reproductive means. See id. Subzonal Insertion (SUZI) is a procedure in which the sperm are inserted under the egg's protective layer, where one sperm eventually penetrates and fertilizes the egg. See Wartik, supra note 15, at 20.

²⁵ See Cryopreservation, supra note 18, at 2229. Some find this procedure to be unethical and this practice is prohibited in some countries. See id. at 2230. Perhaps one of the most important developments for assisted reproductive technology is the use of cryopreservation or "cryogenics." See id.; see also Proposed Guidelines, supra note 1, at 98-99. Many people use cryopreservation to store more than one gamete or preembryo at a time; this is termed "banking." See id.; see also Jim Erickson, Freezing Time: Egg Banking is Latest Step in Assisted Pregnancies, Az. Daily Star, June 1, 1997, at 1B. Banking is used to reduce the amount of invasive procedures needed to retrieve reproductive material or to preserve healthy reproductive material for a donor who is at risk of losing their reproductive ability. See generally Proposed Guidelines, supra note 1, at 99; see also John Travis, Researchers Egg Women On, Chi. Trib., June 22, 1997, at 8.

This process may be used by a woman to turn off her biological clock. See Don Sider, Cooling Off Period: A Scientific First Will Let Women Conceive with Their Own Frozen Eggs, PEOPLE, Nov. 10, 1997, at 141. If a woman of twenty-five wished to delay motherhood until she is forty, she could freeze her eggs until then. See id. This process allows people to preserve eggs, sperm, and embryos to protect against the lack of viability due to age, illness, occupational exposure, and other factors and enables posthumous reproduction to be done. See Cryopreservation, supra note 18, at 2229-30. The process may be used by women planning to undergo chemotherapy or radiation which can destroy their ovaries. See Sider, supra, at 142. Frozen eggs and sperm may last for decades as proven by studies done on cattle and mice. See id.

As with other forms of technology deviating from natural conception, such techniques raise "both medical questions of safety and efficacy and ethical, legal, and social questions about prohibition, restriction or regulation of these practices." Cryopreservation, supra note 18, at 2230. Despite these concerns, cryopreservation of sperm is a well-accepted practice today. See id.

²⁶ See Cryopreservation, supra note 18, at 2229.

²⁷ See The New Reproduction, supra note 1, at 952 n.48.

The swift development of these technologies and the enormous amounts of money involved in this private, unregulated industry has caused unforeseen strains on American jurisprudence.²⁸ Because of these new technologies, legal disputes have arisen surrounding the technological procedures as well as the ownership of reproductive material developed in these reproductive procedures.²⁹ Such disputes have arisen in various circumstances including divorce and probate proceedings.³⁰

Market forces and social demand are driving these new medical procedures with little medical, legal or ethical oversight.⁵¹ Scientific debate has focused on the propriety of

Other legal issues surround the length of time that such gametes can be stored, limiting the authority of the providers over the disposition of frozen embryos. See id. at 2232. For example, Spain and Germany prohibit the discarding of embryos, while Great Britain limits their storage to the reproductive life of the woman or ten years, whichever is longer. See Cryopreservation, supra note 18, at 2232. Legislation in the United States on this subject is largely absent, although the Ethics Committee of the American Fertility Society has recommended a maximum period of storage. See id. at 2232.

²⁸ See id.; see also Proposed Guidelines, supra note 1, at 107.

²⁹ See, e.g. Elmer-DeWitt, supra note 11, at 58; see also Sider, supra note 25, at 141. As a result of the use of artificial insemination, parental rights of the parties are often implicated, as the sperm used may be that of the husband or of a third-party sperm donor. See Elmer-DeWitt, supra note 11, at 58. The ownership interest involved with the removal, cryopreserved storage, and usage of reproductive material causes many of the legal problems surrounding assisted reproductive technologies. See Sider, supra note 25, at 141; see also Cryopreservation, supra note 18, at 2231. Many of the same issues concerning sperm donors apply to those banking ova. See Cryopreservation, supra note 18, at 2231. There is no doubt that ova will be purchased by such banks and resold to those in need of egg donors. See id. The contracts surrounding these transactions are of utmost importance to the parties' rights. See id.

³⁰ See, e.g., Hecht v. Superior Court, 16 Cal. App. 4th 836 (Cal. Ct. App. 1993) (addressing right of testator to determine disposition of reproductive material); see also Davis v. Davis, 842 S.W.2d 588 (Tenn. 1992), partial reh'g granted, No. 34, 1992 WL 341632 (Tenn. Nov. 23, 1992) cert. denied, 61 U.S.L.W. 3427 (U.S. Feb. 22, 1993) (addressing ownership dispute surrounding cryopreserved embryos in divorce proceeding). See Part IV, infra, for a discussion of these and other cases.

³¹ See generally The New Reproduction, supra note 1, at 952 n.48. Medical and scientific communities face virtually no oversight by government regulatory commissions. See id. This is due in part to Congress' desire to remain distanced from legal and ethical debates concerning assisted reproduction. See generally Elmer-DeWitt, supra note 11, at 62; see also Wartik, supra note 15, at 21, 44. Congress demonstrated a negative view of IVF research by cutting all government funding of IVF research in 1980. See Elmer-DeWitt, supra note 11, at 62; see also Wartik, supra

using these complex assisted reproductive techniques without extensive clinical tests.³² Religious and ethical groups question whether this technology should even be available.³³

note 15, at 20. Congress has appropriated \$3 million in funds for three contraceptive centers and five infertility centers. See Elmer-DeWitt, supra note 11, at 62. This disinterest is also exhibited by the fact that the United States Public Health Service has not supported research for in vitro fertilization, leaving the responsibility to review issues regarding reproductive technologies to the medical profession. See Luigi Mastroianni, Jr., Reproductive Laws for the 1990's: The Key Social Issues Posed By the New Reproductive Technologies: A Physicians Perspective 435 (Sherrill Cohen & Nadine Taub, eds., Humana Press 1989).

This cut in federal funding left a "moral vacuum" in which private research on assisted reproductive technology continues with virtually no public regulation. See Elmer-DeWitt, supra note 11, at 62; but see FEDERAL CLINIC REPORTING ACT, 42 U.S.C. § 263a-1-7 (WEST 1998), for public reporting of IVF success rates. This response is far different than that of the British government, which has sponsored a commission that reviews issues surrounding human fertilization and embryology to address new technologies and suggests guidelines on the regulation of infertility services and research by the British National Health Service. See MASTROIANNI, supra.

³² See generally Wartik, supra note 15, at 21, 44. Rapid advances in reproductive technology coupled with the "lack of outside scrutiny of the price, safety and effectiveness of many emerging medical treatments" could lead to abuses within the system. See Kramon, supra note 15, at D2; see also Elmer-DeWitt, supra note 11, at 58. In vitro treatments may run from \$6,000 to over \$50,000 per live birth. See Elmer-DeWitt, supra note 11, at 58.

Critics complain that the advances in assisted reproductive technology occur without concurrent research into the possible harmful effects on women or their artificially reproduced offspring. See generally The New Reproduction, supra note 1, at 953. Issues such as exploitation, the possibility of physical harm, and informed consent remain unanswered. See MASTROIANNI, supra note 31, at 433. There is potential for misuse of these new technologies. See id. Patients should be made aware of the risks of serious harm that these procedures present and of feasible alternatives. See WADLINGTON, supra note 3, at 2218. The lack of regulated, publicly funded research leads most scientists and physicians involved in this field to recognize that their practice is, in reality, an ongoing clinical trial. See generally Wartik, supra note 15, at 44 (stating that the World Health Organization has "criticized the profit-driven proliferation of reproductive technology in countries around the globe and called for more clinical trials").

³³ See Proposed Guidelines, supra note 1, at 110-12. The advent of assisted reproduction in the United States has created serious ethical concerns. See generally Elmer-DeWitt, supra note 11, at 58-62; see also Mastroianni, supra note 31, at 433. Some of these concerns include whether egg and sperm donors have rights to their biological children, if embryos have a right to life, and how much manipulation of genetic reproductive material should society allow. See Elmer-DeWitt, supra note 11, at 58. Other moral questions are raised as to what extent should society help infertile couples have children. See id. at 62. Nine states have enacted laws requiring insurance companies to cover the expense of infertility treatments. See id. at 61. Others voice the opinion that the diagnoses may be paid by society, but the cost of treatment itself should be paid for by the couples seeking reproductive assistance.

These unsettled issues, compounded by the impact that these technologies have on our understanding of the traditional concepts of privacy, property, and procreative rights, have left the present state of reproductive technology law in a state of flux.³⁴ Basic contract law, for example, has been

See id.

Religious groups constantly debate the morality of unnaturally creating children and the effects that artificial means of fertilization and the use of donated gametes and surrogates have had on the family structure. See generally WADLINGTON, supra note 3, at 2219. Some view artificial means of reproduction as unnatural and strongly object to its use. See id. Others view it as another way in which humans have exerted their control over nature. See id. In 1987, the Vatican called for a ban on embryo and sperm banks and an end to embryo experimentation. See Marcia Chambers, Legal Issues Seen in Vatican Call for Laws to Bar Birth Technology, N.Y. TIMES, Mar. 16, 1987, at A1. Some oppose such reproduction claiming that is it tantamount to adultery and contrary to the unity of marriage and conjugal fidelity. WADLINGTON, supra note 3, at 2219. This also prompts ethical and legal debate as to what constitutes a family. See id. Others challenge these new technologies saying that this encourages selective breeding and the creation of a master race. See id. One sperm bank in the United States was established with the intent of accepting donor sperm from those with superior intellect. See id. Despite such opposition, large populations of infertile couples pursue reproductive assistance. See generally Wartik, supra note 15, at 45-46. Another view states that because of the uncontrolled population explosion worldwide, humans "are in imminent danger of reproducing themselves out of existence. Rather than encourage fertility labs, we should outlaw them." Don Gately, Baby Steps, THE LOS ANGELES TIMES MAGAZINE, April 3, 1994, at 4.

