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OUTSOURCING HUMAN REPRODUCTION: EMBRYOS & SURROGACY SERVICES IN THE CYBERPROCREATION ERA

J. BRAD REICH* & DAWN SWINK**

“Cyberprocreation”: using the Internet to create human life

INTRODUCTION

Traditionally, a child was conceived via male-female intercourse, but the Internet provides many more possibilities. In 2011 Patrick, a single, sterile man wants a baby, but does not want to adopt.¹ He goes online and performs a Google search for eggs² and sperm³ to discover millions of ready suppliers.⁴ Patrick purchases these materials through PayPal.⁵ He

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** J.D. Drake University Law School, Associate Professor, University of St. Thomas. This article is dedicated to my sister, Peg Grundmeier.

1. Patrick is a fictional character used for illustrative purposes.

2. A January 4, 2011, Google search using “egg donor wanted” returned 85,301 hits in .14 seconds. *See, e.g.*, THE DONOR SOURCE, <http://www.thedonorsource.com> (last visited Apr. 5, 2011); TINY TREASURES AGENCY, <http://www.tinytreasuresagency.com> (last visited Apr. 5, 2011); EGG DONATION, <http://www.eggdonation.com> (last visited Apr. 5, 2011); CORI’S EGG DONOR SERVICES, <http://www.coriseggdonorservices.com> (last visited Apr. 5, 2011).

3. A January 4, 2011, Google search using “sperm donor wanted” returned 127,101 hits in .18 seconds. *See, e.g.*, PRIVATE SPERM, <http://www.privatesperm.com> (last visited Apr. 5, 2011); SPERM DONORS WORLDWIDE, <http://www.sperm-donors-worldwide.com> (last visited Apr. 5, 2011); FAIRFAX CRYOBANK, <http://www.fairfaxcryobank.com> (last visited Apr. 5, 2011); XYTEX, <http://www.xytex.com> (last visited Apr. 5, 2011).

4. Although Patrick is intrigued by entities offering “designer” embryos, it is unclear if there is an online “designer” bank operational at this time, although there has been at least one available online recently. *See infra* notes 21–22; *see also* Debra Saunders, *Embryos Made to Order*, S.F. CHRON., Aug. 8, 2006, at B7. It appears the founder has since closed this “bank” due to public pressure and commentary. Press Release, , Abraham Center of Life LLC, Abraham Center of Life No Longer in Embryo Business (May 30, 2007), *available at* <http://www.eworldwire.com/pressreleases/17092>.

wants his child as soon as possible,⁶ so he has the tissues shipped to a South African fertility clinic⁷ where the egg is fertilized and implanted into an Indian surrogate, also discovered online.⁸ Patrick regularly monitors ultrasound using Sight Speed video link⁹ and receives weekly email medical updates with portable document format attachments (pdfs).¹⁰ He connects his laptop computer to his television and watches the birth in his living room via Skype.¹¹ He then retains a “guide” to accompany the newborn to his local airport where he meets his new baby for the first time. He pays all costs through secure websites. Patrick created human life through cyberspace. There is nothing “traditional” about potential baby making in the Cyberprocreation era.

While this scenario may seem implausible to some, that is only because it is so different from how many envision human procreation. Every technological aspect identified is readily available and potential human life is truly just a few cyber links away. That reality raises many issues begging discussion and analysis. This article focuses on two: embryo donation and surrogacy. We contend that while the Internet increased the availability of, and the market for, human embryos and surrogacy services

5. PAYPAL, <https://www.paypal.com/> (last visited Apr. 5, 2011) (providing financial services for online transactions).

6. Patrick could have opted to store the embryos at an embryo bank using a process known as “cryopreservation.” A January 4, 2011, Google search using “embryo bank storage” generated 343,000 hits in .28 seconds. *See, e.g.*, THE SPERM AND EMBRYO BANK OF NEW JERSEY, <http://www.sperml.com/sebnj/index.html> (last visited Apr. 5, 2011); Sperm Bank, Inc., www.spermbankcalifornia.com (last visited Apr. 5, 2011); Centrum voor Reproductieve Geneeskunde, www.brussellsivf.be/embryo_bank (last visited Apr. 5, 2011). “Cryopreservation” means freezing the embryo for future use. *See* David I. Hoffman, et al., *Cryopreserved Embryos in the United States and Their Availability for Research*, 79 FERTILITY & STERILITY 1063, 1066 (2003).

7. A January 4, 2011, Google search using “fertility clinic services” generated 24,000,000 hits in .22 seconds. *See, e.g.*, THE CENTER FOR ADVANCED REPRODUCTIVE SERVICES, www.fertilitycenter-uconn.org (last visited Apr. 5, 2011); AMERICAN FERTILITY, www.americanfertility.com (last visited Apr. 5, 2011); MIDLAND FERTILITY SERVICES, www.midlandfertility.com (last visited Apr. 5, 2011).

8. A January 2, 2011, Google search using “surrogacy services” generated 429,000 hits in .26 seconds. *See, e.g.*, SURROGATE PARENTING SERVICES, <http://www.surrogateparenting.com> (last visited Apr. 5, 2011); THE FERTILITY INSTITUTES, <http://www.fertility-docs.com> (last visited Apr. 5, 2011); SURROGACY ABROAD, <http://www.surrogacyabroad.com> (last visited Apr. 5, 2011).

9. *See* SIGHTSPEED, <http://www.sightspeed.com>, (last visited Jan. 13, 2011) (providing a videoconferencing service).

10. *See* TRS. OF IND. UNIV. *What is a PDF File*, INDIANA UNIVERSITY (Feb. 21, 2011), <http://www.kb.iu.edu/data/aftt.html> (“PDF (Portable Document Format) is a file format developed by Adobe as a means of distributing compact, platform-independent documents.”).

11. SKYPE, <http://www.skype.com/intl/en-us/features/allfeatures/video-call/> (last visited Apr. 5, 2011) (providing a system whereby a computer can communicate with another computer or phone).

to a larger audience than ever envisioned, it also created significant and unimagined legal concerns for embryo donors,¹² suppliers,¹³ surrogates¹⁴ and surrogate providers.¹⁵

Parts I and II of this article provide a background on various Assisted Reproductive Technology (“ART”) procedures and perspective on current applications. We will see that a combination of need, technological advancement, cost and process effectiveness, and increasing social acceptance will fuel the future use of donor embryos and/or surrogates.¹⁶

Part III discusses the Internet’s impact on ART. Without question, the Internet increased the level of information available on virtually any subject.¹⁷ This section addresses three significant Cyberprocreation developments. First, the Internet likely creates or influences the idea that people should be, or use, reproductive goods or service providers.¹⁸ Second, it fosters new approaches and developments.¹⁹ Third, it shapes where people pursue ART, a development known as “Reproductive Tourism.”²⁰

In Part IV we look at international, federal, state, and voluntary association regulation of embryo and surrogacy practices. We will find that despite the significant danger posed by defective embryos or inadequate surrogates, along with the investments some consumers are willing to incur,²¹ these areas are the “wild west”²² and largely unregulated.

Part V analyzes potential parental rights and responsibilities of embryo donors and surrogates. While it will undoubtedly surprise some, it is increasingly likely that surrogates may have parental rights and, to the surprise of the surrogate, she may have parental responsibilities as well. Parties may try to address these issues through surrogacy contracts, but we

12. See *infra* text accompanying note 28 (defining embryo donors).

13. See *infra* text accompanying note 30 (defining suppliers).

14. See *infra* text accompanying note 31 (defining surrogates).

15. See *infra* Part I.

16. See *infra* Parts I–II.

17. See, e.g., EHOW.COM, <http://www.ehow.com> (last visited Mar. 16, 2011) (giving information on such topics as how to milk a goat, how to pay for items online, or how to stay awake while racing in the Iditarod); HOWSTUFFWORKS, <http://www.HowStuffWorks.com> (last visited Mar. 16, 2011) (providing access to bizarre facts and explanations of how things work).

18. See *infra* Part III.

19. See *infra* Part III.

20. See *infra* Part III.

21. See, e.g., Susan Donaldson James, *Bringing Out Baby: Who Pays for IVF?*, ABC NEWS, Apr. 8, 2008, <http://abcnews.go.com/Health/ReproductiveHealth/bringing-baby-pays-ivf/story?id=4607004> (reporting that one couple paid for one IVF child by securing a second home mortgage and a second child using the couple’s inheritance).

22. See Debra Spar, *Taming the Wild West of Assisted Reproduction*, COLUMBIA SPECTATOR, Feb. 26, 2009, available at <http://www.columbiaspectator.com/2009/02/26/taming-wild-west-assisted-reproduction>.

will see that there is no guarantee that such agreements will be legally enforceable.²³

Finally, Part VI shifts the focus from parentage to product liability. We analyze potential liability for embryo donors and suppliers under breach of warranty, strict product liability, and negligence causes of action.²⁴ We then assess potential surrogate and surrogate provider liability under negligence and breach of contract.²⁵ The article concludes with predictions and recommendations as society continues forward in the Cyberprocreation Era.

I. A NECESSARY CAVEAT

Readers will quickly realize that much is unsettled, and certainly unknown, in the rapidly developing world of ART. This article represents an important discussion, but clear language and consistent use is essential to guide our collaborative journey. We, therefore, provide certain operational definitions before we proceed further:

1. “Embryo” – the prefetal product of human conception from implantation through the eighth week of development.²⁶
2. “Designer embryo” – an embryo created to attempt to include or exclude certain resulting characteristics.²⁷
3. “Embryo donor” – the person(s) who causes the embryo to exist.²⁸
4. “Embryo donation” – providing an embryo in exchange for compensation.²⁹

23. See *infra* Part V.

24. See *infra* Part VI.

25. See *infra* Part VI.B.

26. THE FREE DICTIONARY, <http://medical-dictionary.thefreedictionary.com/embryo> (last visited Apr. 5, 2011). This definition is appropriate for our discussion; however, the development during this time actually encompasses multiple steps with increasing cell division. See Craig Freudenrich, *How Sex Works: The Fertilization Process*, DISCOVERY HEALTH, <http://health.howstuffworks.com/sexual-health/sexuality/human-reproduction10.htm> (last visited Mar. 16, 2011) (explaining the fertilization process).

