The ART of Probate: 
Cryopreserved Reproductive Materials in the Estate

I. Introduction

Assisted Reproductive Technology ("ART") has developed at a lightning fast pace. Yet the law governing the processes and products of ART has lagged behind significantly. The resulting chasm has created a perplexing body of law that tends to apply traditional principals of law to nontraditional circumstances. In certain respects this approach has been successful;\(^1\) in others, however, courts and legislatures have lacked the tools to build law that appropriately addresses the modern questions raised by ART.

One area that has developed limited legal authority is the disposition of cryogenically preserved gametes (sperm and ova) and embryos\(^2\) at the death of one or both of the progenitors. Prior to freezing a client's gametes or embryos, fertility clinics often require clients to sign lengthy consent forms that cover a wide array of scenarios, usually including the client's divorce or death. But if such an agreement was not signed, or if the agreement is deemed unenforceable, or where circumstances arise other than those contemplated by the signed consent form, the frozen genetic material may outlast the client. Upon the client's death, what is to become of the stored gametes or embryos? Are they part of the decedent's estate? Is the reproductive material inheritable? Who is authorized to make decisions with respect to the future of this material? This article will attempt to address the current state of the law in this area, and reflect on various proposed legal models.

II. Property Considerations\(^3\)

A. Frozen Gametes
Frozen gametes have generally been treated as tangible personal property under the law. Statutorily, there is little law directly relating to the proper characterization of frozen gametes. While statutes may address the consent required prior to undertaking cryopreservation of gametes, and the treatment of children born posthumously using a decedent’s frozen gametes, few if any state statutes address the question of whether frozen gametes themselves are to be treated as personal property or something else. Since the legislatures have not taken up this question, the courts are forced to apply existing principles of property law, or hybrids thereof, to govern the disposition of frozen gametes.

In the earliest court decisions considering these novel questions regarding the disposition of frozen gametes, courts clearly felt some tension between (i) treating gametes as pure property, thereby applying traditional property laws to the dispute; and (ii) treating them as something different because of their potential to create human life, which would require building a new body of law to govern this special type of property. Although courts have not come to a uniform set of holdings in every jurisdiction, they have generally agreed that deposited gametes should be treated as personal property and thereby governed by the well developed body of property law.

*Hecht v. Superior Court* held that the decedent retained a property interest in his frozen sperm sample where he deposited sperm with a fertility clinic, instructing the clinic to release the sperm sample to his estate or, alternatively, to his girlfriend. The decedent then committed suicide. The decedent's will nominated his girlfriend as the executor and bequeathed his sperm to her. The court-appointed special administrator to the estate, with the support of the decedent's living children, petitioned for the sperm's destruction. The decedent's girlfriend sought the sperm as a bequest to her under the decedent's will. The trial court ruled that the sperm sample was to be destroyed. In reversing, the Court of Appeals held that at time of death the decedent had an
interest in the sperm sample to the extent he retained decision-making authority over it, and that this interest was sufficient for the sample to constitute property under state law. Furthermore, the court held that the decedent's "contract with the sperm bank purports to evidence decedent's intent and expectation that he would in fact retain control over the sperm following its deposit." Thus, the material constituted estate assets, and the executor had a duty to preserve.

In *Hall v. Fertility Clinic of New Orleans*, the Louisiana court also found that the decedent’s frozen sperm was his property. Prior to undergoing cancer treatment, the decedent deposited his sperm with a fertility institute. Several months after the deposit was made, the decedent executed an Act of Donation, purportedly conveying his interest in the frozen semen to his girlfriend. After the decedent's death, the decedent's mother was appointed executor and sought declaratory judgment that the frozen semen was succession property of the estate, or alternatively, that the material be destroyed. The decedent's girlfriend intervened, alleging ownership of the frozen semen pursuant to the Act of Donation. The court concluded that the executor established the necessary elements of a preliminary injunction, and that trial on the merits must be held to determine decedent's competency at the time of the Act of Donation. If, however, the decedent was found competent at trial, the court directed that the frozen sperm would be property of decedent's girlfriend with full rights to its disposition.

In a more recent case, *In re Estate of Kievernagel*, the court characterized the frozen sperm sample as property, but as a special sort of property. As part of its IVF program, a fertility clinic required the decedent to store sperm samples in case additional sperm was needed during the IVF procedure. The decedent signed the clinic's consent agreement, which referred to the sperm sample as the decedent's sole and separate property, and stated that he retained all authority to control its disposition. On the form, the decedent indicated that, at his death, the
sperm sample was to be destroyed. The decedent died unexpectedly, and his wife attempted to retrieve the sperm stored at the clinic. The clinic refused. The court concluded that gametic material is a "unique type of property and thus not governed by the general laws relating to gifts or personal property or transfer of personal property upon death." Rather, the intent of the donor should control, and therefore, the decedent's instruction that the sample be destroyed on his death was controlling.

B. Frozen embryos

Only Louisiana has statutorily addressed the status of frozen embryos. Under LA Stat. Ann. § 9:126, "an in vitro fertilized human ovum is a biological human being which is not the property of the physician which acts as an agent of fertilization, or the facility which employs him or the donors of the sperm and ovum." Rather, under § 9:130, "an in vitro fertilized human ovum is a juridical person which cannot be owned by the in vitro fertilization patients who owe it a high duty of care and prudent administration." No published court decisions have yet considered or applied these statutes.