Physicians recognize that the unregulated and rapid development of reproductive technology poses ethical problems. See generally Erickson, supra note 25, at 1B. Scientists and doctors involved with reproductive technologies may continue to stretch "the boundaries of good judgment and common sense." Id. (quoting Dr. Timothy J. Gelety, Director of the University Medical Center's assisted-reproduction program). As such, legal and medical regulations can and should address most of the ethical concerns about the effects of reproductive technologies. See generally The New Reproduction, supra note 1, at 952 n.48, 953.

³⁴ See The New Reproduction, supra note 1, at 952. In 1986, Professor John A. Robertson succinctly described the legal environment surrounding the advent of reproductive technology:

The legal environment is marked by an absence of direct regulation and uncertainty about the extent to which laws devised for other purposes will apply. This may be unduly laissez-faire. If existing laws have no application, doctors and their clients are legally free to develop and use the new birth technology without regard to social consequences, using surrogates, donors, and other techniques as they wish. There may be interests of offspring, collaborators, or society at stake, which justify concern or even regulation.

On the other hand, the uncertain legal situation might instill

applied to reproductive material issues, such as disputes surrounding ownership rights of the reproductive material and potential liability to the donor or physician for financial support of a subsequently born child. Furthermore, there continues to be virtually no regulation of reproductive technology practices, nor significant legislation to guide the new legal interests involved.

III. Statutory Ownership Interests

Although the courts have begun to address issues surrounding reproductive technology, the consensus is that the judiciary decides these cases in a legal vacuum, which leads to

excessive caution on clinicians, detouring research into less fruitful avenues and preventing infertile couples from using techniques that could meet their reproductive needs.... Legislation to clarify the legality of these procedures would, from both a social and consumer perspective, be desirable.

Id.; see also supra note 6; WADLINGTON, supra note 3, at 2216-17. Some of the most significant risks are of a legal nature and include questions of "kinship status, whether a sperm donor might assert parentage, and confidentiality in the event of legal actions such as divorce." WADLINGTON, supra note 3, at 2218. Also at issue is the possibility that half siblings related by blood via a common sperm donor marry without awareness of that relation, and find that such a marriage is void under most state laws. See id. The failure to address these serious status problems derived from these new technologies is inconsistent with family law. See id. at 2220. For example, divorce law recognizes "that the civil law provides basic guidelines that should not obstruct the tenets of individual religious groups who are free to follow their own beliefs." Id. at 2220.

³⁵ See Cryopreservation, supra note 18, at 2230. Such contracts addressing these new technologies must set forth clear specification of the duties and rights of the parties involved. See id. Legislation should be established setting forth the duties of the parties involved and the subjects to be addressed in such a contract. For example, a sperm bank should have the legal duty to return the correct sperm to the donor on his request. See id. One case reported the return of the wrong sperm specimen which resulted in the birth of a child not of the same race as the donor. See id. Additionally, physicians should have the duty of reasonable care to test donors for infectious and genetic diseases. See id.

Other concerns surround how the facilities themselves should be run. See WADLINGTON, supra note 3, at 2217. Some states require that AI be performed only by licensed physicians. See id. Additional regulations are needed to prevent unethical instances such as where a doctor used his own semen without his patient's knowledge. See id.

²⁶ See generally Paine, supra note 5, at 62.

inconsistent judicial decisions.³⁷ This presents a dilemma that demands that the legislature provide guidance in this area with regard to the legal and policy issues related to reproductive ownership rights.³⁸ Such a legislative process should begin with a review of the constitutional foundations for reproductive rights, followed by scrutiny of the statutory developments and common law jurisprudence already established in the area. This analysis would lay the groundwork for future legislation addressing this new area of law.

A. Constitutional Background

The Supreme Court recognized that a right of privacy extended to an individual's right to reproductive freedom in Griswold v. Connecticut. Griswold was the first case to establish a couple's right not to procreate by guaranteeing the right to use contraception to avoid conception. In Eisenstadt v. Baird, Justice Brennan extended this right to non-married couples. Brennan stated that "if the right of privacy means anything, it is the right of the individual, married or single, to be free from unwarranted governmental intrusion into matters so fundamentally affecting a person as the decision whether to bear or beget a child."

Subsequently, in Meyer v. Nebraska, the Supreme Court first recognized an individual's interest "to marry, establish a home

³⁷ See Mydans, supra note 15, § 4, at 6.

³⁸ See Proposed Guidelines, supra note 1, at 122.

³⁹ 381 U.S. 479, 484-85 (1965) (holding that married couples may decide to use contraceptives because this falls within the penumbral rights of marital privacy as guaranteed by the Bill of Rights).

⁴⁰ See id.

 $^{^{41}}$ 405 U.S. 438, 453 (1972) (holding that the right to use contraceptives is not limited to married couples).

⁴² Id. (citing Stanley v. Georgia, 394 U.S. 557 (1967); Skinner v. Oklahoma, 316 U.S. 535 (1942); Jacobson v. Massachusetts, 197 U.S. 11, 29 (1905)). Although this statement was made in the context of protecting an unmarried couple's interest in using contraceptives to avoid conception of a child, one may imply that the right to procreate is protected by the penumbral right to privacy. See The New Reproduction, supra note 1, at 959-60. Thus, any law that limits procreative freedom should be subject to the same strict scrutiny applied to laws restricting abortion or contraception, and the same scrutiny should extend to laws that limit artificial reproduction. See id.

and bring up children" as a liberty interest protected by the Due Process Clause of the Fourteenth Amendment. Later, in Skinner v. Oklahoma, the Supreme Court struck down a statute that required sterilization of habitual criminals. The Court declared that the right to procreate was "one of the basic civil rights of man... fundamental to the very existence and survival of the race."

These landmark decisions stand for the proposition that a fundamental right to procreate or prevent procreation exists. ⁴⁶ Any laws that affect one's procreative decisions must not infringe on that individual's right to privacy and liberty interest in raising children. ⁴⁷ These strict constitutional protections will hinder legislative attempts to regulate and limit procreative interests, and continue to influence judicial attempts to address the legal issues implicated by the new reproductive technologies. ⁴⁸

B. Analysis of Statutory Development

Because the issues surrounding reproductive rights are emotional and controversial, most lawmakers are hesitant to enact laws that regulate assisted reproduction or restrict an

 $^{^{43}}$ 262 U.S. 390, 399 (1923). "No state shall... deprive any person of life, liberty or property, without due process of law..." U.S. CONST. amend. XIV, \S 1.

⁴⁴ 316 U.S. 535, 543 (1942).

⁴⁵ Id. at 541.

⁴⁶ See Stanley v. Illinois, 405 U.S. 645, 651 (1972) (citing Meyer v. Nebraska, 262 U.S. 390, 399 (1923) stating that "[t]he rights to conceive and to raise one's children have been deemed 'essential'"). "It is cardinal with us that the custody, care and nurture of the child reside first in the parents, whose primary function and freedom include the preparation for obligations the state can neither supply nor hinder." Stanley, 405 U.S. at 651 (citing Prince v. Massachusetts, 321 U.S. 158, 166 (1944)). See also Skinner, 316 U.S. at 541 (holding that "[m]arriage and procreation are fundamental to the very existence and survival of the race").

⁴⁷ See generally Meyer, 262 U.S. at 399; see also Skinner, 316 U.S. at 541. These cases support the proposition that there are constitutional protections of the liberty to have and raise a child. Since infertile individuals have the same interest in bearing children as fertile individuals, "their right to use noncoital techniques to treat infertility should have equal respect." Technology and the Family, supra note 21, at 914.

⁴⁸ See id.

individual's fundamental right to procreate.⁴⁹ Despite this reluctance, some legislatures have deemed it necessary to enact legislation to address the legal controversies created by these new technologies.⁵⁰

1. Federal Legislation and the Lack Thereof.

The federal government entered the reproductive technology arena by creating various bioethical commissions.⁵¹ Beyond this limited involvement, the only federal law that presently regulates assisted reproductive technologies is the Fertility Clinic Success Rate and Certification Act of 1992, which requires fertility clinics to report their fertility success rates to the Centers for Disease Control.⁵² The fact that the federal government has not substantially addressed assisted reproductive technology is not viewed as a loss by some scholars who consider state legislatures to be the proper forum to address the issue.⁵³

⁴⁹ See generally Proposed Guidelines, supra note 1, at 98-99; see also Mydans, supra note 15, § 4, at 6.

 $^{^{50}}$ See, e.g., La. Rev. Stat. Ann. §§ 9:121-133 (West 1998); Fla. Stat. Ann. §§ 742.11 -.17 (West 1998).