Initially the sperm fertilizes one or more eggs, resulting in a zygote. *Id.* The zygote develops in a blastocyst within a few days. *Id.* The blastocyst becomes an embryo once it has developed cells to support both the fetus and the placenta. *Id.*

27. See, Kate Foster, *Couples Offered Designer Babies (PGD Embryo Screening)*, FREE REPUBLIC, Jan 17, 2009, <http://www.freerepublic.com/focus/f-news/2166642/posts> (defining what a designer embryo is and the process of how one is created).

28. This could actually encompass a wide variety of situations: fertile couples, a couple or individual using an egg or sperm donor, or a couple or individual using an egg and sperm donor.

29. While it may seem unusual to define a donor as a person receiving compensation, that is the appropriate definition when discussing donation of human reproductive tissues eggs, sperm, or embryos because such “donors” are really “sellers”. See, e.g., *Donor Compensation*, THE EGG DONOR PROGRAM, <http://www.eggdonation.com/becoming-an-egg-donor/Donor-compensation.php> (last visited Mar. 16, 2011) (discussing the promise to reward donors with gifts and the highest level of compensation); *Fees*, SPERM DONORS INC.,

5. “Embryo supplier” – the person or entity that provides an embryo to prospective parent(s), but has no biological connection to the embryo.³⁰

6. “Surrogate” – a woman who is paid to act as a replacement for another woman who will not, or cannot, carry a pregnancy through to term.³¹

7. “Surrogate provider” – an entity providing a surrogate to prospective parent(s).

<http://www.spermdonorsinc.com/Fees.html> (identifying compensation to sperm donors as ranging from \$1,000–2,000 depending on qualifications) (last visited Mar. 18, 2011).

Embryo donation is different from embryo adoption. See Brandon S. Mercer, *Embryo Adoption: What are the Laws*, 26 J. JUV. L. 73, 73 (2006) (“[E]mbryo adoption is the ‘donation of frozen embryo(s) from one party to a recipient who wishes to bear and raise a child.’ Embryo adoption is simply defined as the gifting of embryos.”), Jaime E. Conde, *Embryo Donation: The Government Adopts a Cause*, 13 WM. & MARY J. WOMEN & L. 273, 279–83 (2006) (discussing the different ways embryo adoption and embryo donation are defined). But see Paula J. Manning, *Baby Needs a New Set of Rules: Using Adoption Doctrine to Regulate Embryo Donation*, 5 GEO. J. GENDER & L. 677, 678 (2004) (stating that the terms embryo donation and embryo adoption are synonymous). This contention is frequently well supported by entities that merge the concepts, likely causing confusion. See, e.g., *Embryo Adoption*, FERTILITYCOMMUNITY.COM, <http://www.embryoadoptions.com/> (last visited Mar. 18, 2011) (“The legal process of the transfer of the embryos from the donor to the adopter is governed by contract law rather than adoption law. The embryos are “owned” by the donating family and “ownership” is given to the adopting family before the embryos are thawed and transferred into the adopting mother’s womb. Adoption agencies wrap the protections of current adoption practices around the process of embryo donation.”).

30. Common examples are fertility clinics offering embryo donation. See, e.g., *Egg Donation*, CONCEPTUAL OPTIONS, <http://www.conceptualoptions.com/egg-donation> (last visited Apr. 16, 2011)

31. See THE FREE DICTIONARY, <http://legal-dictionary.thefreedictionary.com/surrogacy> (last visited Apr. 6, 2011) (defining surrogate motherhood). There are two types of surrogates, “traditional” and “gestational.” See Heather Weller, *Traditional versus Gestational Surrogacy*, CHILDBIRTH SOLUTIONS <http://childbirthsolutions.com/articles/traditional-versus-gestational-surrogacy/> (explaining the difference between traditional and gestational surrogacy). In a traditional surrogacy the surrogate’s egg(s) are fertilized by donor semen using artificial insemination *Id.* In a traditional surrogacy the surrogate is both the biological mother (as the egg donor) and the birth mother. See *Traditional Surrogacy*, INFORMATION ON SURROGACY, <http://www.information-on-surrogacy.com/traditional-surrogacy.html> (last visited Apr. 6, 2011) (explaining that the surrogate is the biological mother). In a gestational surrogacy the surrogate carries an embryo using an egg donated by a third party. Weller, *supra.* Here the surrogate is the birth mother, but not the biological mother as she is not the egg donor. INFORMATION ON SURROGACY, *supra.* The vast majority of current surrogacy relationships, perhaps as high as ninety-five percent, are gestational. See Kimberly D. Krawiec, *Altruism and Intermediation in the Market for Babies*, 66 WASH & LEE L. REV. 203, 224 (2009) (explaining that 95% of surrogacies are gestational). One author argues, quite convincingly, that the perception of “baby selling” has effectively destroyed the market for traditional surrogates. See Noa Ben-Asher, *The Curing Law: On the Evolution of Baby-Making Markets*, 30 CARDOZO L. REV. 1885, 1918 (2009) (“The legal classification of full surrogacy as baby-selling and maternal replacement has had crippling effects on the formation of a market for full surrogacy.”). Surrogacy may also be “commercial” or “altruistic.” See Amy M. Larkey, *Redefining Motherhood: Determining Legal Maternity in Gestational Surrogacy Arrangements*, 51 DRAKE L. REV. 605, 608 (2003) (describing the different motivations to become a surrogate).

II. RE-CONCEPTUALIZING CONCEPTION

Traditionally conception occurred through intercourse between a male and female, with the male supplying the sperm and the female providing the eggs. ART is the umbrella term for various medical technologies creating conception through means other than coital reproduction.³² There are a number of ART strategies.³³ The oldest and most common is Artificial Insemination (AI).³⁴ The next most common is In Vitro Fertilization (IVF).³⁵ The goal of such procedures is to successfully fertilize a human egg, resulting in an embryo. That embryo may then be stored for future use or implanted into a woman's uterus for gestation. Gestation may involve the services of a surrogate. There is very recent growth in ART practices using embryo donation and/or surrogates³⁶ and, going forward, these two trends will be increasingly prominent for, at least, four reasons.

32. *What is Assisted Reproductive Technology?*, CTRS FOR DISEASE CONTROL & PREVENTION, U.S. HEALTH & HUMAN SERVS., <http://www.cdc.gov/art/> (last updated Feb. 14, 2011).

33. Examples of such techniques include intracytoplasmic sperm injections (ICSI) (injecting a single sperm directing into an egg), gamete intrafallopian transfer (GIFT), zygote intrafallopian transfer (ZIFT), and Intracytoplasmic sperm injection (ICSI), embryo transfer, and increasingly, surrogacy. See DEBORA L. SPAR, *THE BABY BUSINESS: HOW MONEY, SCIENCE, AND POLITICS DRIVE THE COMMERCE OF CONCEPTION* 17 (2006).

34. See Kari Livingston, *What is the Difference Between TS & GS Surrogacy*, EHOW available at http://www.ehow.com/info_8124952_difference-between-ts-gs-surrogacy.html. AI is the least intrusive ART procedure. AI takes previously ejaculated sperm and implants it into a woman's cervix or uterine lining. Weller, *supra* note 31. There are several forms of insemination process such as standard vaginal and intrauterine. See Justyn Lezin, *(Mis)Conceptions: Unjust Limitations on Legally Unmarried Women's Access to Reproductive Technology and Their Use of Known Donors*, 14 HASTINGS WOMEN'S L.J. 185, 191 (2003) (stating that vaginal insemination is the most commonly used method of insemination); KIM TOEVS & STEPHANIE BRILL, *THE ESSENTIAL GUIDE TO LESBIAN CONCEPTION, PREGNANCY AND BIRTH* 304-5 (2002). There are two forms of AI but they differ based on who is providing the sperm. See *Definition of AID*, MEDTERMS,

<http://www.medterms.com/script/main/art.asp?articlekey=6986> (last updated Oct. 21, 1998). In Artificial Insemination by Husband, the husband is the donor. *Id.* In Artificial Insemination by Donor, the donor is someone other than the recipient-mother's husband. *Id.*

35. IVF (literally meaning "in glass") requires a sperm donor and a physician's/clinician's assistance for implantation. The process begins with hormonal stimulation of a woman's ovaries to produce multiple eggs. See IN VITRO FERTILIZATION, <http://in-vitro-fertilization.eu/> (last visited Apr. 7, 2011) (explaining the process of in vitro fertilization). This woman may be the intended birth mother or she may be an egg donor who will not carry any resulting child. The eggs are surgically removed and placed in a glass Petri dish. Sperm are then introduced to the eggs. If successful, the sperm fertilizes the eggs and upon an eight-cell stage, the "pre-embryo" is transferred to a woman's uterus by cervical catheter. See Weldon E. Havins & James J. Dalessio, *Reproductive Surrogacy at the Millennium: Proposed Model Legislation Regulating "Non-Traditional" Gestational Surrogacy Contracts*, 31 MCGEORGE L. REV. 673, 681 (2000) (discussing gestational surrogacy and how after the ovum is fertilized with the sperm, it becomes an embryo and is then placed into a woman's uterus).