The few courts that have considered the nature of frozen embryos have tried to articulate that embryos are something more than mere property. This conclusion might arise from the fact that embryos contain the combined reproductive material of two separate persons, or because embryos have the potential for continued human development. For these reasons, the preserved embryo has fallen into something of a "legal purgatory" with few clear articulations of whether the embryo is person, property, or something in between. The significant cases in this area are outlined below.
1. **Actions in Property.** In at least one early case, frozen embryos were held to be a proper subject of property claims.

   In *York v. Jones*, after a fertility clinic refused to transfer a couple's frozen embryos as they requested, the couple sued under property theories of bailment and detinue. In considering the clinic's motion to dismiss, the court found that the frozen embryos were the property of the parents and that the parents had properly stated causes of action under these theories of property law.

2. **Divorce Cases.** Many of the first cases to consider the nature of frozen embryos were divorce contests, in which the divorcing spouses disagreed as to the disposition of frozen embryos that had been created during the marriage.

   The often-cited case of *Davis v. Davis* set forth what has become a common approach, treating frozen embryos as "special" property. In *Davis*, a husband and wife had engaged in several years of IVF treatment, and as part of that treatment had stored frozen embryos with the IVF clinic. It was contemplated by the couple that the frozen embryos would be soon used in their attempts to procreate, and therefore no long term arrangements were made and no agreements (oral or written) were entered with respect to the disposition of the frozen embryos. The husband then filed for divorce and, at that time, the couple had seven frozen embryos stored at the clinic. The wife sought control of the embryos, hoping to use them to become pregnant. The husband objected, stating that he preferred to leave the embryos cryogenically preserved until he decided whether he wanted to become a father.

   The trial court determined that the embryos were "human beings" from the moment of fertilization and awarded the embryos to the wife, directing that she "be permitted the
opportunity to bring these children to term through implantation." The Court of Appeals reversed, holding that the husband had a "constitutionally protected right not to beget a child" and finding that there was "no compelling state interest" to justify the trial court's order that the embryos be implanted. Thus, the Court of Appeals remanded the case to trial court for entry of an order vesting them with "joint control" and "equal voice over their disposition," and by citing *York*, implied that the couple shared a property interest in the embryos. The wife sought review of this order; meanwhile both parties had remarried, the wife now seeking custody to donate the embryos to other infertile couples and the husband preferring that the embryos be discarded.

The Supreme Court of Tennessee, noting that there was no case law available to guide the decision, but instead citing guidelines issued by the American Fertility Society, concluded that "preembryos are not, strictly speaking, either 'persons' or 'property,' but occupy an interim category that entitles them to special respect because of their potential for human life." Thus, the Court held that the parties' ownership interests should control the disposition of the embryos. First, the preferences of the gamete donors should control. If their preferences cannot be ascertained or if the parties disagree, any prior agreement regarding the disposition of the embryos should be respected. If no prior agreement exists, the relative interests of the parties must be weighed. Under this balancing test, the Court concluded that the husband faced serious financial and psychological consequences if unwanted parenthood were forced upon him, which outweighed the wife's interest in donating the embryos to another infertile couple. Therefore, "[o]rdinarily, the party wishing to avoid procreation should prevail, assuming that the other party has a reasonable possibility of achieving parenthood by means other than use of the preembryos in question. . . . But the rule does not contemplate the creation of an automatic veto."

Although Davis outlined a test for the treatment of embryos as "special" forms of
property, the court left many questions unanswered. By the time the Supreme Court of Tennessee had an opportunity to rule in the matter, the wife had changed her position and was now seeking custody of the embryos in order to donate them to another couple. What result would the court have reached if she sought to implant them herself? In that hypothetical, the husband's right not to procreate might be in direct opposition to the wife's right to procreate, and Davis gives no guidance as to how such interests should be balanced. The Davis court admits that "[t]he case would be closer if [the wife] were seeking to use the preembryos herself, but only if she could not achieve parenthood by any other reasonable means." The court goes on to clarify that "reasonable means" includes additional IVF and adoption, so that as long as a party has some way to procreate that party is likely to lose the balancing test. No further published cases have delved into what constitutes a "reasonable" means of procreation. Are additional painful and costly IVF treatments reasonable? Is adoption of an unrelated genetic child a reasonable means of procreating? These and similar questions remain unanswered.

Kass v. Kass10 followed several years after Davis. Whereas the couple in Davis did not have any agreement in place regarding the future disposition of their frozen embryos, Kass is significant in that it considers the appropriate weight to be given such an agreement. In Kass, a husband and wife underwent IVF treatment, then later divorced leaving five cryogenically preserved embryos. During the IVF procedure, the couple signed four consent forms which stated, inter alia, that the frozen embryos would not be released from storage without the written consent of both parties, that in the event of divorce the legal ownership of the frozen embryos were to be determined in a property settlement, and that in the event that a decision about the disposition of the frozen embryos cannot be made, the frozen embryos may be used by the IVF clinic for certain research investigation. The couple underwent IVF treatment unsuccessfully
and divorced three weeks later. The parties drafted and signed an "uncontested divorce agreement" stating that the frozen embryos were to be disposed of in accordance with the IVF consent forms they had signed. One month later, the wife sought sole custody of the embryos; the husband counterclaimed for specific performance to permit the IVF clinic to use the embryos for research purposes.