⁵¹ See GEORGE J. Annas, Reproductive Laws for the 1990's: Regulating the New Reproductive Technologies 413 (Sherrill Cohen & Nadine Taub, eds., Humana Press 1989); see also The Ethical Advisory Board in the United States, U.S. Dept. of Health, Education & Welfare, Ethics Advisory Board, HEW Support of Research Involving Human In Vitro Fertilization and Embryo Transfer, 44 Fed. Reg. 35,033 (1979). These commissions include The National Commission, the Ethics Advisory Board, the President's Commission on Bioethics, and the Congressional Biomedical Ethics Board. See Annas, supra, at 413. These commissions make recommendations regarding the use of assisted reproductive technologies. See id.

⁵² See Technology and the Family, supra note 21, at 919; see also The Fertility Clinic Success Rate and Certification Act of 1992, Pub. L. No. 102-493, 1992 U.S.C.C.A.N. (106 Stat.) 3146. This information is available to future patients who may use it to research their clinical choices. See id. However, although the intent of the act was to "standardize success rates and to create a central repository for information regarding success rates and clinic licensure", there is still no definition of "success rate". See Paine, supra note 5, at 53.

⁵³ See Annas, supra note 51, at 417. Regulation of medical practices are considered to be primarily a state function. See id. at 414. Annas argues that Congress should enact legislation to expand the existing federal prohibition of the transfer of human organs for money to include embryos and gametes. See id. at 415-16. This would prevent reproductive materials from being considered "commodities." See id. If such legislation is enacted, then most, if not all sperm and

2. State Legislation

There is little state legislation concerning reproductive material.⁵⁴ Legislation that does exist is generally inconsistent.⁵⁵ This legislation covers an array of subjects from insurance funding of IVF procedures⁵⁶ to probate code determination of descendants produced from donated gametes.⁵⁷ Only

egg banks may close due to the commercial nature of purchasing and selling reproductive material. Statutes that prohibit organ sales usually exempt semen and regenerative tissue, but a 1986 report of the Ethics Committee of the American Fertility Society asserts that donors should not be paid for their semen and, similarly, a 1979 draft by the Council of Europe recommended reimbursing donors only for their expenses. See WADLINGTON, supra note 3, at 2220. For this reason, it is unlikely that Congress will amend federal law to include sperm, ova, and embryos to the specific list of human tissue covered by the term "organs." See The National Organ Transplant Act of 1984 which currently applies only to, "the human kidney, liver, heart, lung, pancreas, bone marrow, cornea, eye, bone and skin..." 42 U.S.C. § 274 (e)(c)(1) (the National Organ Transplant Act of 1984 may be found at 42 U.S.C. §§ 273-274 (e)).

⁵⁴ See, e.g., La. Rev. Stat. Ann. §§ 9:121-133 (West 1998); Fla. Stat. Ann. §§ 742.11 -.17 (West 1998).

⁵⁵ See, e.g., Mydans, supra note 15, § 4 at 6. Inconsistencies in the legislation are exhibited by comparing the legislation of Florida, the District of Columbia, and Michigan which ban paid surrogate agreements, while five other states have legislation that make surrogate agreements unenforceable. See id.; see also D.C. CODE ANN. § 16-401, 402 (West 1998). The Pennsylvania Abortion Control Act requires that physicians performing IVF keep detailed records of the number of eggs fertilized, implanted, and destroyed. See PA. STAT. ANN. tit. 18 § 3213 (e) (West 1990).

⁵⁶ For laws mandating the availability of health insurance proceeds for IVF procedures, see, e.g., ARK. CODE ANN. §§ 23-85-137; 23-86-118 (Michie 1992); CONN. GEN. STAT. ANN. § 38a-536 (West 1998); HAW. REV. STAT § 431:10A-116.5 (1990); MD. CODE ANN. art. 48A, § 470W (Supp. 1991); MASS. GEN. LAWS ANN. Ch. 175, § 47H (West 1998); R.I. GEN. LAWS § 27-18-30 (1989); TEX. INS. CODE ANN. § 3.5-6(3)A (West Supp. 1991). Kentucky banned the use of public funds for both IVF procedures and research. See Ky. Rev. STAT. ANN. § 311.715 (Banks-Baldwin 1983).

⁵⁷ See, e.g., Hecht v. Superior Court, 16 Cal. App. 4th 836, 848 (Cal. Ct. App. 1993), see also the Uniform Status of Children of Assisted Conception Act, adopted in North Dakota and Virginia, which

is designed to provide finality for the determination of parenthood of those whose genetic material is utilized in the procreation process after death. The death of the person whose genetic material is either used in conceiving an embryo or in implanting an already existing embryo into a womb would end the potential parenthood of the deceased.... It is designed primarily to avoid the problems of intestate succession which could arise if the posthumous use of a person's genetic material could lead to the deceased being termed a parent. Of course, those who want to

Louisiana and Florida currently have statutes that directly affect the ownership interests over reproductive material.⁵⁸

Louisiana has enacted the most comprehensive laws governing IVF procedures and the treatment of embryos.⁵⁹ The laws prohibit the sale of fertilized and unfertilized human ova and embryos.⁶⁰ The laws also expressly prohibit the use of embryos for research purposes.⁶¹ Most importantly, Louisiana is the only state that legally protects an in vitro fertilized ovum as a "juridical person" with a separate legal identity, rights to confidentiality, the ability to sue and be sued, and protections against any form of intentional destruction.⁶² In essence, the embryo is not considered property, but rather, a biological human being.⁶³ As such, Louisiana laws place a duty of care

explicitly provide for such children in their wills may do so.

Uniform Status of Children of Assisted Conception Act, §4(b) (1988 Act; 1993 Pocket Supp.) Committee Comments (emphasis added). See also N.D. STAT. ANN. § 14-18-01 (West 1998); VA. STAT. ANN. § 20-156 (Michie 1998).

Over half the states have adopted legislation declaring a husband the legal father of a child conceived by artificial insemination so long as he consented to the procedure. See ANNAS, supra note 51, at 413-14. This Act also defines the husband of the inseminated woman as the legal father of a child born by donated sperm, provided that he consented to the procedure. See id. at 413-14.

⁵⁸ See La. Rev. Stat. Ann. §§ 9:121-133; Fla. Stat. Ann. §§ 742.11 -.17.

⁵⁹ See La. Rev. Stat. Ann. §§ 9:121-133.

⁶⁰ See La. Rev. Stat. Ann § 9:122.

⁶¹ See id.

⁶² See LA. REV. STAT. ANN. §§ 9:124-27, 129. "Juridical" is defined to mean "of or relating to the administration of the law." Webster's II New Riverside Dictionary 383 (1984). It is interesting to note that the current Louisiana Criminal Code does not protect a "person" as a "human being" until after the "moment of fertilization and implantation." LA. REV. STAT. ANN. § 14:2 (West 1998) (emphasis added).

⁶³ See La. Rev. Stat. Ann. §§ 9:126-27. The "Ownership" section of the statute states that an egg is a human being at fertilization. See La. Rev. Stat. Ann. §§ 9:126. Generally, this legislation ignores the science of reproduction and embryonic development. See generally The New Reproduction, supra note 1, at 967-69. The Louisiana statutory sections entitled "Ownership" and "Duties of Donors" determine ownership interests in embryonic material. See La. Rev. Stat. Ann. §§ 9:126, 130. Under the "Ownership" section, the Louisiana legislation protects "an in vitro fertilized human ovum [as] a biological human being which is not the property of the physician . . . or the facility which employs the physician who acts as the agent of fertilization." La. Rev. Stat. Ann. §9:126. This section defines the ownership interests of the patients who contributed genetic material to the embryo and provides that if the progenitors decide not use embryos remaining in storage, then the physician "shall be deemed to be temporary guardian of the in vitro fertilized human ovum until adoptive implantation can occur." La. Rev. Stat. Ann. §9:126.

upon physicians to protect the interests and well being of the embryo.⁶⁴ Furthermore, the legislation states that donors do not have ownership rights over the reproductive material, requiring that the physician be a temporary guardian of the embryo in cases where the progenitors decide not to use it for themselves.⁶⁵ Granting the embryo the rights of a human being and placing such a duty on physicians imposes a heavy burden that may cause the statute's constitutionality to be challenged.⁶⁶

The Florida statute is an example of a state's attempt to use proactive legislation to prevent litigation over the disposition of gametes or embryos. The statute determines the legal

⁶⁴ See La. Rev. Stat. Ann. §§ 9:126-27.

⁶⁵ See La. Rev. Stat. Ann. § 9:126. The "Duties of Donors" section states that fertilized human ovum "cannot be owned by the in vitro fertilization patients who owe it a high duty of care and prudent administration." La. Rev. Stat. Ann. § 9:130. Fertilization patients can only renounce their parental duties by a notarized act, and only when they renounce their parental rights will the in vitro fertilized embryo be available for "adoptive implantation." La. Rev. Stat. Ann. § 9:130.

⁶⁶ See Chambers, supra note 33, at B5 (quoting Professor Lori B. Andrews). Classifying an egg as a human being at fertilization will likely "deter physicians from offering even basic in vitro fertilization," because of the strict duty that it imposes on physicians who handle embryos. Id. Such restrictions impose a heavy burden and interfere with one's right to procreate, and therefore, may be held unconstitutional. See id. Compare this legislation to that in Planned Parenthood of Southeastern Pennsylvania v. Casey, 505 U.S. 833, 870 (1992). Neither the Louisiana State nor federal courts have reviewed the constitutionality of the Louisiana statutes.