36. See Ronni Berke, *Single Men Turning to Surrogates*, CNN, Dec. 23, 2008, <http://www.cnn.com/2008/HEALTH/12/23/single.men.parenting/?iref=mpstoryview> ("[T]he

First there is, and will be, increasing need. This need may be rooted in biology, legal constraints, economics, culture, or a combination of these and other factors. Biologically the fact is that many people have difficulty conceiving,³⁷ and that problem is getting worse.³⁸ For some reproduction is biologically impossible, even though there are no infertility issues.³⁹ While many people might need embryos or surrogacy services, the laws of their domiciles may limit, or prohibit outright, such reproductive assistance, forcing them to secure this aid elsewhere.⁴⁰ Need is frequently financial.⁴¹

Society for Assisted Reproductive Technology, representing scores of reproductive clinics, reports that the number of gestational surrogate births in the [United States] quadrupled between 1996 and 2006.”). This rapid evolution cannot be over-stated. As recently as 2004 the President’s Council on Bioethics concluded that there was no embryo commerce taking place in the United States. Jeffery T. Wise, *Embryo Banking as a Novel Option for the Infertile? Law Policy, and a Proposed Model Act*, 8 HOUS. J. HEALTH L. & POL’Y 163, 177 (2007). Within 24 months “The World’s First Human Embryo Bank” was available online and based in San Antonio, Texas. This “Bank” was properly known as the Abraham Centre of Life. See Rob Stein, *Texas Firm First to Offer Ready-Made Embryos*, available at

<http://www.chron.com/disp/story.mpl/headline/metro/4451076.html>. We can now obtain embryos from diverse entities. See, e.g., CONCEPTUAL OPTIONS, *supra* note 30 (offering designer embryos from many sources); *Embryo Donation*, SPECIALISTS IN REPRODUCTIVE MEDICINE & SURGERY, P.A., <http://www.dreamababy.com/embryo-donation.htm> (last visited Mar. 18, 2011); *Embryo Donation*, BETHANY CHRISTIAN SERVICES, <http://www.bethany.org/a55798/bethanywww.nsf/0/12a23f0bc63400a085257289006eb5d6> (last visited Mar. 18, 2011).

Of course, “growth” requires context. As one article properly notes, surrogacy is one of the least used ART procedures. See Debora Spar & Anna M. Harrington, *Building a Better Baby Business*, 10 MINN. J.L. SCI. & TECH. 41, 46 (2009) (stating that surrogacy was used in one percent of ART cycles in 2005. But, this fails to recognize the pronounced increase recently. See Berke, *supra*. We also note that there are at least thirty clinics in the United States offering surrogacy services with one boasting more than 1,400 births and another with fifty surrogates available. See *Egg Donor and Surrogacy Programs*, INFERTILITY RESOURCES FOR CONSUMERS,, <http://www.ihr.com/infertility/provider/donoregg.html> (last visited Mar. 18, 2011). Additionally domestic physicians are increasingly using foreign surrogates. See *infra* text accompanying notes 100–107.

37. Spar & Harrington, *supra* note 36, at 44 (noting that an estimated 15% of American women and 10–15% of American men are infertile).

38. See CTRS FOR DISEASE CONTROL & PREVENTION, U.S. HEALTH & HUMAN SERVS., FERTILITY, FAMILY PLANNING, AND REPRODUCTIVE HEALTH OF U.S. WOMEN: DATA FROM THE 2002 NATIONAL SURVEY OF FAMILY GROWTH 22 (2002), (reporting that an estimated 7.3 million American women aged 15–44 reported some impaired ability to have children in 2002, compared with 6.1 million in 1995, and 4.9 million in 1988).

39. See Berke, *supra* note 36 (discussing two agencies that have each experienced a fifty percent increase in the number of single men using surrogacy services and noting that a significant percentage of those using surrogates are gay men or couples or single, straight men.)

40. See *infra* text accompanying notes 91–93

41. Habiba Nosheen & Hilke Schellmann, *The Most Wanted Surrogates in the World*, GLAMOUR MAGAZINE, Oct. 2010, available at <http://www.glamour.com/magazine/2010/10/the-most-wanted-surrogates-in-the-world> (discussing the trend by U.S. military wives to serve as surrogates often to supplement family income).

Those unable or unwilling⁴² to carry an embryo to term can hire a surrogate. There are many women, both in the United States⁴³ and abroad⁴⁴, who need the income surrogacy can provide.⁴⁵ There are many people who

42. See, e.g., Ruby L. Lee, Note, *New Trends in Global Outsourcing of Commercial Surrogacy: A Call for Regulation*, 20 HASTINGS WOMEN'S L.J. 275, 282 (2009) (discussing that there is a "the trend of fertile, married, career women opting out of bearing their own children in favor of convenience" and that there is an "increasing interest in using surrogates has come from career women who do not want to take a break from their careers").

43. Nosheen & Schellmann, *supra* note 41. Surrogacy contracts in the United States appear to range between \$40,000 and \$100,000. Nick Williams, *India Adopts Surrogate Mother Hotspot*, VIDETTE REP., Nov. 11, 2010, available at http://www.videtteonline.com/index.php?option=com_content&view=article&id=33247:india-adopts-surrogate-mother-hotspot&catid=37:newsnationalglobal&Itemid=53. While those numbers may reflect the total contract "price," actual compensation to the surrogate might be far less. See Jennifer L. Watson, *Growing a Baby for Sale or Merely Renting a Womb: Should Surrogate Mothers be Compensated for their Services?*, 6 WHITTIER J. CHILD & FAM. ADVOC. 529, 531 (2007) ("Currently, the typical fee for a first time surrogate mother ranges from \$14,000 to \$18,000, with an average of \$15,000."); *Surrogate*, OPEN ARMS EGG DONATION AND SURROGACY AGENCY, <http://www.openarmsconsultants.com/index.php?action=sg> (last visited Mar. 18, 2011) (stating that this company provides a minimum compensation of \$18,000 to a surrogate).

At least one court refused to enforce a surrogacy contract, in part precisely because they were concerned about the effect of compensation. See *R.R. v. M.H.*, 689 N.E.2d 790, 796 (Mass. 1998) ("Eliminating any financial reward to a surrogate mother is the only way to assure that no economic pressure will cause a woman, who may well be a member of an economically vulnerable class, to act as a surrogate.").

See Lee, *supra* note 42, at 278 ("On average, an Indian gestational surrogate receives between \$2,800 and \$5,600 for her services. For perspective, these amounts are equivalent to ten years' salary for rural Indian women."); Kritivas Mukherjee, *Rent-a-Womb in India Fuels Debate*, EZILON INFOBASE, Feb. 5, 2007 http://www.ezilon.com/information/article_17613.shtml (last visited Mar. 18, 2011) ("[A] surrogate is paid anything between \$3,000 and \$6,000, a fortune in a country with an annual per capita income of around \$500.").

45. See, e.g., Margot Cohen, *A Search for a Surrogate Leads to India*, WALL ST. J., Oct. 9, 2009, <http://online.wsj.com/article/SB10001424052748704252004574459003279407832.html?KEYWORDS=Margot+Cohen> (discussing one Indian woman's decision to be a surrogate because "[H]aving someone else's child sounded like a better option than her other plan: selling a kidney."). While there is some information regarding surrogates and financial need, there is little publicly available regarding embryo donors, but we gain some insight from recent human egg donation trends. Cf., Stephanie Smith, *Dim Economy Drives Women to Donate Eggs for Profit*, CNN, Aug. 8, 2008, <http://cnn.com/2008/HEALTH/08/05/selling.eggs/index.html> (reporting a Chicago clinic was fielding 30 to 50 inquiries a day from potential donors in 2008 compared to the prior year's 10 to 30, while the Reproductive Science Center of the Bay Area received 158 calls in July 2008, in contrast to 120 in July 2007). Fertility clinics report a dramatic increase in the number of egg donations and procedures performed each year. Smith, *supra*. This is particularly true during the recent economic times. Cf. Judy Keen, *Recession Finds Fertile Field of Egg, Sperm Donors*, U.S.A. TODAY, July 7, 2009, at 1A (reporting that Health News, an Irvine, California company that operates a national donor referral service, had a 40% increase since February 2008) Fertility clinics nationwide report a significant increase in the number of donors coming forward. See e.g., Juju Chang & Kiran Khalid, *Less Money Means More Egg Donors*, ABC NEWS, Oct. 27, 2008, <http://abcnews.go.com/GMA/OnCall/story?id=6119578&page=1> (stating fertility experts throughout the country reported a 30% to 40% increase in applicants). As

desperately want a child but cannot reproduce and cannot afford to pursue IVF. Embryos and/or surrogates may provide the only options. Finally, need may be cultural as well, particularly when infertility brings shame.⁴⁶ Although there is no published data, anecdotally it appears that the use of surrogates has grown exponentially over just the past few years.⁴⁷

Second, reproductive technology advances at a truly astounding rate.⁴⁸ Many ART procedures are now so common that we lose perspective of how recently they came into existence. America celebrated the birth of its first IVF-conceived baby in 1981,⁴⁹ just twenty-five years later at least 54,656

of 2008 more than 100,000 young women sold or donated eggs to approximately 470 IVF clinics in the United States. W. Kramer et al., *U.S. Oocyte Donors: A Retrospective Study of Medical and Psychosocial Issues*, 24 OXFORD J. OF HUM. REPROD. 3144, 3144 (2009), available at <http://humrep.oxfordjournals.org/content/24/12/3144.full>

46. Mark Alpert, *New U.S. Export to Japan: Babies*, FORTUNE, Aug. 10, 1992, available at http://money.cnn.com/magazines/fortune/fortune_archive/1992/08/10/76762/index.htm. As an example, in Japan infertility carries serious social stigma, adoption is frowned upon, and clinics cannot provide surrogates. *Id.* As a result, at least one American fertility center has been recruiting Asian American women to serve as surrogates for Japanese clients for the past several years. *Id.* Japanese customers use Indian surrogates a well. See *Japanese Girl Born to Indian Surrogate Arrives Home*, CNN, Nov. 2, 2008, http://articles.cnn.com/2008-11-02/world/india.baby_1_indian-law-japanese-girl-jaipur?_s=PM:WORLD (describing a situation where an Japanese couple paid a clinic in India to have an Indian surrogate implanted with the husband's sperm and an anonymous donor egg)

47. See Cohen, *supra* note 45 ("Robert Rupak, president of PlanetHospital, a California-based medical-tourism country, says that in the first eight months of [2009] he sent 600 couples or single parents overseas for surrogacy, nearly three times the number in 2008 and up from just 33 in 2007."); Joseph Gathia, *Surrogate Mothers: Outsourcing Pregnancy in India*, MERINews, June 26, 2008, available at <http://www.merineews.com/article/surrogate-mothers-outsourcing-pregnancy-in-india/136421.shtml>; Lorraine Ali, *The Curious Lives of Surrogates*, NEWSWEEK, Apr. 7, 2008, <http://www.newsweek.com/2008/03/29/the-curious-lives-of-surrogates.html>; and Amelia Gentleman, *Foreign Couples Turn to India for Surrogate Mothers*, N.Y. TIMES, Mar. 4, 2008 <http://www.nytimes.com/2008/03/04/world/asia/04iht-mother.1.10690283.html> (stating that people are becoming more aware of the process of surrogacy in India).