The trial court granted custody of the embryos to the wife, concluding that the wife had exclusive decisional authority over the fertilized eggs, "just as a pregnant woman has exclusive decisional authority over a nonviable fetus," and that the wife had not waived her rights in the consent forms and uncontested divorce agreement. The husband appealed. On appeal, the Appellate Division reversed, holding that a woman's right to privacy is not implicated prior to implantation, and concluding that "when parties to an IVF procedure have themselves determined the disposition of any unused fertilized eggs, their agreement should control." The court was divided, however, on whether the terms of the agreement and consent forms were ambiguous with respect to the disposition of the embryos, and remitted the case for a full hearing on the issue. The wife appealed, and the Court of Appeals affirmed, holding that the agreement between the husband and wife should control, and that the embryos would therefore be donated to the IVF clinic for approved research purposes as the couple had specified in their agreement.

Some courts, however, have expressed reluctance to enforce embryo disposition agreements. In AZ v. BZ,11 the court modified the Kass rule by making an exception that consent agreements would not be enforced if the result would be to force parenthood upon a now unwilling individual. During IVF and other reproductive procedures, a husband and wife created embryos that were cryogenically preserved at the IVF clinic. Prior to these procedures, the husband and wife both signed a pre-printed consent form allowing the couple to designate
disposition of the embryos in the event of certain circumstances. In case of the couples separation, the form stated that the couple agreed to have the embryos returned to the wife for implant. The couple eventually gave birth to twins, leaving several frozen embryos in storage. The couple's relationship soured, however, and the wife eventually received a protective order against the husband and filed for divorce. In the divorce action, the wife sought the frozen embryos in accordance with the consent form.

The probate court held that the agreement should not be enforced in equity due to changed circumstances that neither party could have anticipated at the time the agreement was signed. Rather, the judge balanced the wife's interest in procreating against the husband's interest in avoiding procreation and determined that the husband's interests were more significant, thus issuing a permanent injunction in favor of the husband.

The Supreme Court of Massachusetts affirmed the order, holding that even if the consent agreement had been unambiguous as to the disposition of the embryos, the court would not "enforce an agreement that would compel one donor to become a parent against his or her will." Analogizing to the court's reluctance to enforce contracts to marry or divorce, the court reasoned that "prior agreements to enter into familial relationships (marriage or parenthood) should not be enforced against individuals who subsequently reconsider their decisions."

Similarly, in *JB v. MB*, the court concluded that an embryo disposition agreement would not be enforceable if the result were to force unwanted parenthood on one of the parties. In *JB*, a husband and wife underwent IVF during their marriage, but later divorced leaving seven embryos in storage at the fertility clinic. The couple signed a consent form prior to the IVF procedure that stated, in the event of divorce, the fertility clinic would take possession of the frozen embryos unless a court otherwise specified which party was to take control and direction
of the embryos. In the divorce action, the wife sought an order from the court with respect to the frozen embryos. The husband counterclaimed, demanding judgment compelling the wife to allow the embryos to be implanted or donated to another infertile couple. The wife protested, claiming that the embryos had only been created for use in her marriage with her husband.

The trial court granted the wife's motion for summary judgment, holding that the husband's interest in bringing the embryos to term was outweighed by the wife's interest in avoiding unwanted motherhood. The Appellate Division affirmed, holding that the alleged agreement between the couple ("a contract to procreate") was unenforceable as a matter of public policy; therefore, the embryos should be discarded.

The Supreme Court of New Jersey first held that, in contrast to Kass, no clear unambiguous writing existed expressing the couples' intent, and that the provision in the consent form was insufficient to determine disposition of the embryos. The Court, citing Davis, stated that the party wishing to avoid procreation should ordinarily prevail, and the Court refused to "force [the wife] to become a biological parent against her will." Moreover, the Court pointed out that, although Davis and Kass articulated the benefits of embryo disposition agreements, agreements that "compel procreation over the subsequent objection of one of the parties . . . are violative of public policy." Instead, the Court proposed a new rule with respect to the disposition of stored embryos: "enforce agreements entered into at the time in vitro fertilization is begun, subject to the right of either party to change his or her mind about disposition up to the point of use or destruction of any stored preembryo." If a party reconsiders his or her position and disposition is therefore disputed, the interests of both parties must be evaluated and "ordinarily the party choosing not to become a parent will prevail."
In Litowitz v. Litowitz, the court swung the other way, this time enforcing a consent agreement despite the fact that the agreement did not specifically speak to the event of divorce, and even though the lower courts had raised concerns about compelled procreation. A husband and wife had a child, and the wife then underwent a hysterectomy. More than fifteen years later, the couple decided to have another child through IVF using a donated egg and surrogate carrier. Prior to the IVF procedure, the couple signed the consent form which recited that the pre-embryos were to be destroyed in certain enumerated events, but did not mention separation or divorce. The clinic then used the husband's sperm to fertilize the donated eggs, some of which were implanted in the surrogate and resulted in the birth of a daughter. Prior to her birth, however, the couple separated, leaving two frozen embryos. The husband sought to put the remaining embryos up for adoption, while the wife expressed her desire to implant them in a surrogate and bring them to term.

The trial court appointed a guardian ad litem for the two embryos, and applied the best interest of the child standard. The court awarded the embryos to the husband, ruling that such a disposition was in the best interest of any child that may eventually result from the embryos, since adoption provided such a child with the best probability of being raised in a two-parent household. The Court of Appeals affirmed on grounds that the consent form did not apply in the case of dissolution, and that the husband's right not to procreate required that the embryos be awarded to him.