Under Casey, viability of the fetus creates a legitimate state interest that enables the state to intervene and restrict reproductive choice. See Casey, 505 U.S. at 870 (citing Roe, 410 U.S. at 163). Casey holds that pre-viability, the state must demonstrate a compelling interest in regulating reproductive choice, otherwise the law shall be considered invalid. See Casey, 505 U.S. at 873-74. By analogizing a woman's right to abort before viability without undue burdens from the state to the disposition rights of progenitors concerning reproductive material, one may extend the right not to procreate to the right to destroy one's preembryos before implantation. See id. at 870. This analogy extends the right to an abortion to the fundamental right not to procreate. See id. Although the Louisiana statute does not necessarily pose an undue burden upon a woman's right to an abortion, it does present an undue burden to avoid genetic reproduction by requiring the use of the genetic reproductive material of women involved in IVF procedures. See generally Chambers, supra note 33, at B5. Thus, the Louisiana laws that prevent the destruction and demand the implantation of the preembryos present a substantial obstacle and an undue burden to an individual's right not to procreate. See generally The Louisiana law should be invalidated because stored embryos enjoy protections not given to three or four-week-old fetuses. See id.; see also Proposed Guidelines, supra note 1, at 117.

⁶⁷ See Fla. Stat. Ann. §§ 742.11-.17.

outcome of a dispute over the reproductive material when there is no pre-written agreement between the couple and the treating physician. Before moving forward with the reproductive procedure, the statute directs the "commissioning couple" to create an agreement that outlines their disposition wishes. The statute recommends that the agreement should cover the disposition of the couple's "eggs, sperm, and preembryos in the event of a divorce, death of a spouse, or any other unforeseen circumstance." The statute also determines the disposition of the reproductive material when the parties fail to create a pre-written agreement.

The Florida legislation would most likely pass constitutional muster. Unlike the Louisiana legislation, the Florida statute does not create burdensome duties, nor does it restrict or direct the use of preembryonic material. The Florida statute narrowly regulates the decisional authority over reproductive material used during assisted reproductive procedures. The statute avoids constitutional strict scrutiny because it does not restrict or regulate an individual's right to procreate. Although the Florida statute does attempt to legislate the ownership interests of reproductive material used

⁶⁸ See Fla. Stat. Ann. § 742.17.

⁶⁹ See Fla. Stat. Ann. § 742.17; see also § 742.13 (defining "commissioning couple" as the "intended mother and father of a child who will be conceived by means of assisted reproductive technology using the eggs or sperm of at least one of the intended parents").

⁷⁰ See Fla. Stat. Ann. § 742.17; see also Fla. Stat. Ann. § 742.13 (defining "preembryos" as "the product of the fertilization of an egg by a sperm until the appearance of the embryonic axis"); see also Fla. Stat. Ann. § 742.17.

The See Fla. Stat. Ann. § 742.17. Section one of the statute grants control of gametes to the individual who provided one of the gametes, presumably not the anonymous donor if a donated gamete is used. See Fla. Stat. Ann. § 742.17(1). Section two grants joint decision-making authority over preembryos to the "commissioning couple." See Fla. Stat. Ann. § 742.17(2). Section three provides that if one member of the commissioning couple should predecease the other, the surviving intended parent shall retain exclusive control over any sperm, eggs, or preembryos. See Fla. Stat. Ann. § 742.17(3). The final section prohibits a child conceived of a gamete donated by a person who died before the placement of the material into a woman's body from making a claim against the decedent's estate unless the decedent provided for the child in a will. See Fla. Stat. Ann. § 742.17(4).

⁷² See FLA. STAT. ANN. § 742.16.

⁷³ See id.

⁷⁴ See, e.g., Skinner, 316 U.S. at 543.

in assisted reproductive technology, it is ineffective in providing guidance to courts in instances where the disposition of embryos are disputed.⁷⁵

IV. Common Law and Reproduction

Few judicial decisions exist that address conflicts of ownership and the disposition of reproductive material. In these decisions, the courts applied traditional constitutional, property, and contract doctrines along with existing statutory law to decide these novel legal disputes.⁷⁶

A. York v. Jones

York v. Jones was one of the first cases to consider the legal interests of multiple parties in disputes over reproductive material. This case involved a dispute between an IVF institution in Virginia and a couple that was storing a cryopreserved pre-zygote there who wished to transfer the zygote to a California institute. The case of the control of the couple of the case of the couple of th

The court examined the ownership interests and disposition rights involved based on breach of contract and detinue claims.⁷⁹ The couple founded their breach of contract

⁷⁵ See generally Kass v. Kass, 663 N.Y.S.2d at 590 (stating the court will not interfere with a party's expressed wishes for the disposition of reproductive material). This legislation provides a simple legal guide to a complex situation. It not only promotes a pre-written agreement that precludes litigation over the disposition of reproductive material, but also provides a legal guide for situations in which no written agreement is entered into. See FLA. STAT. ANN. § 742.17. However, the second section of the statute fails to adequately address possible disputes that may arise between the commissioning couple over the disposition of the embryo. See id.

⁷⁶ See Davis v. Davis, 842 S.W.2d 588, 599 (Tenn. 1992), partial reh'g granted, No. 34, 1992 WL 341632 (Tenn. Nov. 23, 1992) cert. denied, 61 U.S.L.W. 3427 (U.S. Feb. 22, 1993); York v. Jones, 717 F. Supp. 421, 425 (E.D. Va. 1989).

⁷⁷ See 717 F. Supp. 421, 422 (E.D. Va. 1989) (noting that this was a case of first impression).

⁷⁸ See id. at 422. The couple wished to continue their IVF procedures at the California institute. See id. at 422-23.

⁷⁹ See id. at 424, 427. Detinue is defined as "[a] form of action which lies for the recovery . . . of personal chattels from one who acquired possession of them lawfully, but retains it without right . . ." BLACK'S LAW DICTIONARY 450 (6th ed.

claim upon the "Cryopreservation Agreement" entered into between the couple and the Virginia institute. The court determined that the agreement between the parties created a contractual bailment of the pre-zygote. The court determined that since the "defendants fully recognize plaintiffs' property rights in the pre-zygote [the institute has] limited their rights as bailee to exercise dominion and control over the pre-zygote. Ethe court concluded that the plaintiff couple, as bailor, had stated a claim in detinue, and as such, the institute had unlawfully refused to return the lawful property of the couple. The court held that the cryopreserved embryo was the couple's property, and based upon this, determined the prevailing rights and interests in the property's ownership, use, and disposition of this reproductive material.

This ruling provided the foundation for the judicially-created "property model" used to address ownership interests in reproductive material. 85 Although this model is an adequate

1990).

- (1) the couple would have 'the principle responsibility to decide the disposition of (the) pre-zygotes,'
- (2) in the event of divorce, the legal ownership of any stored pre-zygote would be determined by a property settlement, and
- (3) should the couple decide not to pursue initiation of pregnancy with the stored pre-zygotes, the couple could chose either to donate the material for another couple to implant, to donate the material for research, or to permit the institute to thaw the material without it developing further.

Id. at 424.

The institute claimed that the agreement did not contain a transfer option provision, and that a transfer option was not mutually agreed to by all parties. *See id.* at 425-26.

- 81 See id. at 425.
- 82 York v. Jones, 717 F. Supp. at 427.
- ⁸³ See id.
- ⁸⁴ See id. at 425. The court found that the institute referred to the pre-zygote as the couple's "property." See id.
- ⁸⁵ See Jennifer Marigliano Dehmel, To Have or Not to Have: Whose Procreative Rights Prevail in Disputes Over Dispositions of Frozen Embryos?, 27 CONN. L. REV. 1377, 1384 (1995). This model reflects the view that the American Fertility Society takes towards preembryonic reproductive material: "It is understood that the gametes (sperm and ova) and concepti (embryos) are the property of the donors. The donors therefore have the right to decide at their sole discretion the disposition of these items, provided such disposition is within the medical and ethical guidelines as outlined herein." ETHICS COMM. OF THE AM. FERTILITY SOC'Y, ETHICAL CONSIDERATIONS OF THE

⁸⁰ See id. at 424-25. The agreement stated, in relevant part, that:

legal guide for disputes arising between the reproductive progenitors and a third party, it does not provide adequate legal guidance for disputes between genetic progenitors.⁸⁶

B. Davis v. Davis

Davis v. Davis was the first case to test whether the York property model adequately addressed a dispute between the gamete providers over the disposition of jointly created reproductive material. In Davis, a divorcing couple disputed the disposition of jointly-created cryopreserved embryos. Reproductive material.

The court attempted to resolve the dispute as a child custody case, first by determining whether the embryos were

NEW REPRODUCTIVE TECHNOLOGIES, 46 FERTILITY & STERILITY 89s (1986).

The property model adequately determines the rights of the genetic contributors when both contributors agree to the ownership and disposition of the gametes or embryos. See Dehmel, supra note 85, at 1384-85. This model is simple enough to manage situations involving disputes between a storage institution and the people who contracted with the institution to store their reproductive material. See id. It is possible that most of the time, the progenitors may draft flexible and comprehensive agreements that cover a myriad of contingencies. The agreement should cover contingencies like those not addressed in York, specifically, disputes involving the inter-institutional transfer of reproductive material. See generally York v. Jones, 717 F. Supp. 421 (E.D. Va. 1989).