48. See generally Liza Mundy, *Souls on Ice: America's Embryo Glut and the Wasted Promise of Stem Cell Research*, MOTHER JONES, July/Aug. 2006, available at <http://motherjones.com/politics/2006/07/souls-ice-americas-embryo-glut-and-wasted-promise-stem-cell-research> (discussing a wide range of recent developments, including the combination of more effective fertility drugs and laboratory procedures producing more embryos per cycle, implantation procedures using fewer embryos, and the fact that a woman recently gave birth using an embryo that had been frozen for 13 years, which underscores how unclear the future of embryo storage and usage really is, as professionals do not even know how long frozen embryos will be "good for" going forward). This may be particularly true of medical technology regarding embryos. *Id.*; see also Lucy Laing, *Conceived Together, Born 11 Years Apart: Deep-frozen Third Sister Arrives After Record Gap*, DAILY MAIL, available at <http://www.dailymail.co.uk/health/article-1341766/Conceived-born-11-years-apart-Deep-frozen-sister-arrives-record-gap.html> (last updated Dec. 27, 2010) (explaining how a woman was born 11 years after being conceived).

49. Miss Elizabeth Carr was born in Norfolk, Virginia on December 28, 1981. See DEBORA L. SPAR, *THE BABY BUSINESS: HOW MONEY, SCIENCE, AND POLITICS DRIVE THE COMMERCE OF CONCEPTION* 17, 28 (2006).

babies were born in the United States using IVF and IVF-related procedures.⁵⁰ We have only been able to store human eggs since 2004.⁵¹ In 2007, Europe's first in vitro maturation babies were born.⁵² We may have even gotten to the point where women do not need men to create babies.⁵³ There is little reason to doubt that we will regularly see regular such ART "miracles" going forward or that the use of reproductive technology will continue to increase.

The third driving force is the cost and process effectiveness of purchasing embryos and/or using surrogacy services relative to IVF. IVF based procedures are not single, point-in-time activities; they are more accurately a series of steps over different periods of time. The Centers for Disease Control ("CDC") refers to these as "cycles of treatment"⁵⁴ or, for purposes of this article, "cycles." The average cost for a single cycle of IVF is \$10,000-12,000, but can reach as much as \$25,000 if features such as donor gametes or intracytoplasmic sperm injection (ICSI) are added.⁵⁵ And,

50. CTRS FOR DISEASE CONTROL & PREVENTION, U.S. HEALTH & HUMAN SERVS., 2006 ASSISTED REPRODUCTIVE TECHNOLOGY REPORT 61 (2008) [hereinafter CDC 2006 REPORT]

51. Aina Hunter, *Why Worry? Put Your Eggs on Ice!*, ABC NEWS, Apr. 9, 2008, <http://abcnews.go.com/Health/story?id=4591877&page=1>. The difficulty with storing eggs is that eggs have high water content that tends to produce destructive ice crystals in the egg when frozen. *Id.* While data is limited, one study showed that eggs survive the new storage process 85% of the time. Cherie Black, *Seattle Women Now Have Option to Freeze Eggs*, SEATTLE PI, Feb. 10, 2008, available at www.seattlepi.com/printer2/index.asp?ploc=t&refer=http://www.seattlepi.com/local/350763_eggfreezing11.html.

52. Justin Blau, *IVM Babies Just Fine, Thank You*, CBS NEWS, June 30, 2003, <http://www.cbsnews.com/stories/2003/06/30/health/main561011.shtml>. In vitro maturation ("IVM") is similar to IVF. See Tracy Connor, *Have a Baby at New Low, Low Price, Says Fertility Doctor Joel Batzofin*, NY DAILY NEWS, Apr. 13, 2009, [http://www.nydailynews.com/news/2009/04/13/2009-04-](http://www.nydailynews.com/news/2009/04/13/2009-04-13_have_a_baby_at_new_low_low_price.html)

13_have_a_baby_at_new_low_low_price.html (describing the basic procedure for both IVF and IVM). The key difference is that, in IVF, the egg donor is placed on hormones to stimulate their ovaries and the eggs are withdrawn when mature. *Id.* In IVM no hormones are used and the eggs are removed before maturation. *Id.*

53. In 2009, British researchers announced that they had taken stem cells from an embryo and used them to create human sperm. See Peter Allen, *Sperm from Stem Cells*, CBS NEWS, July 9, 2009, <http://www.cbsnews.com/stories/2009/07/09/uttm/main5148372.shtml> ("Sperm could be produced from female stem cells. That would mean women would no longer need men to create babies.").

54. See CDC 2006 REPORT, *supra* note 50, at 4 ("Because ART consists of several steps over an interval of approximately two weeks, an ART procedure is more appropriately considered a cycle of treatment rather than a procedure at a single point in time.").

55. See Marcia C. Inhorn & Michael Hassan Fakh, *Arab Americans, African Americans, and Infertility: Barriers to Reproduction and Medical Care*, 85 FERTILITY & STERILITY 844, 844 (2006) (estimating the mean cost of IVF in the United States in 2002 at \$9,547). Cost varies by region and clinic. See *id.* (describing a study of Arab and African Americans living in low-income areas of the United States that are unable to afford infertility treatment even when clinics offer discounts or different pricing).

while the rate of success has grown considerably, most women need more than one cycle to accomplish pregnancy.⁵⁶ It is not uncommon for a person or couple to spend \$100,000 just attempting to conceive using traditional IVF based procedures.⁵⁷ Making IVF even more cost prohibitive is the fact that the vast majority of states do not require insurance companies to cover, or offer coverage for, infertility diagnosis and treatment.⁵⁸ Using embryos and/or surrogates may decrease total costs, perhaps by 50% or more,⁵⁹ while also increasing the likelihood of success.⁶⁰

Finally, ART use is increasingly common and possibly more socially acceptable.⁶¹ In 1996, there were 64,681 ART cycles performed in the

56. See CTRS FOR DISEASE CONTROL & PREVENTION, U.S. HEALTH & HUMAN SERVS., 2005 ASSISTED REPRODUCTIVE TECHNOLOGY SUCCESS RATES NATIONAL SUMMARY AND FERTILITY CLINIC REPORTS 6 (2007), <http://www.cdc.gov/art/ART2005/508PDF/2005ART508.pdf> [hereinafter CDC 2005 REPORT] (providing 2005 statistics that of the 97,442 cycles started only 28% resulted in a live birth). Ironically success rates actually decrease with each additional cycle. *Id.* at 17.

57. See Spar & Harrington, *supra* note 36, at 46–47 (projecting the average cost of a single cycle to be \$12,400 while the price of some eggs ranged from \$25,000 to \$50,000). This is true even when the patient knows the probability of success is low. See Judith F. Daar, *Regulating Reproductive Technologies: Panacea or Paper Tiger?*, 34 HOUS. L. REV. 609, 632 (1997) (discussing the recent entrance of women into the ART market who were previously ineligible for treatment, including the extreme case of a post menopausal woman birthing a son from a donor egg). Patients are frequently willing to pay nearly \$30,000 for a 10% chance of having a baby. See Melinda B. Henne et al., *The Combined Effect of Age and Basal Follicle-Stimulating Hormone on the Cost of a Live Birth at Assisted Reproductive Technology*, 89 FERTILITY & STERILITY 104, 107 (2008) (describing a pilot study that found patients in 2005 willing to pay \$27,158 for a 10% chance of delivering a baby).

58. See, *State Laws Related to Insurance Coverage for Infertility Treatment*, NAT'L CONFERENCE OF STATE LEGISLATURES (Sept. 2010), <http://www.ncsl.org/programs/health/50infert.htm> (listing current state insurance laws that address insurance coverage for fertilization procedures).

59. See Stein, *supra* note 36 (explaining that The Abraham Center provided affordable options for clients to its fertility bank by charging \$2,500 per embryo and an estimated \$10,000 for total cost of a pregnancy); see also Wise, *supra* note 36, at 169 (describing The Abraham Center's less costly process and report of two women who "shared" a single batch of embryos and shared costs).

60. See Lynne Peeples, *In IVF, Frozen Embryos May Fare Better Than Fresh*, REUTERS, Feb. 17, 2010,

<http://www.reuters.com/article/2010/02/17/us-ivf-embryos-idUSTRE61G4U120100217>

(describing a Finnish study that determined children born from frozen embryos were less likely to be born prematurely and had a higher birth weight and length). While we cannot say that it is a well-established medical fact, designer embryos may have higher pregnancy success rates than non-designer embryos, particularly when the egg and sperm come from donors with an established track record of achieved pregnancies. See Wise, *supra* note 36, at 168 n.21 ("[T]hey can increase the chance of a successful pregnancy from approximately thirty percent to an impressive seventy percent.").

61. See, e.g., NO BABY ON BOARD, www.nobabyonboard.com/moviestv.html (last visited Jan. 14, 2011) (providing examples of celebrities who publicly acknowledge using IVF to conceive, including David and Courtney Cox, Marcia Cross, Penn Jillette; moreover, Angela Bassett, Robert DeNiro, Peri Gilpin, Kelsey Grammar, and Deidre Hall used surrogates). It may even be the case

United States,⁶² by 2008 that number increased to 148,055 resulting in 46,326 live births (deliveries of one or more living infants) and 61,426 infants.⁶³ Although ART use is still relatively rare, it has doubled over the past decade.⁶⁴

It is also, arguably, acceptable not only to use ART to try to create life, but to attempt to create life through designer embryos.⁶⁵ While some contend there is no need for such embryos⁶⁶ the reality is that there will be demand for three reasons. First, while there are embryos in storage,⁶⁷ the vast majority is unavailable to prospective parent(s).⁶⁸ Second, even if those embryos were readily available, there are questions about potential viability.⁶⁹ Third, it is simply ridiculous to discount the reality that would-

that ART discussions have become social events. *See, e.g., Non-profit Organization Holds Egg Donor/Surrogacy Event in Popular Beverly Hills Nail Salon*, GAY NEWSWIRE, Jan. 21, 2010, <http://www.gaynewswire.com/nonprofit-organization-holds-egg-donorsurrogacy-event-popular-beverly-hills-nail-salon/6192> (posting an invitation to a program “designed to deliver sensitive and important information about surrogacy and egg donation in a casual, relaxed setting, where participants enjoy complimentary manicures, pedicure, and martinis”).