The Supreme Court of Washington reversed, holding that the consent form should govern the dispute. First, although only the husband was biologically related to the embryos, the husband and wife share equal rights to the eggs, and thus the embryos. Moreover, the Court concluded that although the consent form does not specifically address separation or divorce, the
form does provide that in the event the couple is unable to reach a mutual decision regarding disposition of the embryos, they must petition a court for instructions regarding the appropriate disposition. Since the couple had not reached mutual agreement, the Court was entitled to determine the disposition of the embryos under the agreement. Viewing the contract as a whole, the Court concluded that it was the couple’s mutual intent that the embryos be destroyed.

_In re Marriage of Witten_ held that there were exceptions to the enforceability of embryo disposition agreements. Prior to undergoing IVF treatment, a couple signed a consent form that provided the embryos would be released only with the approval of both parties, but did not specify what would happen in the event the couple divorced. Eventually the couple did divorce, leaving seventeen frozen embryos.

The trial court held that the consent agreement governed, and that unless the parties could agree on disposition, the clinic would retain possession of the frozen embryos.

The Iowa Supreme Court rejected the best interest standard as the wife argued and, citing _J.B._, held that embryo agreements entered into at the time of IVF between patients and fertility clinics are enforceable and binding, subject to the right of either party to change his or her mind with respect to the disposition. (Judicial enforcement of an agreement between a couple regarding their reproductive choices, however, would be against public policy.) Because one party no longer concurs in the prior agreement and the parties are unable to reach a new agreement, the Court enjoined both parties from using the embryos without the other's written consent. The Court pointed out that "[w]hen the couple is unable to agree to any disposition decision, the most appropriate solution is to keep the embryos where they are - in frozen storage"
because "keeping the embryos frozen is not final and irrevocable" thereby "mak[ing] it possible for the partners to reach an agreement at a later time."

In *Roman v. Roman*, a husband and wife generated several embryos in the course of IVF treatment, then divorced leaving three cryogenically preserved embryos. Prior to the IVF treatment, they had signed a consent form stating that it was their intent that any frozen embryos be discarded in the event of divorce, but providing that the parties could withdraw their consent as to the disposition of the embryos. The agreement also stated that in the event the couple is unable to agree on the disposition of the embryos for any reason, the embryos will be discarded. Upon divorce, the wife sought custody so that she could have the embryos implanted and bear a biologically related child. The husband argued that the written agreement should be upheld and the embryos discarded. The trial court held that the wife was to take possession of the embryos as a just and right division of the community estate.

The Texas Court of Appeals reversed and remanded to the trial court, instructing that an order be entered consistent with the couple's intention that the embryos be discarded. The Court held that embryo disposition agreements serve an important purpose in minimizing misunderstandings and maximizing procreative liberty, and that upholding such agreements, subject to mutual change of mind, is in the best interest of the state and the interests of the parties. The agreement in this case reflected a meeting of the minds that, in the event of divorce, the embryos were to be discarded.

3. Wrongful Destruction. The tendency to treat frozen embryos as property can also be observed in the few cases that have considered claims for inadvertently lost or destroyed embryos under the property theory of wrongful destruction at common law.
In *Frisina v. Women & Infants Hospital of Rhode Island*, three couples brought suit against a clinic, claiming that the clinic had inadvertently lost or destroyed their frozen embryos. The couples sued on theories of medical malpractice, bailment, and breach of contract, further alleging that they suffered severe trauma and emotional pain and loss of irreplaceable property. Although the Court dismissed the couples' negligent infliction of emotional distress claims, the Court recognized that embryos have been deemed "property" of their progenitors and that "the progenitors are deemed to have an 'interest in the nature of ownership'" (citing *York*). The Court found "merit in the argument raised by the [couples] that recovery for damages for emotional distress based on the 'loss of irreplaceable property,' the loss of their pre-embryos, is permissible."

In *Jeter v. Mayo Clinic Arizona*, a couple underwent IVF treatment, producing ten embryos. They decided to use the services of a physician at an alternate clinic, and arranged to have the embryos transferred. Upon transfer, however, only five embryos were counted. The five embryos were implanted and resulted in the birth of a daughter. The couple, however, sued the original clinic alleging four claims: (i) negligence - loss of potential children; (ii) negligence - loss or irreplaceable property; (iii) breach of fiduciary duty; and (iv) breach of bailment.

The trial court upheld the clinic's motion to dismiss. On appeal, the Court of Appeals reversed the dismissal of the negligent loss or destruction of the embryos, and remanded for further proceedings. According to the Court, the couple "could maintain an action for harm resulting from the loss of 'things.'" Given the special respect due to pre-embryos, the [couple was] also able to maintain an action against [the clinic] for any physical or economic harm resulting from that failure to exercise reasonable care to the extent [the clinic]'s actions either
caused the alleged harm, the loss or destruction of the pre-embryos, or increased the risk of that harm."

4. Personhood. Although the Frisina and Jeter courts recognized property rights in the frozen embryos, they and other courts have refused to recognize frozen embryos as "persons" for legal purposes. Even before ART produced the dilemma of the frozen embryo, the Supreme Court at least twice considered personhood, stating in Roe v. Wade\textsuperscript{18} that "the unborn have never been recognized in the law as persons in the whole sense" and in Thornburgh v. American College of Obstetricians and Gynecologists\textsuperscript{19} that "[n]o member of this Court has ever suggested that a fetus is a 'person' within the meaning of the Fourteenth Amendment."

Even in Frisina and Jeter, while the courts recognized the couples' property claims concerning the frozen embryos, they refused to characterize the frozen embryos as persons. In Frisina, the Court granted summary judgment dismissing the claim for negligent infliction of emotional distress holding, in part, that the frozen embryos cannot be "victims" under the state emotional distress statute. The same Court had held previously\textsuperscript{20} that a nonviable fetus was not a "person" for purposes of the wrongful death statute. By extension, the Court determined that this prior holding "that a nonviable fetus is not a 'person' within the meaning of the wrongful death statute would preclude pre-embryos from being considered victims" for purposes of negligent infliction of emotional distress.