86 See Dehmel, supra note 85, at 1384-85.

⁸⁷ See Davis, 842 S.W.2d 588, 589 (Tenn. 1992), cert. denied sub nom., Stowe v. Davis, 113 S. Ct. 1259 (1993); see also Robert J. Muller, Davis v. Davis: The Applicability of Privacy and Property Rights to the Disposition of Frozen Preembryos in Intrafamilial Disputes, 24 U. Tol., L. Rev. 763, 764 (1993).

88 See Davis, 842 S.W.2d at 588. The Davises had a history of unsuccessful attempts to bear or adopt a child, so in 1985, they began a series of six unsuccessful IVF procedures in an attempt to bear a child by assisted reproductive means. See id. at 591. The couple decided that the cryopreservation of multiple, fertilized ovum might help facilitate the difficult process. See id. at 592. Mrs. Davis attempted impregnation with two embryos, and the remaining embryos were cryogenically stored for future use. See id. She did not become pregnant, and before she could make another attempt at impregnation with the remaining frozen embryos, Mr. Davis filed for divorce. See id. The Davises agreed to all terms of the divorce but did not agree on the disposition of the frozen embryos. See Davis, 842 S.W.2d at 589, 592. No written agreement had been executed by the Davises concerning the disposition in case of divorce. See id. Moreover, no state statute existed addressing this subject and case law had not been developed to assist the court in their decision. See id. at 590. Mrs. Davis sought control over the frozen embryos so that she could use them for her own impregnation. See id. at 593-94. Mr. Davis objected, desiring the embryos to remain frozen until he had a chance to decide whether he wanted to become a parent in this manner. See id.

"human beings." The court found that there was no significant genetic difference between a "preembryo" and an "embryo." Thus, the court reasoned that life begins at conception and, therefore, the state has a compelling interest in protecting the embryo from destruction. The court concluded that it was in the "child's" best interest to be implanted and born, and thus Mrs. Davis' desire to use the embryos for her own impregnation controlled. "2"

On appeal, Mr. Davis claimed that the decision forced him to become a parent against his will. The appellate court agreed and reversed the lower court, finding that Mr. and Mrs. Davis "jointly... share an interest in the seven fertilized ova." The court stated that giving Mrs. Davis control of the embryo and permitting her to bear a child would allow an "impermissible state action in violation of [the husband's] constitutionally protected right not to beget a child where no pregnancy has taken place." The court held that it was not state policy to force parenthood upon any individual and that the lower court's reliance on finding a compelling state interest in protecting an embryo was erroneous. He

On appeal, the Tennessee Supreme Court refused to treat the embryos as either purely "property" or legal "persons." Instead, the court adopted the widely-held American Fertility Society view that preembryos occupy a position between that of a person and property, and therefore deserve "special

⁸⁹ See Davis v. Davis, No. E-14496, 1989 WL 140495, 1, 4, 9 (Tenn. Cir. Ct., Sept. 21 1989), rev'd No. 180, 1990 WL 130807 (Tenn. Ct. App. Sept. 13, 1990), aff'd, 842 S.W.2d 588 (Tenn. 1992), partial reh'g granted, No. 34, 1992 WL 341632 (Tenn. Nov. 23, 1992), cert. denied, 61 U.S.L.W. 3437 (U.S. Feb. 22, 1993).

⁹⁰ See id. at 7-8. The court found that DNA studies show that human embryo cells contain all the genetic information to create a human being and begin to differentiate very early on in the process of developing into a human. See id. at 7-8.

⁹¹ See id. at 1, 4, 9.

⁹² See id. at 10-11 (court invoked doctrine of parens patriae which is the power of the state to protect the interests of those incapable of protecting themselves).

⁹³ See Davis v. Davis, No. 180, 1990 WL 130807 2 (Tenn. Ct. App. Sept. 13, 1990), aff'd, 842 S.W.2d 588 (Tenn. 1992), partial reh'g granted, No. 34, 1992 WL 341632 (Tenn. Nov. 23, 1992), cert. denied, 61 U.S.L.W. 3437 (U.S. Feb. 22, 1993).

⁹⁴ Id. at 3.

⁹⁵ Id. at 2.

⁹⁶ See id. at 3.

⁹⁷ See Davis, 842 S.W.2d at 596-97.

respect."⁹⁸ The court opined that the Davises did not have a true property interest in the frozen embryos, but rather "an interest in the nature of ownership, to the extent that they have decision-making authority concerning disposition of the preembryos..."

The court stated that "[t]he right of procreation is a vital part of an individual's right to privacy." Although the United States Supreme Court has never ruled on the right to procreate via IVF, IVF is encompassed by the right to privacy. The court concluded their analysis by stating that "the right of procreational autonomy is composed of two rights of equal significance – the right to procreate and the right to avoid procreation." Thus, the court vested all decisional authority over the disposition of the embryo in equal shares to both Mr. and Mrs. Davis. 103

Determining that the embryo was held in equal shares by Mr. and Mrs. Davis, the court turned its attention to the issue of which party would hold the ultimate right to decide the disposition of the preembryos. ¹⁰⁴ Finding neither an agreement

⁹⁸ See id. As a result of the "special respect" classification, embryos can be "created, frozen, donated, and even discarded or used in research when there is a valid need to treat infertility or pursue a legitimate scientific goal..." Id. "Special respect" means that the preembryo deserves more respect than human tissue, but not as much respect as a human person does. See Davis, 842 S.W.2d at 596.

⁹⁹ Id. at 597. First, the court rejected the claim that the embryos represented human persons. See id. This enabled the court to vest sole decisional authority in the progenitors by excluding any interest the state might have in protecting the embryos as persons. See id. The court adopted an intermediate view by granting the embryos "special respect" and rejecting the view that preembryos are merely property. See id.

Davis, 842 S.W.2d at 600. The court used a constitutional analysis of the right to privacy under the Tennessee and Federal Constitutions to resolve the problem of granting both parties joint custody. See id. The court outlined federal privacy rights by analyzing Skinner, Eisenstadt, and the abortion line of cases. See id.

¹⁰¹ See Davis, 842 S.W.2d at 601.

¹⁰² Id. at 601.

¹⁰³ See id. at 602.

¹⁰⁴ See id. at 602-04.

[[]D]isputes involving the disposition of preembryos produced by in vitro fertilization should be resolved, first, by looking to the preferences of the progenitors. If their wishes cannot be ascertained, or if there is dispute, then their prior agreement concerning disposition should be carried out. If no agreement exists, then the relative interests of the parties in using or not

between the parties nor a guiding statute, the court established a criteria to be used by a court to weigh party interests when determining reproductive material ownership. The court identified the party interests as the right to procreate as presented by Mrs. Davis versus Mr. Davis' right not to procreate. Although the court recognized the emotional and physical strain endured by Mrs. Davis during the IVF procedures, it concluded that Mr. Davis' interest in avoiding parenthood was more substantial. The court noted had Mrs. Davis presented a current desire to use the embryos to attempt her own pregnancy and if she had no other means to do so, it may have been persuaded to find in her favor. The court established a current desire to use the embryos to attempt her own pregnancy and if she had no other means to do so, it may have been persuaded to find in her favor.

using the preembryos must be weighed.

Id. at 604.

¹⁰⁵ See Davis, 842 S.W.2d at 603-04. The Tennessee Supreme Court affirmed the appellate court decision by resolving the joint custody dispute with a balancing test of the burdens and benefits. See Cryopreservation, supra note 17, at 2232. This provided the court with the opportunity to decide the case in favor of either party, without giving an automatic veto to one party over the other party's interest to use or not to use the preembryos. See Davis, 842 S.W.2d at 602-03.

¹⁰⁶ See generally Davis, 842 S.W.2d at 601. The court framed Mr. Davis' interest as that of wanting to avoid unwanted fatherhood including all the "possible financial and psychological consequences." *Id.* at 603. The court described Mrs. Davis' interest as that of wanting to donate the preembryos for implantation by another couple. *See id.* at 604.

¹⁰⁷ See id.

108 See id. The court noted that the legal position of the parties had changed from their initial positions. See Davis, 842 S.W.2d at 590. Mrs. Davis appealed, and the Tennessee Supreme Court granted review of this case of first impression. See id. The court recognized that this case was lacking "two critical factors that might otherwise control or influence the result of this litigation": a pre-written agreement between the parties covering the disposition of the embryos or a statute that would govern such disposition. Id. Mrs. Davis had remarried and no longer wished to use the embryos herself, but wanted control so that she could donate the embryos for use by a childless couple. See id. Mr. Davis wished to see the embryos destroyed and used by no one. See id. In dicta, the court added that:

Ordinarily, the party wishing to avoid procreation should prevail, assuming that the other party has a reasonable possibility of achieving parenthood by means other than use of the preembryos in question. If no other reasonable alternatives exist, then the argument in favor of using the preembryos to achieve pregnancy should be considered. However, if the party seeking control of the preembryos intends merely to donate them to another couple, the objecting party obviously has the greater interest and should prevail.