62. CDC 2006 REPORT, *supra* note 50, at 61.

63. CTRS. FOR DISEASE CONTROL & PREVENTION, 2008 ASSISTED REPRODUCTIVE TECHNOLOGY SUCCESS RATES 13 (2008).

64. *Id.* at 65.

65. We say “arguably” because there are certainly opinions to the contrary. *See, e.g., Joyce E. Cutler, Designer Baby Offer to Screen Embryos for Eye, Hair, Skin Pigmentation Dropped*, CTR. FOR GENETICS & SOC’Y (March 4, 2009), <http://www.geneticsandsociety.org/article.php?id=5210> (discussing a California fertility clinic’s decision to withdraw its screening plan due to “apparent negative social impacts.”); Daniel Martin, *Couple Pay 9,000 to Have First British Web Baby*, DAILY MAIL, Jan. 22, 2007, <http://www.dailymail.co.uk/health/article-429393/Couple-pay-9-000-British-web-baby.html> (“Stephen Green, national director of Christian Voice, said ‘The objection to the idea of designer babies is that it divorces procreation from the act of sexual congress, and there is a real sense in which it is playing God.’”).

66. *See, e.g., The Slope is Really Slippery*, CHRISTIANITY TODAY, Mar. 24, 2007, <http://www.christianitytoday.com/ct/2007/march/24.29.html> (discussing the slippery slope that the Abraham Center is approaching through embryo selection as “the world’s first embryo bank”).

67. *Id.* (alleging that there are some 500,000 embryos in cryopreservation in the United States).

68. Susan Crockin, *How do you “Adopt” a Frozen Egg?*, BOSTON GLOBE, Dec. 4, 2005, at D12 (“According to a 2003 study, approximately 88 % of those frozen embryos are still under the active control of the patients who created them and are still trying to create a family with them. Of the remaining embryos, only about 2 % of patients were found to actually choose to donate their embryos to another family for procreation — likely, at least in part, from discomfort over donating their born child’s potential genetic sibling. In my own practice and those of many of my colleagues, almost 75 % of patients who seriously consider donation ultimately decide not to donate to another family.”).

69. *See* Jennalee Ryan, *The World’s First Embryo Bank*, FREE REPUBLIC, Aug. 2, 2006, <http://www.freerepublic.com/focus/f-news/1676440/posts> (pointing out that the quality of embryos from infertile couples is less than those from a proven egg and sperm donor raising the pregnancy, with pregnancy rates of 30% and 70% respectively).

be parents hope to “produce” a child with certain characteristics or abilities.⁷⁰

III. SYMBIOSIS

The embryo market is, at least domestically, a very recent development⁷¹ and surrogate use increased dramatically over the past few years.⁷² The logical explanation for these developments is the Internet. As recently as 1999 people advertised in newspapers for human tissue donors⁷³ and only 40% of the American population aged 16-years and older accessed the Internet.⁷⁴ Ten-years later, 74% did⁷⁵ and the United States currently has more than 239,232,863 Internet users.⁷⁶ Global Internet use increased 444.8% from 2000 to 2010.⁷⁷ As of June 2010, there were approximately 1,966,514,816 Internet users worldwide.⁷⁸ In 1993 the United States ART industry was estimated at \$164 million per year.⁷⁹ By 2010, that figure

70. See, e.g., Joan O’C.Hamilton, *What are the Costs?*, 2000 STANFORD MAGAZINE 53, 58 (“[F]uturistic scenarios of parents-in-waiting “constructing” a child already have arrived. Scouring a website where they can select donors, hopeful couples can quickly get caught up in comparison shopping, where physical features are the stock in trade. “Couples who would have been looking for someone with a lovely character before [the Internet] now say, ‘Well, we like No. 98, but haven’t you got someone with a bluer eye?’”). It may even be the case that prospective parents desire characteristics that may not commonly be perceived as desirable. See Sarah-Jay Templeton, *Deaf Demand Right to Designer Deaf Children*, SUNDAY TIMES, Dec. 23, 2007, <http://www.timesonline.co.uk/tol/news/uk/health/article3087367.ece> (presenting an argument by the Royal Institute for Deaf and Hard of Hearing People that Deaf parents should be allowed to screen their embryos so they can choose a deaf child). An American family chose a sperm donor with a history of family deafness to purposely have a deaf child. *Id.*

71. See Cohen, *supra* note 45, at W8 (describing the tremendous increase in facilities, surrogate pregnancy attempts and number of couples sent overseas between 2005 and 2007, structuring a market for embryos and surrogacy).

72. *Id.*

73. That year, a married couple put ads in the Harvard and Princeton newspapers seeking an egg donor who was 5’10” or taller and who had scored over 1400 on her SATs. Barbara Katz Rothman, *The Potential Cost of the Best Genes Money Can Buy*, CHRONICLE OF HIGHER EDUC., June 11, 1999, at A52, available at <http://chronicle.com/article/The-Potential-Cost-of-the-Best/21979/>.

74. INTELLIQUEST, *Statistics: Internet, Internet Use (U.S.)*, MEDIA AWARENESS NETWORK, May 23, 1999, http://www.media-awareness.ca/english/resources/research_documents/statistics/internet/internet_use.cfm.

75. Sydney Jones & Susannah Fox, *Generations Online in 2009*, PEW RESEARCH CENTER (Jan. 28, 2009), available at <http://pewresearch.org/pubs/1093/generations-online>.

76. *North America Internet Users and Population Statistics*, INTERNET WORLD STATS, <http://www.internetworldstats.com/stats14.htm#north> (last visited Apr. 26, 2011).

77. *Internet Usage Statistics: World Internet Users and Population Statistics*, INTERNET WORLD STATS, <http://www.internetworldstats.com/stats.htm> (last visited Apr. 26, 2011).

78. *Id.*

79. Judith Gaines, *A Scandal of Artificial Insemination*, N.Y. TIMES MAGAZINE, Oct. 7, 1990, at 23,

grew to at least \$1.7 billion.⁸⁰ Eighty percent of adult Internet users seek health information online⁸¹ and reproductive health questions are one of the most common areas of interest.⁸² It is no coincidence that Internet usage and ART growth mirror each other. The fact is that the Internet allows prospective ART buyers and sellers to find each other in ways unimaginable even a decade ago. But the Internet is not only providing ART access it is shaping, at least, three significant ART ideas.

First, many ART buyers and sellers find each other online, but that pre-supposes awareness of the existence of the “other party”. While it is impossible to quantify, there is no doubt that some people get the initial idea to pursue ART activities from the Internet.⁸³

Second, the Internet fosters the idea that ART is not limited to any traditional audience. Originally IVF was for married women under the age of 35 who suffered specific physiological problems and could not conceive naturally.⁸⁴ The Internet makes ART developments available to broader constituencies. Prominent user groups now include non-married, career heterosexual women,⁸⁵ gay⁸⁶ or lesbian⁸⁷ couples, individuals,⁸⁸ and

<http://www.nytimes.com/1990/10/07/magazine/a-scandal-of-artificial-insemination.html?scp=1&sq=judith%20gaines&st=cse>.

80. See Spar & Harrington, *supra* note 36, at 47 (“[T]he arithmetic suggests that assisted reproduction in the United States is at least a \$1.7 billion market.”).

81. Nathan Cortez, *Patients Without Borders: The Emerging Global Market for Patients and the Evolution of Modern Health Care*, 83 IND. L.J. 71, 85 (2008). Searching health information ranks behind only email use and consumer goods and services searches online. *Id.*

82. See Wolfgang Himmel et al., *Information Needs and Visitors' Experience of an Internet Expert Forum on Infertility*, 7 J. OF MED. INTERNET RESEARCH e20 (2005), available at <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1550645> (last visited Jan. 15, 2011) (outlining a German study that analyzed internet traffic to a site answering questions about infertility medical questions).

83. See *Want to Buy My Eggs for \$4,000?*, SGCLUB.COM, http://www.sgclub.com/singapore/eggs_4000_china_188402.html (last visited Jan. 15, 2011). While there are no documented cases, it is difficult to believe that ideas such as purchasing embryos, much less designer embryos, and becoming a surrogate were not created by people doing online research in areas ranging from “infertility” to simple current events.

84. See, e.g., LIZA MUNDY, EVERYTHING CONCEIVABLE: HOW ASSISTED REPRODUCTION IS CHANGING OUR WORLD, 27 (2007) (“We limited our cases at first to those women who had had their Fallopian tubes removed”).

85. See Deborah Apton, *More Women Choosing Single Motherhood*, ABC NEWS, May 24, 2006, <http://abcnews.go.com/Nightline/story?id=1995278&page=1> (“California Cryobank, one of the largest sperm banks in the country, reports that single women make up 32 % of the clients who buy sperm from its bank.”).

86. See Stephen H. Miller, *Gay Men's Baby Boom*, May 18, 2000 <http://www.indegayforum.org/news/show/26805.html> (alleging that there is a gay men's baby boom developing fed by the Internet); Guy Ringer, *Gay Man, Gay Dad: Gay Men Can Become Fathers*, http://www.theafa.org/library/article/gay_man_gay_dad_gay_men_can_become_fathers/ (last visited Apr. 26, 2009) (outlining the process for a gay man to start a family).