Likewise, in Jeter, the Court refused to consider the preserved embryos as "persons" for purposes of application of the state wrongful death statute. "Person" is not defined in the state statutes, but in an earlier case\textsuperscript{21} the same Court had determined that a viable fetus should be considered a "person" for purposes of the wrongful death statute. The Court focused on the prior
decision and its restriction of that holding to viable fetuses. In contrast to viable fetuses, "many variables affect whether a fertilized egg outside the womb will eventually result in the birth of a child." Therefore, the Court concluded that the embryos could not be considered "persons" for purposes of recovery under the state wrongful death statute.

In dicta, at least one court has also refused to extend the defense of another to frozen embryos. In *People v. Kurr*, a woman stabbed and killed her boyfriend and was convicted of voluntary manslaughter. On appeal, she argued that she was pregnant and should have been allowed a jury instruction regarding the defense of others since the jurors could have concluded that she killed her boyfriend while defending her unborn child. The trial court held that because she could not have been more than seventeen weeks pregnant, and a seventeen-week fetus was not viable, the defendant could not have asserted a defense of others theory. The Michigan Court of Appeals reversed, and held that a defense of others theory may be advanced even to protect a nonviable fetus. However, the Court specifically noted that "the Legislature has not extended the protection of the criminal laws to embryos existing outside a woman's body, i.e. frozen embryos stored for future use, and we therefore do not extend the applicability of the defense of others theory to situations involving these embryos" (emphasis in original).

Most recently, the Fourth Circuit Court of Appeals recently held in *Doe v. Obama* that frozen embryos lack standing. In that case, Mary Scott Doe, a frozen human embryo, attempted to bring suit alleging that President Obama’s Executive Order 13505, which lifted certain human stem cell research restrictions, violated her constitutional rights. The Court dismissed the claim, holding that “in order to establish an injury in fact, the embryos must be able show an ‘invasion of a legally protected interest,’ which embryos do not possess as they are not considered to be persons under the law.”
Considering the limited statutory and case law as a whole, there is some authority for the general treatment of frozen embryos as personal property. However, courts have also made certain exceptions to the traditional principals of property because of the "special" nature of the embryos and the rights of their progenitors, especially the right to avoid imposing parenthood.

III. Estate Considerations Generally\textsuperscript{25}

Despite the cases above that consider disposition of frozen embryos between disputing progenitors, there currently does not seem to be any published case law in the U.S. regarding disposition of frozen embryos at the death of the progenitors or treatment of embryos as an asset of the estate. The courts have frequently addressed the issue of frozen gametes at death (see section IV, below), but there is reason to believe that, because of the "special" nature of frozen embryos, the disposition of frozen embryos may be treated differently from that of frozen gametes.

Without much guidance, and based in part of the many proposed (but rejected) approaches outlined in \textit{Davis} and \textit{Kass}, the following represents a non-exhaustive list of the spectrum of proposals, both moderate and extreme, for the disposition of frozen embryos in the event that the progenitors fail to reach an agreement as to the disposition of the embryos or fail to leave clear instructions in the event of their death or incapacity:

1. Require that all embryos be used by the gamete-providers or donated for reproductive use;

2. Require that any unused embryos be discarded;
3. Vest control over the embryos in the female gamete-provider in all cases because of her more significant emotional and physical contribution to the IVF process (sometimes referred to as the "sweat-equity model");

4. Vest control in the female gamete-provider only in the event that she wishes to use the embryos for her own reproductive purposes;

5. Vest control in the IVF clinic because, through participation in the IVF program, an implied contract arises giving the clinic the authority to decide the fate of the embryos should the gamete-providers fail to do so;

6. Vest control in the IVF clinic but only to use the embryos for reproductive purposes because, by participation in the IVF program, the couple has made an implied irrevocable commitment to reproduction;

7. Physically divide the embryos in equity among the gamete-donors (or their estates) to do with as they wish (noted by Davis to be the worst of both worlds);

8. Award veto power to the party wishing to avoid parenthood;

9. Vest control in the party wishing to avoid procreation;

10. Allow gamete-providers equal rights in the embryos that can be exercised only through joint disposition agreements; or

11. Institute a default rule that in the absence of specific instructions by the gamete-providers, no embryo should be implanted, destroyed, or used in research over the objection of an individual with decision-making authority.
In a more detailed proposal, Bridget M. Fuselier proposes a novel approach for frozen embryos (the “Fuselier Model”) that would "take the property laws and modify them to meet the needs of this property with special dignity." The Fuselier Model makes two general rules:

First, frozen embryos should be recognized as held by the gamete-providers in a modified tenancy by the entirety. The usual rule of tenancy by the entirety would apply, namely that each tenant spouse owns the undivided whole with rights of survivorship. However, the following modifications would apply in the case of frozen embryos:

1. The tenancy by the entirety would be extended to the genetic parents of the embryos even if they were unmarried;

2. During the lives of the tenants by the entirety, no severance or partition of the embryos would be permitted;

3. On the death of the first tenant, the decedent's interest would pass automatically to the surviving tenant and, although the surviving tenant now holds a 100% interest in the embryos, the survivor's ability to use, transfer, or destroy the embryos would still be restricted by the express, written desires or objections of the decedent made during the decedent's lifetime; and

4. On the death of the survivor, if no lifetime disposition of the embryos was made by the survivor, the embryos will be destroyed without express, written objection by either party.