C. Hecht v. Superior Court

The *Hecht* court relied upon the property model of reproductive material in conjunction with the probate code to determine the disposition of the reproductive material in dispute in a will contest. In *Hecht*, William Kane donated sperm to a sperm bank and entered a storage agreement. The agreement stated that in the event of his death, the sperm would continue to be stored or would be released to the executor of his estate. He also executed a will including an identical provision and drafted letters to his children stating the same intent. 112

After committing suicide months later, his children filed will contests seeking destruction of the stored sperm. The

Davis, 842 S.W.2d at 590.

The court essentially found that the state's interest in these preembryos did not override the interests of the gamete provider, who did not want parenthood to be imposed on him. See id. at 603-04. Note that in such a case where both parties are progenitors, the property model would not be effective in resolving a dispute; rather a balancing test as used here would be more effective. See id.

109 See Hecht v. Superior Court, 16 Cal. App. 4th 836, 850 (Cal. Ct. App. 1993). Hecht was the first to consider interests outside of those of the individual gamete progenitor by looking at the effect on and desires of the rest of the progenitor's immediate family. See id. The court also used some of the Davis indicators of party interests to decide the ownership interests of an individual sperm donor. See id.

110 See id. at 840.

111 See id. The agreement contained a provision that authorized the release of the sperm to Deborah Hecht, the woman with whom Kane had been living with for several years. See id.

112 See Hecht, 16 Cal. App. 4th at 840. In his will, Kane bequeathed "all right, title, and interest that I may have in any specimens of my sperm stored with any sperm bank or similar facility for storage to Deborah Ellen Hecht." Id. The will also stated that Kane wished that Hecht would use the sperm being stored for impregnation to bear him children before or after his death. See id. Kane drafted a letter to his present and future children granting Ms. Hecht permission to use his sperm in this manner. See id. at 841.

113 See id. at 841-42. The children and Ms. Hecht attempted various settlements. See id. at 842. They failed to come to agreement as to the disposition of the sperm. See id. The administrator of the estate filed a petition with the probate court to order its disposition or destruction. See id. at 842-43. The administrator's petition asked the court to order one of the following options:

- (1) order destruction of the sperm;
- (2) order distribution of the sperm to descendant's children;
- (3) order distribution of 80 percent of the sperm to descendant's children and 20 percent to Hecht, and determine whether any

probate court ordered the destruction of stored sperm, but stayed execution in order to give Hecht time to appeal the decision. On appeal, the appellate court reasoned that "[a]t the time of his death, decedent had an interest, in the nature of ownership, to the extent that he had decision making authority as to the use of his sperm for reproduction. Such interest is sufficient to constitute 'property' within the meaning of Probate Code section 62." The court held that the probate court could not order the destruction of the sperm under either the will or the settlement agreements because the sperm was rightfully Mr. Kane's property. Thus, Hecht set forth the

children subsequently conceived by the sperm shall be entitled to distribution of the estate assets; and order distribution of the sperm to Hecht, but reserve one or two vials for future DNA/paternity testing, and determine to what extent any children subsequently conceived shall be entitled to estate assets.

Hecht, 16 Cal. App. 4th at 843.

114 See id. at 845 n3.

115 Hecht, 16 Cal. App. 4th at 850. Like the court in Davis, the Hecht court began its analysis by looking at who contributed to the production of the material to determine who had ownership interests in it. See id. On appeal, the appellate court cited Davis to support the view that the sperm occupied a special interim category of personal property. See id. at 846. Therefore, the probate court had general jurisdiction over the disposition of the sperm as part of Mr. Kane's estate. See id. The court refused to use Moore v. Regents of University of California to find that Kane gave up all property rights to his sperm once it left his body. See id. at 846-847; see also Moore v. Regents of University of California, 51 Cal. 3d 120 (Cal. 1990).

116 See Hecht v. Superior Court, 16 Cal. App. 4th at 850-51. The court also addressed the public policy claims of the children. See id. The children claimed that both the conceiving of children by unwed women and impregnation of women with the sperm of deceased men was against public policy. See id. at 851-58. The court dismissed these claims, noting that while artificial insemination has been used for centuries, its use has not been limited to married couples, and post-mortem artificial insemination was a practice for which the court could find no reason to judicially restrict. See id. The court also rejected the children's claims that Ms. Hecht could conceive by other means and that permitting the use of Kane's sperm by Hecht would constitute "state authorization" of post-mortem insemination. See id. at 857-58.

Lastly, the court addressed the children's psychological concerns and legal effects that insemination would have on their family. Hecht v. Superior Court, 16 Cal. App. 4th at 859. The court cited the California Probate Code and the California adoption of the Uniform Parentage Act as preventing a child subsequently born of Kane's sperm from making claims of support upon the estate. See id. Subsequently, the California Appellate Court ordered the distribution of three vials of sperm to Hecht for her procreative use. See Kane v. Superior Court, 37 Cal. App. 4th 1577, 1587 (Cal. App. 2d 1995). The appellate court determined that Mr. Kane created sperm with the intent of having post-mortem children through Ms. Hecht having clearly expressed this intent in his will and an explanatory letter. See id.

premise that the creator of reproductive material has a property right in that material along with the right of ultimate disposition of that material.¹¹⁷

D. Kass v. Kass

Like *Davis*, *Kass v. Kass* involved a dispute between a divorcing couple over the disposition of their cryopreserved embryos. Unlike Mrs. Davis, however, Maureen Kass wished to use the embryos she created with her ex-husband, Steven Kass, for her own impregnation. 119

The trial court ruled for Mrs. Kass and granted her possession of the embryos. The court found that although the pre-zygotes were not legal persons, they were also not property. Next, the court held that a man's procreative rights during IVF procedures are identical to his procreative rights during normal in vivo impregnation. Thus, the court concluded that the man's rights terminate at the moment of fertilization, leaving "the disposition of the pre-zygotes a matter exclusively within the wife's unfettered discretion. The court ignored the pre-written informed consent agreement between the parties, finding that the agreement could not have foreseen "a divorce situation" and was therefore inapplicable to this

¹¹⁷ See Hall v. Fertility Institute of New Orleans, 647 So. 2d 1348, 1351 (La. App. 4 Cir. 1994) (holding that the posthumous act of donation of a deceased person's frozen sperm did not violate public policy and the donee's artificial insemination with the sperm was not against good morals).

¹¹⁸ See Kass v. Kass, 663 N.Y.S.2d 581, 235 A.2d 150 (N.Y. App. Div. 1997). The Kasses were married in 1988 and because of Mrs. Kass' exposure to the chemical DES, she had difficulty reproducing through coital means. See id. at 583. From 1990 through 1993, the Kasses unsuccessfully attempted impregnation through IVF and surrogacy procedures. See id. at 583-84. During these procedures, the IVF facility cryopreserved five pre-zygotes for future use by the Kasses. See id. at 584. After the failure of these attempts, the Kasses filed for divorce in 1993. See id. at 584. Like Davis, the Kass appellate decision reversed a decision of a lower court by focusing upon the agreement between the parties, their intent, and the weight of their interests. See id. at 587, 601-02.

¹¹⁹ See id. at 584.

¹²⁰ See id. at 582, 585.

¹²¹ See id.

¹²² See id. at 584.

¹²³ Kass, 663 N.Y.S.2d at 584.

dispute.124

The New York Supreme Court reversed the lower court's decision, unanimously rejecting the determination that prezygotes created via IVF are legally identical to pre-zygotes that are inside a woman's body. The court also rejected the concept that, in both instances, the sole control of the prezygotes vest in the woman. After the court granted the male contributor to the pre-zygote some legal interests, it sought to determine whether the parties had made an earlier expression of their intent for the disposition of the pre-zygotes. 127

The court examined the Kass' informed consent agreement and found that it expressly set forth the intent of the parties, in that, the Kasses had agreed that "[i]n the event that we no longer wish to initiate a pregnancy or are unable to make a decision regarding the disposition of our stored, frozen prezygotes, we now indicate our desire for the disposition of our pre-zygotes and direct the IVF Program [to use or dispose of the pre-zygotes for research]." 128

¹²⁴ See id. at 585. The pre-written agreement outlined the disposition of the preembryos should they not be used for future implantation attempts. See id. at 583-84.

¹²⁵ See id. at 585.

¹²⁶ See id. at 585-86.

¹²⁷ See Kass, 663 N.Y.S.2d at 585.

¹²⁸ Id. at 586-87 (quoting paragraph III—"Disposition of Pre-Zygotes"—of Informed Consent Form No. 2, used by the Long Island IVF Program at the John T. Mather Memorial Hospital). This agreement expressly included general language describing the parties' rights of disposition, providing that the Kasses possess decisional authority over their reproductive material and that they are expressly stating their disposition desires. See id. at 583-84. The agreement provided in pertinent part:

We have the principle responsibility to decide the disposition of our frozen pre-zygotes... In the event of divorce, we understand that legal ownership of any stored pre-zygotes must be determined in a property settlement and will be released as directed by order of a court of competent jurisdiction.... The possibility of our death or any other unforeseen circumstances that may result in neither of us being able to determine the disposition of any stored frozen pre-zygotes requires that we now indicate our wishes.

Id. at 583 (quoting subparagraph 2(b) of the "Disposition of Pre-Zygotes"). The court agreed with Davis "to the extent it requires that where a manifestation of mutual intent exists between the parties, that intent must be given effect by the court." Id. at 586-87. By employing this analysis, the court reasoned that it need consider only the facts contained within the informed consent agreement signed by

Finding this provision clear and unambiguous, the court found for Mr. Kass, holding that IVF clinic should retain the pre-zygotes for scientific purposes. The court concluded that when such a provision is expressly stated as it was in these circumstances, the parties intent must rule. The court concluded that when such a provision is expressly stated as it was in these circumstances, the parties intent must rule.