87. See Paula Amato & Marcy Casey Jacob, *Providing Fertility*

straight single men.⁸⁹ The Internet also cultivates the development of “radical” ART concepts.⁹⁰

Third, the Internet is epicenter of the idea of Reproductive Tourism (“RT”). While authors discuss the concept of RT differently,⁹¹ here it means “citizens of one country using reproductive technologies in another.” Commentators address restrictions driving RT users across borders (such as situations where treatment is unavailable⁹² or procedures are locally illegal),⁹³ but users pursue RT for a variety of reasons⁹⁴ including lack of

Services to Lesbian Couples: The Lesbian Baby Boom, SEXUALITY, REPROD. & MENOPAUSE 83, 83 (2004) (“Thirty to 50% of lesbian women of child-bearing age wish to become parents, and given the current social trends toward same-sex marriage, many will seek to do so with the help of a sperm donor.”). There are clinics that market services specifically to lesbian couples and individuals. See, e.g., *Services*, THIE MD, <http://www.thiemd.com/infertility.html> (last visited Apr. 26, 2011) (addressing services available specifically for lesbian patients), Co-ParentMatch.com, Lesbian Sperm Donors, http://www.co-parentmatch.com/sperm_donors/lesbian_sperm_donors.php (last visited Apr. 26, 2011) (providing information specifically catered to both lesbian sperm donors and lesbians seeking to get pregnant).

88. See Berke, *supra* note 36 (telling the story of a single male in Manhattan who became of single parent through surrogacy).

89. *Id.*

90. See, e.g., Martin, *supra* note 66 (discussing the Texas-based Abraham Center, the “World’s First Embryo Bank” who marketed its services, and attracted clients, online. Its first two successful procedures involved women from Canada and California and quickly gained potential clients from England).

91. See, e.g., Guido Pennings, *Legal Harmonization and Reproductive Tourism in Europe*, 19 HUMAN REPROD. 2689, 2690 (2004) (“Reproductive or infertility tourism refers to the movement of citizens to another state . . . to obtain specific types of medical assistance in reproduction that they can not receive at home.”). The basis of this definition likely comes from Bartha M. Knoppers & Sonia LeBris, *Recent Advances in Medically Assisted Conception: Legal, Ethical, and Social Issues*, 17 AM. J.L. & MED. 329, 333 (1991) (defining “procreative tourism” as people traveling to exercise “personal reproductive choices in less restrictive states”).

92. Sometimes procedures are “unavailable” because medical personnel simply refuse to perform them. See, e.g., Andrea D. Gurmankin et al., *Screening Practices and Beliefs of Reproductive Technology Programs*, 83 FERTILITY & STERILITY 61, 65 tbl. 6 (2005) (reporting that one in five treatment providers refuse treatment to unmarried women); Catherine DeLair, *Ethical, Moral, Economic and Legal Barriers to Assisted Reproductive Technologies Employed by Gay Men and Lesbian Women*, 4 DEPAUL J. HEALTH CARE L. 147, 150 (2000) (“The most common and the most significant barrier that gays and lesbians face when trying to access reproductive technologies is physician discrimination and refusal to provide treatment.”). In addition to direct discrimination – refusal to provide treatment – same-sex couples face statutes that prohibit insurance payments for in-vitro procedures unless for instance, the treatment is rendered upon their lawful spouse. See NAT’L CONFERENCE OF STATE LEGISLATURES, *supra* note 58 (outlining various state statutes addressing insurance coverage of in vitro procedures).

93. See Lee, *supra* note 42, at 285 (“[R]egulation that is overly restrictive towards the practice of surrogacy has not eliminated the practice. Rather it has boosted demand for [reproductive] tourism.”).

94. See generally Elizabeth Ferrari Morris, *Reproductive Tourism and the Role of the European Union*, 8 CHI. J. INT’L L. 701, 703 (2008). See Cortez, *supra* note 81 (providing a comprehensive discussion of why patients travel abroad for medical care).

local medical expertise, lengthy waiting lists,⁹⁵ cost considerations,⁹⁶ and convenience.⁹⁷ RT is a prevalent,⁹⁸ and based on growth patterns, soon to be an enormous ART/Internet consideration because the Internet “facilitates nearly all facets of medical tourism.”⁹⁹

It is almost impossible to fathom the future explosion of RT but, while data is limited, the projections for India provide some perspective. In 2003, India’s Finance Minister announced his country’s goal to become a “global health destination.”¹⁰⁰ An estimated 150,000 medical tourists visited India in 2005, but that number was projected to increase to 450,000 by 2008.¹⁰¹ Perhaps more telling is that India’s RT segment of medical tourism was approximately \$450 million per year in 2006 and is projected to grow by 600% in the near future.¹⁰² A significant portion of this growth is

95. See *A Growing Number of Brits Cross the Atlantic for Donor Egg IVF Treatment at Shady Grove Fertility Center*, PR NEWSWIRE, June 16, 2009, <http://news.prnewswire.com/ViewContent.aspx?ACCT=109&STORY=/www/story/06-16-2009/0005044891&EDATE> (last visited Jan. 15, 2011) (“In the UK, where egg donors are neither paid nor guaranteed anonymity, donor eggs are scarce, wait times can be as long as three years and choice of donor is limited.”) Some clinics exist precisely because countries have more demand than supply. See, e.g., *International Egg Donor Program*, SHADY GROVE FERTILITY, <http://www.shadygrovefertility.com/international> (last visited Jan. 15, 2011).

96. Fertility treatments in foreign countries may be significantly cheaper. *Cost of IVF with Sperm Donation Abroad*, VISITANDCARE.COM, <http://www.visitandcare.com/infertility-treatment-abroad/guides/treatment/ivf-with-sperm-donation/cost> (last visited Apr. 26, 2011). As an example, the average cost for a cycle of IVF is \$10,500 in the United States. *Id.* That same treatment costs \$5,100 in Cyprus, \$4,200 in Argentina, and almost 80% less, \$2,200, in India. *Id.* Prospective users can comparison shop online utilizing estimated costs and user reviews. See, e.g., *IVF Fertility Medical Procedure Country Price Compare Traveling from USA*, ALLMEDICALTOURISM.COM, <http://www.allmedicaltourism.com/usa/fertility/ivf-in-vitro-fertilization/?mic=m62tl88kjf&gclid=CNmwwYWOrpwCFQMNDQodIWSM7w> (last visited Apr. 26, 2011) (allowing users to choose countries to compare pricing).

97. Foreign clinics use online promotions to target frazzled, infertile couples with an attractive combination: fertility treatments and vacation. See, e.g., *My IVF Alternative*, <http://www.myivfalternative.com/> (last visited Apr. 26, 2011) (offering “vacation style” IVF procedures in the Czech Republic); *IVF Mexico Experts Offer IVF in Mexico*, GO SCULPTURA, http://www.ivfmexicoexperts.com/conversion/mexico_conv_fertility.htm?OVRAW=IVF%20Vacation&OVKEY=ivf%20abroad&OVMTIC=advanced&OVADID=44419002522&OVKWID=220392856522 (last visited Apr. 26, 2011) (offering a “pleasurable” IVF vacation experience in Mexico).

98. See Morris, *supra* note 94, at 712 (“Reproductive Tourism has become an unmistakable part of the European landscape.”).

99. See Cortez, *supra* note 81, at 85.

100. Rupa Chinai & Rahul Goswami, *Bulletin of the World Health Organization: Medical Visas Mark Growth of Indian Medical Tourism*, WORLD HEALTH ORGANIZATION, www.who.int/bulletin/volumes/85/3/07-010307/en/index.html (last visited Mar. 23, 2011).

101. *Id.*

102. Usha Rengachary Smerdon, *Crossing Bodies, Crossing Borders: International Surrogacy Between the United States and India*, 39 CUMB. L. REV. 15, 24 (2008); Linda F. Powers, *Leveraging Medical Tourism*, 20 SCIENTIST at 79 (2006).

attributable to the Internet, specifically user-friendly websites¹⁰³ and effective, although not necessarily reliable,¹⁰⁴ online advertising.¹⁰⁵ The United States, while not attempting to grow RT as India, still has a \$3 billion dollar per year industry¹⁰⁶ and many domestic physicians are increasingly embracing aspects of RT.¹⁰⁷

IV. Regulation¹⁰⁸

*“[T]he plain fact is that medical technologies have raced ahead of the law without the heed of the general public or legislators.”*¹⁰⁹

In this section we examine international, federal, state, and voluntary association regulation, or lack thereof, regarding embryo donation and surrogacy services. While it would be convenient to address the same directives at each level, we do not have that luxury as regulation ranges from chaotic to non-existent. Accordingly we are left attempting to address two general, but significant, topics in each of the following subsections. First, is there embryo “regulation” and, if so, what is regulated? Second, is there surrogacy “regulation” and, if so, what is regulated?

A. International Law

There is little international regulation of human embryos. What does exist primarily focuses on the length of time embryos can be stored. Storage may be prohibited entirely,¹¹⁰ limited to one-year,¹¹¹ two-years,¹¹² three-years,¹¹³ five-years,¹¹⁴ ten-years,¹¹⁵ or unlimited.¹¹⁶

103. See Cortez, *supra* note 81, at 85–86 (“Virtually every hospital that caters to foreign patients has an English Web site. And these Web sites are increasingly functional. Many allow patients to schedule treatments, book hotels and airfare, and even contact their surgeon. Patients can also find medical tourism brokers on the Internet that will liaise with foreign hospitals and make travel arrangements.”).

104. See Smerdon, *supra* note 102, at 30 (noting that many Indian ART practitioners and fertility tourism agencies have created websites that “are designed to function as marketing tools for medical tourism, to attract patients from around the world to India and more importantly, to the clinic. It is difficult to distinguish actual information from marketing strategies, as the two often appear to be indistinguishable”).

105. *Id.* at 24 (“Between 2004 and 2006, the number of websites advertising ART more than quadrupled with marketing heavily geared to foreigners.”).

106. See MUNDY, *supra* note 84, at 4.

107. See Cohen, *supra* note 45, at D1 (noting that the president of a California-based medical-tourism company stated that “in the first eight months of [2009] he sent 600 couples or single parents overseas for surrogacy, triple the number in 2008 and up from just 33 in 2007”).

108. While we will discuss aspects of embryo regulation in this section, we will not address specific stem cell issues as those are beyond the scope of this article.