Second, the Fuselier Model removes frozen embryos from the definition of "property" for purposes of probate. Under the Restatement (Third) of Property, probate courts have jurisdiction over the probate property of the decedent. Probate property is "property owned by the
decedent at death and property acquired by the decedent's estate at or after the decedent's death." 29 Property owned at death is "property that the decedent had actual ownership of and not merely ownership in substance." 30 Actual ownership refers to property in which the decedent has a "true legally recognized ownership," while ownership in substance refers to property "that the decedent did not own but over which the decedent had sufficient control, such as through the power to become the owner or to be treated as the owner for some purposes." 31 Therefore, under the Fuselier Model, embryo progenitors should be regarded as having control over the embryos, but not "actual ownership" over them such that the embryos would be included in the progenitors’ estates. As a result, since the embryos are not includible in the probate estate of the progenitor they do not pass as part of the estate, and the remaining embryos will be destroyed at the death of the surviving tenant by the entirety without express written objection of either tenant.

The Fuselier Model successfully tackles several of the dilemmas posed by frozen embryos. Non-severable ownership clearly vests in the progenitors and passes to the survivor with some restrictions. More importantly, the Fuselier Model imposes a default rule to avoid indefinite indecision with respect to embryos whose progenitors left no instructions or indications of intent.

The Fuselier Model, however, fails to address several serious concerns. First, it is unclear why the Fuselier Model seems to vest ownership in the genetic parents of the embryos, rather than the intended parents. Although Fuselier states that "[d]onors do not have any rights to their reproductive material once the donation to the appropriate clinic or individual is made," the Fuselier Model describes the male and female "providers" as creating a "oneness," implying that the genetic relationship to the embryos is paramount. The tenancy by the entirety rule
should be clarified, and should be extended not only to spouses that create frozen embryos, but also to intended parents who undertake the ART together, even if one or both of the gametic contributions is donated by a third party.

The Fuselier Model also fails to consider the case of multiple parents. If intent is the test of parenthood, could more than two people intend to create a child together? Since marriage is not required, could a threesome decide to engage in procreation together, perhaps using donated sperm and egg? Even if “parent” is limited to “genetic parent” as the Fuselier Model seems to suggest, it might be possible for an embryo to have more than two biologically related parents. Can modified tenancy by the entirety be further adapted to apply in cases of multiple parents?

While one primary strength of the Fuselier Model is that it sets up a default disposition, one weakness is that there are no contingent default arrangements. Under the Fuselier Model as proposed, if the surviving tenant has not made a disposition of the embryos during his or her lifetime, then the embryos will be destroyed at the death of the surviving tenant unless one of the tenants expressly objected in writing during his or her life. Suppose that a husband and wife maintain several frozen embryos, and upon reflection, they both sign statements reflecting their religious convictions and stating that, under no circumstances shall the embryos be discarded or intentionally destroyed. No further actions are taken or agreements entered, and both spouses pass away making no further disposition. Under the Fuselier Model, the embryos will not be destroyed because of the clearly expressed, written objection of both parties. But the Fuselier Model fails to establish any course of action for these embryos. Therefore, the model should be revised to provide alternative dispositions in the event that the embryo owners did not leave instructions for their disposition.
A revised proposal might direct as follows:

1. On the death of the survivor, if no lifetime disposition of the embryos was made by the survivor, the embryos will be destroyed without express, written objection by either party.

2. On the death of the survivor, if no lifetime disposition of the embryos was made by the survivor, but one or more of the parties expressly objected in writing to destruction of the embryos, the embryos will be donated for approved research purposes without express, written objection by either party.

3. On the death of the survivor, if no lifetime disposition of the embryos was made by the survivor, but one or more of the parties expressly objected in writing to destruction of the embryos and to donation of the embryos for approved research purposes, the embryos will be donated to qualifying infertile couples for reproductive purposes without express, written objection by either party.

Although the details of such a scheme are not addressed here (e.g., to what facility or infertile couple would the embryos be donated?), the benefit of a multi-tiered approach is to lessen the likelihood that any frozen embryos remain in storage indefinitely with uncertain futures.

The non-severability of the tenancy in common is critical to the Fuselier Model in that it ensures that one tenant cannot unilaterally sever the tenancy. If the tenancy were severable, the parties might each end up owning half of the frozen embryos to do with as he or she pleased. Such a scenario is unworkable because a progenitor who has no say in the disposition of half of the frozen embryos could very well end up becoming a parent against his or her wishes. However, the non-severability of the tenancy also raises some concerns. Suppose that a couple
maintains several frozen embryos, but eventually the couple separates. Suppose further that one party moves out of the country and cuts contact with all family, or regularly abuses dangerous substances. Under the Fuselier Model, such an individual could become the sole owner of the embryos at the death of the other parent. In such circumstances, could the other party sever the tenancy, or must the embryos pass to the survivor in all cases? Would it be possible to sever the tenancy in extreme cases if the petitioning tenant could meet a burden similar to that required to strip a parent of his or her parental rights?