V. Setting the Foundation for Future Legislation

When creating a new statute governing human reproductive technology issues, legislators must review constitutional issues and determine the sufficiency of current statutory law and common law jurisprudence. New legislation should be responsive, flexible, and equitable to the individuals involved, and should be based upon consideration of public policy issues. This section outlines various constitutional issues and sets forth some of the existing models on which such legislation may be based.

A. Constitutional Issues

The United States Supreme Court has determined the constitutionality of laws restricting reproductive technologies through its decisions on abortion and contraception and its

the Kasses. See Kass, 663 N.Y.S.2d at 587-89.

¹²⁹ See id. at 589. The court used the rationale of the Davis court in granting full force and effect to the party's intentions as demonstrated in the unambiguous terms of the parties agreement. See Kass, 663 N.Y.S.2d at 588. In this way, the court avoided the need to determine and weigh the varying ownership interests of the parties in a balancing test. See id.

¹³⁰ See Kass, 663 N.Y.S.2d at 581, 588. The court stated that

[[]W]e find that the decision to attempt to have children through IVF procedures and the determination of the fate of cryopreserved pre-zygotes resulting therefrom are intensely personal and essentially private matters which are appropriately resolved by the prospective parents rather than the courts. Accordingly, where the parties have indicated their mutual intent regarding the disposition of the pre-zygotes in the event of the occurrence of a contingency, that decision must be scrupulously honored, and the courts must refrain from any interference with the parties' expressed wishes.

Id. at 590.

¹³¹ See, e.g., Roe v. Wade, 410 U.S. 113 (1973).

interpretation of "person." Under these decisions and the Fourteenth Amendment, the Supreme Court would have difficulty in finding that a state has a compelling interest in protecting reproductive material in its preembryonic stages as a viable person. If one extends the constitutional right to avoid procreation to IVF procedures, then statutes which regulate IVF procedures could not restrict the disposition of preembryos by creating an undue burden on the choice of an individual to dispose of his or her reproductive material. Regulations should not restrict the disposition of preembryos based on a claim that the law protects preembryos as viable human life. Consequently, laws that narrowly outline disposition rights over reproductive material, but do not in fact restrict the disposition rights, should not be subject to strict scrutiny, but merely a rational basis test.

B. Legislative Models

Thus far, legislative attempts to address ownership interests over reproductive material have been either inappropriate or incomplete. Louisiana's laws are indicative of the emotion that drives people to extremely polarized positions when discussing the legal implications of reproduction in the United

¹³² See id.; Planned Parenthood of Southeastern Pennsylvania v. Casey, 505 U.S. 833 (1992). In Roe, the Court held that a fetus is not a person under the Fourteenth Amendment until it is born, and the state's interest in protecting it as "life" does not rise to a compelling level until viability. See Roe, 410 U.S. at 158-167.

The Court updated its view concerning the protections afforded life in the womb in Casey. See Casey, 505 U.S. at 846. In Casey, the Court substituted the trimester approach with a determination that the state's interest in protecting life is not compelling enough to prohibit a woman's right to abort until the fetus is viable. See id. at 846. Casey recognizes that the states have a legitimate interest in protecting a fetus' life before viability but notes that legislation based upon this interest must not pose an undue burden to a woman's right to seek abortion. See id. at 877-78. If a state regulation does not create an undue burden on the woman's right to abort, then the regulation is valid, even if it applies to a woman's choice before viability. See id.

¹³³ See Dehmel, supra note 85, at 1383.

¹³⁴ See id. at 1401-02.

¹³⁵ See id. at 1383.

¹³⁶ See generally Muller, supra note 87, at 786.

¹³⁷ See, e.g., LA. REV. STAT. ANN. § 9:121 et seq. (West 1998).

States.¹³⁸ Such statutes threaten to halt the use of IVF by placing a high duty of care on the protection and use of fertilized eggs, and by restricting and dictating the use of abandoned preembryos.¹³⁹ Alternatively, the Florida statute provides the legal foundation for a statute designed to define ownership interests in reproductive material and avoids restricting an individual's right to procreate.¹⁴⁰ However, as discussed earlier, the Florida statute is incomplete.¹⁴¹

In addition to these specific state statutes, as seen in *Hecht*, most states have probate laws that govern a decedent's ownership rights in his or her reproductive material. The judiciary has successfully used probate law to determine the proper disposal of reproductive material of deceased persons. In this way, the courts would not have to guess at the parties' intention and the decedent would have his reproductive wishes honored after death. Nonetheless, conflicts over the use of an embryo may exist between the decedent's wishes and the surviving gamete provider. In such a situation, the court should first consider other agreements between the parties. If other agreements do not exist or are ambiguous, courts should then resort to balancing their reproductive wishes. Additional difficulties arise if a party with interests in

¹³⁸ See id.; see also Chambers, supra note 33, at B5.

¹³⁹ See Chambers, supra note 33, at B5. Legislation such as the Louisiana statute addresses ownership interests in a way that ignores common scientific understanding of reproduction, and overextends the protections afforded human life to any fertilized egg. See id.

¹⁴⁰ See FLA. STAT. ANN. § 742.17.

¹⁴¹ See supra note 75 and text accompanying same for a discussion of the Florida statute; see also Fla. STAT. ANN. § 742.11 -.17.

¹⁴² See, e.g., La. Rev. Stat. Ann. § 9:133 (West 1998); see Fla. Stat. Ann. § 742.11 - .17 (1998).

¹⁴³ See Hecht, 16 Cal. App. 4th at 850. A will or other testamentary device is a valid pre-written expression of the individual's desires for disposition of the reproductive material. See generally id. The Hecht court correctly found that an individual's gametes occupy a significant relation to property and that the owner's wishes should determine the disposition of the gametes. See id. at 850. The court also found that probate law could frame an individual's intentions over the disposition of embryos created jointly with another gamete provider. See id. at 850-51.

¹⁴⁴ See id.

¹⁴⁵ See, e.g., Kass, 663 N.Y.S.2d at 583.

¹⁴⁶ See id. at 587; see also Davis, 842 S.W.2d at 604.

¹⁴⁷ See Davis, 842 S.W.2d at 604.

reproductive material dies intestate, resulting in the distribution of the decedent's estate solely by intestate distribution set forth by statute. Intestate succession is an inadequate means of disposing reproductive material, because close relatives may inherit the decedent's genetic material.

C. Common Law Models

Common law has set forth three legal models, which may be applied to address ownership rights in reproductive material: (1) the property rights model, (2) a "right-to-life" model, and (3) a "special respect" model. 150

1. Property Rights Model.

The York decision demonstrates the property rights model. The York court determined that frozen preembryos should be regarded as property, in part because they were referred to as "property" in the agreement between the donors and the clinic. However, the court concluded that this usage of contract terminology to determine the legal status of the reproductive material should not suggest that embryos be treated like other property. The court stated "[r]ather, the terms merely designate who has authority to decide whether legally available options with early embryos will occur, such as creation, storage, discard, donation, use in research, and placement in a uterus."

The property view is useful in that it resolves disputes over individually created and stored reproductive material by vesting

¹⁴⁸ See, e.g., Wadlington, supra note 3, at 2219 (discussing some ethical dilemmas posed by storing and distributing reproductive material).

¹⁴⁹ See WADLINGTON, supra note 3, at 2219.

¹⁵⁰ See Dehmel, supra note 85, at 1382.

¹⁵¹ See York v. Jones, 717 F. Supp. 421 (E.D. Va. 1989); see supra Part IV for a discussion of York v. Jones, 717 F. Supp. 421 (E.D. Va. 1989).

¹⁵² See id. at 424-25.

¹⁵³ See id. at 425.

¹⁵⁴ John A. Robertson, In the Beginning: The Legal Status of Early Embryos, 76 VA. L. REV. 437, 454-55 (1990) (hereinafter In the Beginning).

sole ownership and disposition authority in its creator. However, this model is problematic in that persons who jointly create embryos will acquire "joint authority" over the material, and this model does little to resolve the disposition right over reproductive material when a dispute arises. 1556

The use of property law works well when there is only one person involved with the creation of the reproductive material. Decisional authority should always rest with the creator of the gamete unless the creator donates the gamete through an established donation institution. Is If the creator donates to a sperm or egg bank, and contractually agrees to give up his or her rights of ownership, then the donor has abrogated his or her property interests in the material. Is

As demonstrated in *Davis* and *Kass*, property law does little to help resolve disputes involving jointly created reproductive material, namely preembryos. In disputes involving more than one preembryo, property law usually resorts to dividing the embryos between the parties. This resolution does not consider the ethical implications for either of the parties involved in the dispute. If the court permits either party use of the embryos allocated to them through a property division, it defeats the other's interest in not becoming a biological parent to a child.

2. Right to Life Model.

Some religious and right-to-life groups espouse the "right-to-life" model.¹⁶² An example of its influence can be found in the Louisiana legislation which affords fertilized eggs the same

¹⁵⁵ See York, 717 F. Supp. at 426, n.5.