109. See UNIF. PARENTAGE ACT, art. 8, cmt. , available at <http://www.law.upenn.edu/bll/archives/ulc/upa/final2002.htm> (last visited Jan. 23, 2011).

110. For example, Italy prohibits the storage of donor egg or sperm, and prohibits freezing embryos for later use. See *Assisted Human Reproduction Internationally*, HEALTH CANADA (Oct.

There is more developed surrogacy regulation, both by action and inaction. Some countries flatly prohibit it,¹¹⁷ others regulate surrogacy by prohibiting compensation to surrogates,¹¹⁸ while still others allow surrogate compensation.¹¹⁹ Many countries, likely even most, have no national regulation.¹²⁰

B. Federal Law

One author asserts that there are federal laws requiring “strict medical and genetic screenings of the [embryo] donating couple to determine the

1, 2004), www.hc-sc.gc.ca/hl-vs/reprod/hc-sc/general/international-eng.php (providing international updates about the legislation of Assisted Human Reproduction).

111. Austria and Denmark limit storage to one year. See *IVF Worldwide Unit Directory – Embryo Bank*, IVF WORLDWIDE, www.ivf-worldwide.com/Education/embryo-bank.html (last visited Mar. 23, 2011).

112. Belarus, the Netherlands, Russia, Switzerland, and the Ukraine allow storage for two years. *Id.*

113. Norway and Sweden allow storage for three years. *Id.*

114. Belgium, Croatia, France, Iceland, and the United Kingdom allow storage for five years. *Id.*

115. Finland, Israel, and Spain allow storage for ten years. *Id.*

116. For example, the United States has no restriction on storage time. *Id.*

117. Examples of countries that flatly prohibit surrogacy are: Austria, China, Finland, France, Germany, Italy, Latvia, Norway, Poland, Singapore, Slovenia, Sweden, Switzerland, Taiwan, Tunisia, Turkey, and Vietnam. See *IVF Worldwide Unit Directory IVF–Surrogacy*, IVF WORLDWIDE, <http://www.ivf-worldwide.com/Education/surrogacy-rw.html> (last visited Mar. 31, 2011).

118. For example, Australia, Canada, Denmark, Greece, Netherlands, New Zealand, and the United Kingdom prohibit commercial surrogacy. *Id.*

119. India, Russia, Israel, and Ukraine allow commercial surrogacy. *Id.*; see also Richard F. Storrow, *Quests for Conception: Fertility Tourists, Globalization and Feminist Legal Theory*, 57 HASTINGS L.J. 295 (2005).

120. Argentina, Belgium, Brazil, Columbia, Croatia, Czech Republic, Ecuador, Egypt, Jordan, Malaysia, Morocco, Peru, Philippines, Portugal, Romania, South Africa, South Korea, Thailand, United States, Uruguay and Venezuela have no surrogacy policy. *IVF Worldwide Unit Directory IVF–Surrogacy*, IVF WORLDWIDE, <http://www.ivf-worldwide.com/Education/surrogacy-rw.html> (last visited Mar. 31, 2011). Ireland is another example of a country that does not have a surrogacy policy. Eric Scott Sills & Clifford M. Healy, *Building Irish Families Through Surrogacy: Medical and Judicial Issues for the Advanced Reproductive Technologies*, 5 REPROD. HEALTH 9, 9 (2008).

This simply means there is nothing preventing commercial surrogacy in these countries; certainly some provide such services. See, e.g., Press Release, PRL0G, *The Latest About Surrogacy in South Africa* (Jan. 31, 2010), <http://www.prlog.org/10512636-the-latest-about-surrogacy-in-south-africa.html> (discussing the current status of surrogacy in South Africa); Rebecca Ponce, *Surrogacy and Adoption in Thailand*, SIAM LEGAL INT’L, July 16, 2010, <http://www.hg.org/article.asp?id=19371> (discussing the current status of surrogacy laws in Thailand); Raissa Robles, *Womb for Hire – Part 1*, ABC–CBN NEWS, June 16, 2009, <http://www.abs-cbnnews.com/special-report/06/16/09/womb-hire-part-1> (discussing the first commercial surrogacy in the Philippines). It is also possible that there is some regulation at the state or territorial levels. See, e.g., *Assisted Human Reproduction Internationally*, *supra* note 110 (discussing regulation in Australia and noting that Victoria prohibits compensated surrogacy and Queensland prohibits all surrogacy.).

embryo's viability and whether the couple is 'free of any genetic and communicable diseases.'"¹²¹ If such comprehensive legislation exists, we cannot find it. In fact the opposite is possible; there may be no federal laws address embryo donor screening. We contend that statutory language and commentary demonstrates there is some embryo screening and storage legislation, though it is minimal.

The federal government oversees assisted reproduction and genetic testing through three agencies: the Food and Drug Administration ("FDA"), the Centers for Medicare and Medicaid Services ("CMS"),¹²² and the Center for Disease Control ("CDC"). The FDA's term "other reproductive tissue" should encompass embryos.¹²³ Even if that is correct, there are no more than two regulations regarding embryo collection and storage. The first merely mandates that all "establishments" engaged in the collection, processing, storage and distribution of human embryos have their donors screened and tested for H.I.V., Hepatitis B & C, Chlamydia trachomatis and Neisseria gonorrhoea.¹²⁴ The second states only that human tissue must be stored at an "appropriate temperature."¹²⁵ While these regulations are nominal and vague, such deficiencies might be explained by accidental over-sight, but the federal government had an opportunity to clearly establish embryo quality control regulation and chose not to do so.

The Fertility Clinic Success Rate and Certification Act of 1992 ("FCSRCA") authorized the Secretary of Health and Human Services to issue regulations establishing certification standards and procedures for

121. Alexia M. Baiman, *Cryopreserved Embryos as America's Prospective Adoptees: Are Couples Truly "Adopting" or Merely Transferring Property Rights?*, 16 WM. & MARY J. WOMEN & L. 133, 138 (2009).

122. 21 C.F.R. §§ 1271.55, 1271.80 (2006) (establishing that laboratory testing is largely governed by CMS).

123. See 21 C.F.R. § 1271.3(d)(3) ("Human cells, tissues, or cellular or tissue-based products (HCT/Ps) means articles containing or consisting of human cells or tissues that are intended for implantation, transplantation, infusion, or transfer into a human recipient. Examples of HCT/Ps include, but are not limited to, bone, ligament, skin, dura mater, heart valve, cornea, hematopoietic stem/progenitor cells derived from peripheral and cord blood, manipulated autologous chondrocytes, epithelial cells on a synthetic matrix, and semen or other reproductive tissue.") (emphasis added); see also 21 C.F.R. § 1270 (2006) (regulating human tissue transplants); Human Cells, Tissues, and Cellular and Tissue-Based Products; Establishment Registration and Listing, 66 Fed. Reg. 5452, cmt. 11 (Jan. 19, 2001) (codified at 21 C.F.R. § 1271.1) ("Several comments questioned the need for the regulation of reproductive cells and tissues, citing current oversight from professional organizations, other Federal agencies, and States. Comments opposed registration for programs involved in egg donation, egg retrieval, semen processing, semen evaluation, or in vitro fertilization (IVF) in assisted reproductive technologies. . . . We stand by our decision to extend regulatory requirements to reproductive cells and tissue.").

124. 21 C.F.R. § 1271.85(a), (c).

125. 21 C.F.R. § 1271.260(b).

embryo laboratories.¹²⁶ The Act defined an “embryo laboratory” as “a facility in which human oocytes and sperm, or embryos, are subject to ART laboratory procedures.”¹²⁷ However nothing in the FCSRCA establishes standards or procedures for quality control practices; instead it only requires that fertility clinics report annual ART success rates.¹²⁸ In sum, if there is any federal embryo quality control regulation, it is minimal¹²⁹ and this minimal level is intentional.

There is no federal surrogacy legislation¹³⁰ but there is one possibility in terms of “national” scope, the Uniform Parentage Act (“UPA”). The most recent incarnation of that Act was in 2002 (“UPA2002”).¹³¹ That Act recognized the need for clarification regarding parentage and surrogacy.¹³² UPA 2002 mandated that surrogacy agreements were not void per se,¹³³ defined that a surrogate may be paid for her services,¹³⁴ and clarified that gestational surrogate services were not “baby selling.”¹³⁵ It further specified that the intended parents of a child born pursuant to an approved surrogacy agreement were, with judicial approval, the legal parents of the child.¹³⁶ While ambitious, the Act does not provide definitive guidance. To date only nine states enacted it, none of them without change,¹³⁷ and at

126. Implementation of the Fertility Clinic Success Rate and Certification Act of 1992; Proposed Model Program for the Certification of Embryo Laboratories, 63 Fed. Reg. 60178 (Nov. 6, 1998).

127. *Id.* at 60181.

128. *Id.* at 60178. See 42 U.S.C. §§ 263a–1 to –7 (2006) (regulating clinical laboratories). The Act has been termed by one author as “governmental regulation at its weakest.” Brenda Reddix–Smalls, *Assessing the Market for Human Reproductive Tissue Alienability: Why Can We Sell Our Eggs, but Not Our Livers?*, 10 VAND. J. ENT. & TECH. L. 643, 658 (2008). It is hard to dispute this contention. To give perspective, in addition to its failure to establish quality control procedures, it was not even funded until four years after enactment. *Id.*

129. At least one author flatly contends there is none. See Helen M. Alvare, *The Case for Regulating Collaborative Reproduction: A Children’s Rights Perspective*, 40 HARV. J. ON LEGIS. 1, 28 (2003).

130. See Pamela Laufer–Ukeles, *Gestation: Work for Hire or the Essence of Motherhood? A Comparative Legal Analysis*, 9 DUKE J. GENDER L. & POL’Y 91, 103–4 (2002) (showing the differences between state regulation on the issue).

131. See generally, UNIF. PARENTAGE ACT, *supra* note 109.

132. *Id.* at art. 7, cmt. (noting that “[t]housands of children are born in the United States each year as the result of ART” and therefore, the Act seeks “to clarify definitively the parentage of a child born under these circumstances”).