Finally, the Fuselier Model fails to address the rights one might hold as an embryo recipient. According to the Fuselier Model, the surviving tenant by the entirety holds a 100% interest in the embryos, subject to the express, written desires and objections of the deceased tenant. Suppose that the decedent left no such expression, and the survivor decided to transfer the embryos to her sibling for possible use by the sibling. Upon the survivor's death, what are the sibling's rights in the transferred embryos? May the sibling transfer the embryos to yet another recipient without the express consent of the now deceased progenitors? If either progenitor had left express, written wishes, would they be binding on the sibling? On any future embryo donee? On the intended parents that might adopt the embryo? Would the same default rule, requiring destruction of the embryos at the death of the survivor, apply also at the death of the sibling if the sibling made no lifetime transfer or disposition of the embryos?

Importantly, the Fuselier Model establishes an initial framework through which to consider the complex questions of embryo disposition. But additional questions remain, and if the Fuselier Model is to be utilized, several additional modifications must be made.
IV. Frozen sperm, ova, or embryos in the estate

Despite the sophisticated nature of the Fuselier Model, no such framework has yet been adopted by any court or legislature, and the current legal approach to embryo disposition is largely unsettled. As a result, and until legislatures act to create better legal solutions to these complex issues, current fiduciaries must deal with a decedent's frozen reproductive material in accordance with the very limited available authority.

Moreover, fiduciary obligations with respect to frozen embryos are unclear. While there is no available case law on treating frozen embryos as part of the estate, anecdotal evidence suggests that in at least some cases frozen embryos are being incorporated into the estate and distributed to beneficiaries. Treating the frozen embryos as assets of the estate while adhering to the traditional fiduciary duties raises several challenging issues:

Generally, a fiduciary must act in accordance with the decedent's intent.33 Likewise, in context of reproductive matter, the fiduciary does not have absolute discretion to make decisions concerning the disposition of reproductive matter, but must act consistently with decedent's intent.34 Generally, when there is evidence of the decedent’s intent, the courts have required that intent to be carried out.

In Estate of Kievernagel, supra, the decedent sperm sample was treated as an asset of the estate. When the decedent died suddenly, leaving a sperm sample in storage, his wife as executor of the estate attempted to retrieve the sample. The court held, however, that because the sperm was a "unique type of property," the intent of the donor must control its disposition. As a result, the court denied the executor's petition and required that the sperm be discarded in accordance with the decedent's expressed intent, as indicated on his signed consent form.
Moreover, in *Speranza v. Repro Lab Inc.* the decedent, who was concerned about his impending medical treatment and its effect on future procreation, deposited a number of sperm samples in a tissue bank facility. As part of the agreement with the facility, the decedent signed an “Ultimate Disposition” form, authorizing and directing the facility to destroy all samples in the event of his death. The decedent died six months later. His parents, as executors of his estate, requested that the facility maintain the specimens. The administrators paid the maintenance fees for seven years while seeking a surrogate to bear a grandchild with their son's sperm. Eventually, the facility informed the administrators that it could not release the specimens to them; the administrators then sought a declaration that the estate is the rightful owner of the specimens. The court determined that the contract between decedent and the facility clearly required that the specimen be destroyed in the event of decedent's death.

In the event that the decedent left stored gametic material but made no express statement of intent, some courts have allowed family to "claim" the decedent's gametes. Although the cases have not been published, two recent courts granted petitions seeking to remove the sperm of the decedent after his death for possible future reproductive use. In *In re Evans,* the decedent's mother requested an emergency hearing to consider whether she could collect a sperm sample from the decedent before it was biologically too late. The Probate Court ordered the 21-year old decedent's body to be kept sufficiently cold until the decedent's mother could collect his sperm, which she hoped to use to create grandchildren using a donated egg and a surrogate. In *In re Quintana,* the 31-year old decedent died unexpectedly and his fiancé filed a petition in the Supreme Court seeking to harvest the decedent's sperm. In an emergency hearing, the Court granted her petition.

Even where the fiduciary attempts to act in accordance with the decedent’s intent, on
what authority does the fiduciary act with respect to the frozen embryos? The cases discussed above have generally approached frozen embryos under theories of personal property, but some courts have made important distinctions that embryos are "special" forms of property. Would typical will or trust language granting a trustee authority over the decedent's personal property translate into the authority to likewise control the disposition of frozen embryos? If common law trends shift, or if the fiduciary is operating in a jurisdiction with a statute like that in effect in Louisiana (characterizing an embryo as a human being and not personal property), can the fiduciary claim to have authority over the disposition of the embryos without an express provision so stating? If the embryo is treated as a human being by law, would a healthcare power of attorney be required for the fiduciary to make decisions with respect to the embryos? Who could (or would) be willing to sign such a document on the embryos’ behalf? Is it possible for a fiduciary, acting as an embryo’s attorney-in-fact, to make decisions resulting in the termination of the principal (the embryo)? Returning to the Fuselier Model, perhaps the best approach is to argue that frozen embryos are not part of the probate estate because the decedent arguably held "ownership in substance" rather than "actual ownership" over the embryos. This position, however, has not been adopted by any court.

In addition, how does the fiduciary's duty to preserve estate assets apply to the frozen embryos? Under the Restatement (Third) of Trusts, the trustee's responsibilities include "collecting and protecting trust property" and "managing the trust estate to provide returns or other benefits from trust property." Would a trustee's decision (assuming it is authorized) to destroy the embryos be consistent with this directive? How are frozen embryos properly "collected" and "protected"?
If the decedent's frozen embryos are includible in the gross estate, can they be assigned a value for purposes of determining the amount of the gross estate? Is it even possible to assign a dollar value to frozen embryos? To the extent frozen gametes are “sold,” should fiduciaries attempt to assign frozen gametes a fair market value? In the case of frozen embryos, assuming they should not be bought and sold, perhaps it makes more sense for the fiduciary to consider the expense of maintaining or transferring the embryos an expense of the estate.