¹⁵⁶ See Dehmel, supra note 85, at 1385; see also David A. Rameden, Frozen Semen as Property in Hecht v. Superior Court: One Step Forward, Two Steps Backward, 63 UMKC L. REV. 377, 387 (1993), for the proposition that embryos could be viewed as a "tenancy-in-the-entirety" under a property model of reproductive material.

¹⁵⁷ See, e.g., Hecht, 16 Cal. App. 4th 836.

¹⁵⁸ See generally Technology and the Family, supra note 21, at 917.

¹⁵⁹ See Kass, 663 N.Y.S.2d at 588-89; see also Davis, 842 S.W.2d at 597.

¹⁶⁰ See generally Kass, 663 N.Y.S.2d at 588-90; see also Davis, 842 S.W.2d at 597.

¹⁶¹ See generally Dehmel, supra note 85, at 1384-85.

¹⁶² See The New Reproduction, supra note 1, at 971-73.

protections to life as that of a "person." This view places a heavy burden on donors and assisted reproductive clinics to protect the fertilized eggs and requires them to bring the preembryos to term. Such burdens would likely abolish IVF procedures in the states that adopt this model as the basis of their legislation. It is also probable that court decisions and statutes concerning the disposition of preembryos based upon the right-to-life model would be unconstitutional because of the restrictions this model places upon an individual's right to procreate.

3. Special Respect Model.

The "special respect" model is a new legal concept adopted by the *Davis* court. This model attempts to deal with the problematic nature of treating reproductive material as either property or protected potential life. The *Davis* model grants reproductive material, and especially embryos, protections of an intermediate nature. This view occupies a position between the protections provided to life and an individual's rights in their property. By adopting this view, the judiciary avoids the problems associated with the property model, namely, the inability to decide which of the joint owners is entitled to ownership control. This model also avoids the problems of the "right-to-life" model which views reproductive material as protected against disposal by the donors or the storage institution because of the preembryo's potential for

¹⁶³ See supra Part III for a discussion of the Louisiana statute, LA. REV. STAT. ANN. §§ 9:121-133; see also The New Reproduction, supra note 1, at 971. This view is extreme in that it grants pre-implanted preembryos the legal protections of an actual person. See The New Reproduction, supra note 1, at 973; see also LA. REV. STAT. ANN §§ 9:121-133.

¹⁶⁴ See generally In the Beginning, supra note 154, at 489.

¹⁶⁵ See Davis, 842 S.W.2d at 595.

¹⁶⁶ See Skinner, 316 U.S. at 543.

¹⁶⁷ See generally Dehmel, supra note 85, at 1383.

¹⁶⁸ See supra Part IV(b) for a discussion of Davis v. Davis, 842 S.W.2d 588 (Tenn. 1992).

¹⁶⁹ See Davis, 842 S.W.2d at 597.

¹⁷⁰ See id.

¹⁷¹ See id. at 595.

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D. Use of Contract Law

In addition to the use of these three legal models, the courts have applied traditional contract law to disputes involving reproductive material disposition.¹⁷³ The use of contract law is usually the court's first means of attempting to determine the intent of the parties.¹⁷⁴ A pre-written agreement may express the parties' intent at the time they entered into a reproductive services program and force both gamete providers to consider the contingencies that may affect their desire to use IVF.¹⁷⁵ The parties' intents as stated in such a contract should be legally enforced unless both parties mutually agree to a modification of the contract.¹⁷⁶ If the parties cannot reach a new agreement over the disposition of their reproductive material, then the expressed intent contained in the original contract should govern.¹⁷⁷

Inserting contractual concepts into reproductive material contracts would avoid the possibility that a storage facility could take control over the donor's genetic material and donate it to another person for implantation. It could also avoid the problems involved with a "right-to-life" statute as in Louisiana, where the statute is likely to force this scenario upon people

¹⁷² See id. at 596; see also supra Part V(3)(b) for a discussion of the "right-to-life" model.

¹⁷³ See MASTROIANNI, supra note 31, at 433-34. Although the legal profession is incorporating contract law into this new phenomenon, the following questions lurk behind many contractual decisions: (1) should such contracts be enforceable, and (2) do such contracts constitute an interference in private decision making. See id. at 434; see also ANNAS, supra note 51, at 414 (questioning whether a woman should be forced to perform an abortion or adoption contract after changing her mind).

Congress' involvement is generally limited to areas where it has indirect authority, primarily with interstate commerce, taxation, and spending. See ANNAS, supra note 51, at 415. Congress enacted the National Organ Transplant Act and should amend it to include a prohibition on the sale of embryos which would protect children by preventing them from being treated as commodities. See id. at 415-16.

¹⁷⁴ See York, 717 F. Supp. at 525.

¹⁷⁵ See Davis, 842 S.W.2d at 597.

¹⁷⁶ See id. at 597.

¹⁷⁷ See id.

who become involved with IVF procedures. 178

VI. Conclusion

There is a dire need for state legislatures to provide guidance, uniformity, and comprehensive definitions of ownership rights for all parties involved in assisted reproductive procedures. Until such comprehensive and uniform laws are enacted, the judiciary will continue to face two dilemmas. First, courts will be confronted with the challenge of keeping apprised of reproductive technology advancements through a "reactive" judicial process. Second, these new issues will continue to defy judicial attempts to consistently apply established legal concepts to disputes over reproductive material. This lack of legislative direction will result in the judiciary attempting to address the new issues by simply expanding existing law.

Essentially, the legislatures should begin this legislative process by establishing general guidelines to address these issues. The legislatures, more freely than the courts, may use property, contract and probate concepts as a guide to expand, modify, or update the law. Such legislation should cover all aspects of assisted reproductive technology. Any new legislation should be comprehensive, yet flexible, to allow for future technological advancements in the field of assisted

reproduction such as the use of DNA to create life and the use

¹⁷⁸ See generally Dehmel, supra note 85, at 1382. In Louisiana, this may inevitably result in forcing the donors to become the genetic parents of children born of other persons, although this is likely not the donor's intention. See id.

¹⁷⁹ See, e.g. Paine, supra note 5, at 62. While there are disputes surrounding reproductive material that have been resolved by the courts, generally, most reproductive issues have not been resolved. See id.; see also The New Reproduction, supra note 1, at 952.

¹⁸⁰ See also Proposed Guidelines, supra note 1, at 107.

¹⁸¹ See id.

¹⁸² See generally Hecht v. Superior Court; 16 Cal. App. 4th 836 (Cal. Ct. App. 1993); see also Davis v. Davis, 842 S.W.2d 588 (Tenn. 1992), partial reh'g granted, No. 34, 1992 WL 341632 (Tenn. Nov. 23, 1992) cert. denied, 61 U.S.L.W. 3427 (U.S. Feb. 22, 1993), York v. Jones, 717 F. Supp. 421 (E.D. Va. 1989). Traditional concepts of property, probate, contract, and constitutional law may provide the foundation for the creation of a law governing ownership rights in reproductive material used in assisted reproductive technologies. See id.

of cloning methods. Such legislation should be sure to address requirements for storage rights and responsibilities, as well as the disposition rights of and between gamete providers and users. The legislation should use comprehensive language and include default rules that state the course of action to be taken when not provided for in a pre-written agreement or if such a contract is not used or is invalid. The legislative process involved in crafting this legislation might use Florida's statute as a starting point. The legislation should also impose criminal penalties and civil liability upon institutes for the willful or negligent misuse of reproductive material. This legal guidance should help stem future litigation over the ownership interests in reproductive material, while at the same

¹⁸³ The subject of cloning is widely disputed and many in the scientific community find it repugnant and unacceptable. *See, e.g.*, Paine, *supra* note 5, at 65.

¹⁸⁴ See generally In the Beginning, supra note 154, at 467. Options may include donation of the reproductive material to the institute for research or experimentation, use by another party, or destruction of the material. See id.

iss See generally Proposed Guidelines, supra note 1, at 118 (stating that legislation should be proactive, not reactive); see also Technology and the Family, supra note 21, at 917-18 (stating that it really does not matter what the default rule is as long as one exists). Statutory terms must be clearly defined. See generally Proposed Guidelines, supra note 1, at 118. As exhibited in the Florida statute, the parties should express their disposition wishes before they begin assisted reproductive procedures. If the parties do not adopt a pre-written agreement over the disposition of the reproductive material, then the parties involved in a dispute should be able to resort to, or perhaps be forced to accept, an equitable statutory default. The model statute posed here provides a default rule of "no-use" for disposition disputes over jointly created embryos. This is a conservative and equitable rule, based upon the legal consideration of both gamete providers' procreative rights. Based on this, legislatures should adopt laws that both promote the use of pre-written agreements and provide the public and the courts with an equitable default rule.

¹⁸⁶ See FLA. STAT. ANN. §§ 742.11 -.17; see also supra note 71 for a discussion of the Florida statute.

¹⁸⁷ See, e.g., Paine, supra note 5, at 53 (stating California legislation requires patients to consent in writing to donating gametes to anyone other than their female partner, and that failure to follow the consent requirements results in a felony punishable by fines and/or imprisonment). See id.; see also Lisa Richardson, UCI Fertility Scandal, L.A. TIMES, June 9, 1995 (Orange County Edition), at A35. This section of the proposed model statute is an extremely important provision that may prevent situations like the one that occurred at the University of California Irvine Hospital where three physicians were accused of stealing eggs and embryos of patients and giving them to other patients or alternatively using them in research. See Paine, subra note 5, at 51.

time provide a foundation for future reproductive material laws.