Finally, fiduciaries have an obligation to act in the best interest of the estate beneficiaries. Under the Restatement (Third) of Trusts, a trustee "has a duty to administer the trust solely in the interest of the beneficiaries." How is that obligation understood in the context of frozen embryos? Assuming that frozen embryos are not considered "persons" for legal purposes, it would be difficult to assert that the fiduciary owed any duty to the embryos themselves as potential beneficiaries. The more troubling question, however, is whether the living beneficiaries of the estate would have a claim against the fiduciary in the event that the fiduciary consented to a disposition of the embryos that resulted in their eventual implantation and birth. Thereby increasing the number of beneficiaries, and reducing the proportionate share of each beneficiary. Suppose, for instance, that the fiduciary determined that several frozen embryos from decedent's prior marriage were properly considered part of the decedent's gross estate, and distributed the embryos to the decedent's current surviving spouse. If the surviving spouse uses the embryos for procreation and additional children are posthumously born, would the decedent's children living at the time of decedent's death have an action against the fiduciary, since the disposition of the embryos resulted in additional beneficiaries of decedent's estate, and thus less to each beneficiary?
V. Conclusion

The rapidly developing field of ART has raised fundamental questions of property, personhood and family. Courts presented with such issues have only the most rudimentary tools with which to work, and the currently applicable legal principles in this area leave most questions unanswered. While solid legal models have been proposed and advanced, the unfortunate reality is that no court or legislature has yet adopted them. Meanwhile, fiduciaries must act as best they can given the current legal uncertainties. Adhering to their fiduciary duties, however, may be an impossible task when the duties themselves are unknown with respect to frozen embryos. Might the uncertainty a potential fiduciary faces with respect to frozen embryos in the estate be enough to cause a nominated fiduciary to refuse the position for fear of inadvertent wrongdoing?

1 There is growing common law addressing the issue of posthumously conceived children, for example. While the treatment of such children varies dramatically between jurisdictions, the complex and extensive issues raised by posthumously conceived children are largely outside the scope of this article.

2 Legal as well as medical authorities are divided on terminology in this area. For purposes of this article, any differences between "pre-embryo" and "embryo" are not significant, and therefore the terms will be used interchangeably.

3 For purposes of this article, the rights and considerations of donors are not considered. It is widely accepted that voluntary donors give up any rights in the item donated. Although there may be reasons to argue for a distinction in the context of donated gametes, the potential rights of sperm and egg donors are outside the scope of this article.


6 83 Cal. Rptr. 3d 311 (Ct. App. 2008).

7 See Bridget M. Fuselier, Pre-Embryos in Probate: Property, Person or Something Else?, PROBATE AND PROPERTY, September/October 2010.

An enormous body of scholarly work, statutory and legal authority has developed regarding the treatment of posthumously conceived children. This issue, however, is largely beyond the scope of this article which will focus on the treatment of embryos as such in the estate, rather than treatment of the embryos as posthumous heirs.

Some have commented that any model which, as its default, calls for the destruction of all frozen embryos is excessively severe. Consider, however, the case of Julie Garber, a 28-year old woman who was diagnosed with leukemia, and who, prior to undergoing chemotherapy and radiation, arranged to have a dozen of her eggs fertilized with anonymously donated sperm and the embryos frozen until her recovery. Garber died shortly thereafter, leaving the frozen embryos without any lifetime statement of intent or disposition. Upon her death, Garber's parents inherited the embryos, then hired a surrogate to carry them to term (the first known case of posthumous maternity). Neither the surrogate, nor the sperm donor, nor Garber's parents had any intention of raising the resulting children; rather, Garber's parents intended to give the children to Garber's sister (it is unclear Garber’s sister was involved in these plans or consented to raising these biological nieces and nephews). The surrogate ultimately miscarried and, given the complicated familial and legal repercussions that could have arisen, "some people couldn't

28 Restatement (Third) of Property § 1.1.

29 *Id.* at § 1.1.

30 *Id.* cmt. B.

31 *Id.* cmt. B.

32 Ooplastic transfer refers to a process by which the ooplasm (or cytoplasm) of a fertilized egg is removed and replaced with healthy ooplasm from a donated egg. Because the ooplasm contains mitochondrial DNA, the embryo resulting embryo has three biological, genetically related parents. See Anne Drapkin Lyerly, *Marking the Fine Line: Ethics and the Regulation of Innovative Technologies in Human Reproduction*, 11 MINN. J.L. SCI. & TECH. 685, 702 (2010). Currently, the process is prohibited in the U.S., but is being considered in the U.K. where it is referred to as “three-parent IVF.” See John Travis, *U.K. Review Launched for "Three-Parent” IVF Technique*, SCIENCE, March 11, 2011 (available at http://news.sciencemag.org/scienceinsider/2011/03/uk-review-launched-for-three-par.html).

33 See, e.g., In re Fabbri's Will, 140 N.E.2d 269 (N.Y. 1957) (With respect to a decedent's will, "[a]ll rules of interpretation are subordinated to the requirement that the actual purpose of the testator be sought and effectuated as far as is consonant with principles of law and public policy").


36 Although outside the scope of this paper, the court also determined that the proposed use of the sperm to inseminate a surrogate would violate New York Department of Health regulations, which require semen donors to be "fully evaluated and tested" prior to the use of semen by a recipient "other than his current or active regular sexual partner."


39 Rest. 3d Trusts § 76 (2005).


41 *Id.* at § 78.