133. *Id.* at §801, cmt.

134. *Id.* at § 801(e).

135. *Id.* at §801, cmt.

136. *Id.* at § 807, cmt. However, if the gestational agreement is not judicially validated, the gestational mother is the legal mother. *Id.* at § 809, cmt.

137. The states that enacted the Uniform Parentage Act were Alabama, Delaware, New Mexico, North Dakota, Oklahoma, Texas, Utah, Washington, and Wyoming. *Legislative Fact Sheet – Parentage Act*, UNIFORM LAW COMMISSION (2010),

least two of those states did not adopt Article 8, the provision addressing gestational agreements.¹³⁸ There is no case law interpreting UPA 2002 and its comments.

C. State Law

There is very little specific state embryo regulation and what does exist is inconsistent and frequently nebulous. Few states have attempted, or are attempting, to define the legal status of embryos.¹³⁹ That status is a particularly compelling issue on many levels but, for purposes of this article, one aspect is critical. If embryos are “people,” they cannot be bought or sold.¹⁴⁰ If they are “property,” disposition can be contracted like other goods.¹⁴¹ This distinction seems to warrant not just regulation, but a comprehensive and consistent body of rules. Unfortunately, developed regulation is sparse and, where it does exist, embryos may be people, property, or something in between.

Louisiana designates embryos as legal persons,¹⁴² while pending Georgia legislation declares that embryo life begins at the single-cell stage and that embryos have rights and responsibilities under state law.¹⁴³ New

<http://www.nccusl.org/LegislativeFactSheet.aspx?title=Parentage%20Act>. The first draft of a “Model Act” has also been published. Sara Cotton et al., *Model Assisted Reproductive Technology Act*, 9 J. GENDER, RACE & JUST. 55 (2005). To our knowledge it has not yet been reduced to final form or adopted by any state.

138. DEL. CODE ANN. tit. 13, §§ 801–819 (repealed 2004); WYO. STAT. ANN. § 14–2–401 to –907 (2009).

139. However 38 states have “fetal homicide” statutes; laws that punish people who kill a pregnant woman and cause the death of her fetus. See Fetal Homicide, NAT’L CONFERENCE OF STATE LEGISLATURES, available at <http://www.ncsl.org/programs/health/fethom.htm> (last visited Jan. 15, 2011). Of those, 21 apply to the earliest stages of pregnancy. *Id.* This indicates that, while such states have not statutorily recognized embryos as human beings, embryos are not always property. On a potentially related note, a New York appellate court recently ruled that a boy, in utero when his father was killed, had standing to bring a wrongful death action. On a potentially related note, a New York appellate court recently ruled that a boy, in utero when his father was killed, had standing to bring a wrongful death action. *Seaton v. County of Suffolk*, 912 N.Y.S.2d 289, 291 (2010). This case also indicates that the un-born have some legal rights.

140. See Paige C. Cunningham, *Embryo Adoption or Embryo Donation?: The Distinction and its Implications*, CENTER FOR BIOETHICS & HUMAN DIGNITY (Apr. 16, 2003), available at <http://cbhd.org/content/embryo-adoption-or-embryo-donation-distinction-and-its-implications>

141. *Id.*

142. See L.A. REV. STAT. ANN. § 9:123 (1986). Interestingly, in the same year that Louisiana enacted this law, the United States Supreme Court was clear that it had never implied that an embryo or fetus was a human being. See *Thornbury v. Am. Coll. of Obstetricians and Gynecologists*, 476 U.S. 747, 779 (1986) (“No Member of this Court has ever suggested that a fetus is a ‘person’ within the meaning of the Fourteenth Amendment.”) (Stevens, J., dissenting). The Court has not re-visited the issue in the quarter-century since.

143. See Daniel Becker, *Georgia Passes Nation’s First Embryo Adoption Law*, VOICE MAGAZINE, <http://www.thevoicemagazine.com/headline-news/headline-news/georgia-passes-nations-first-embryo-adoption-law.html> (last visited Mar. 24, 2011). The text of the law is

Mexico gives embryos the status of “fetus” by its broad statutory definition¹⁴⁴ and Missouri law is that “the life of each human being begins at conception.”¹⁴⁵ At the other end of the continuum Michigan recently passed a statute treating some embryos as property¹⁴⁶ and Florida law grants sperm and egg donors joint decision-making regarding embryo disposition.¹⁴⁷ At common law, Texas treats embryos as property by allowing contract law to determine disposition.¹⁴⁸ It appears that Maine, Massachusetts, North Dakota, and Pennsylvania statutorily recognize a special “interim” status making embryos more than property but less than human¹⁴⁹ and, while Tennessee has not codified such status, its Supreme Court held that “[Embryos 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.”¹⁵⁰ While there is little definitive status regulation, there is even less regarding the sale of human embryos. Louisiana¹⁵¹ and Florida¹⁵² statutorily prohibit such transactions,

available at http://www.legis.state.ga.us/legis/2009_10/fulltext/hb388.htm (last visited Mar. 24, 2011). The Governor had not signed the bill at the time this article was drafted.

144. See N.M. STAT. ANN. § 24–9A–1G (2007) (defining “fetus” as “the product of conception from the time of conception until the expulsion or extraction of the fetus or the opening of the uterine cavity.”).

145. MO. REV. STAT. § 1.205 (2010).

146. See Shari Roan, *Obama Victory Delights*, available at http://latimesblogs.latimes.com/booster_shots/2008/11/obama-victory-d.html (last visited Jan. 5, 2010).

147. See FLA. STAT. § 742.17(2) (2009).

148. See, e.g., *Roman v. Roman*, 193 S.W.3d 40, 49–50 (Tex. App. 2006) (holding that embryo agreements do not violate public policy because parties are allowed to come to a voluntary agreement); but see Jodi L. Bender, *Snowflakes in Texas? Enacting Legislation to Allow for Embryo Adoption*, 16 TEX. WESLEYAN L. REV. 413, 414 (2010) (“But, in recent years, the courts and legislature have gradually moved in the direction of giving embryos the legal status of a person.”). The author contends that Texas should adopt an “interim” status and “suggests that Texas should enact laws that will place a frozen embryo in a unique category not as a person, but as a special kind of property deserving of extraordinary respect.” *Id.* at 415.

In 2007 the Texas House of Representatives had the opportunity to address HB 1703. HOUSE COMM. ON STATE AFFAIRS, BILL ANALYSIS, Tex. H.B. 1703, 80th Leg. Reg. Sess. (2007), available at http://www.thbi.com/storage/pdf-files/end_of_session_report_80.pdf. That Act would have, in pertinent part, defined a human embryo as a “a genetically complete living organism of the species Homo [S]apien, from the single–cell zygote stage to eight weeks’ development.” Further, the bill would have defined “embryo trafficking” as “creating a human embryo using in vitro fertilization for the purpose of selling, buying, or transferring for valuable consideration the human embryo to a person who is not a genetic parent of the embryo or the spouse of the genetic parent.” *Id.* (explaining that the bill apparently expired during session).

149. See Baiman, *supra* note 121, at 145.

150. *Davis v. Davis*, 842 S.W.2d 588, 597 (Tenn. 1992).

151. LA. REV. STAT. ANN. § 9:122 (2006).

152. FLA. STAT. ANN. § 873.05 (West 2000 & Supp. 2011)

while Virginia exempts human ovum from its statutory restriction on the sale of human body parts.¹⁵³

It may appear fortunate that more states have surrogacy regulation, at least as compared to embryo regulation, but more is not better¹⁵⁴ when it lacks consistency. Current state regulation primarily addresses two frequently inter-related areas. The first is the enforceability of surrogacy agreements themselves. Some states prohibit certain surrogacy agreements completely,¹⁵⁵ some limit agreements,¹⁵⁶ while still others recognize the enforceability of surrogacy contracts.¹⁵⁷ The second area is surrogate compensation. The approach here, again, differs. Some states refuse to enforce surrogacy agreements if the surrogate receives compensation for her services¹⁵⁸ or make only altruistic surrogacy legal.¹⁵⁹ Other jurisdictions prohibit payment to intermediaries used to help provide surrogates,¹⁶⁰ thus likely decreasing the number of potential surrogates actually available.¹⁶¹ The end result is that, similar to state embryo regulation, state level surrogacy regulation varies greatly, in the oft chance it exists at all.¹⁶²

153. VA. CODE ANN. § 32.1–289.1 (2006), *repealed by* Acts 2007, c.92, cl.2 (2007).

154. As succinctly summarized by one author, “[t]he law of surrogate motherhood in the United States is in a state of flux and confusion.” Carla Spivack, *The Law of Surrogate Motherhood in the United States*, 58 AM. J. COMP. L. 97, 97 (2010).

155. *See State by State Surrogacy Laws*, RAINBOWLAW, <http://www.rainbowlaw.com/surrogacy-adoption-and-ivf/188-state-by-state-surrogacy-laws> (last visited Mar. 3, 2011). Examples include Delaware, Indiana, Louisiana, Michigan, New York, New Jersey, and the District of Columbia.

156. Examples include Nevada, New Hampshire, Tennessee, Texas, Utah, and Virginia. *Id.*

157. Examples include California, Connecticut, Florida, Illinois, Massachusetts, and Ohio. *Id.* For a related discussion see Radhika Rao, *Surrogacy Law in the United States: The Outcome of Ambivalence in SURROGATE MOTHERHOOD: INTERNATIONAL PERSPECTIVES* 23, 23 (Rachel Cook et al. eds., 2003).

158. *E.g.*, KY. REV. STAT. ANN. § 199.590(4) (West 2006) ; LA. REV. STAT. ANN. § 9:2713(A) (2005) ; NEB. REV. STAT. § 25–21,200 (2008) ; N.Y. DOM. REL. LAW § 123(1) (McKinney 2010) ; N.C. GEN. STAT. § 48–10–102(a) (2009) ; WASH. REV. CODE ANN. § 26.26.230 (West 2005).

159. *See, e.g.*, FLA. STAT. § 63.212(1)(h) (2005); NEV. REV. STAT. § 126.045 (2006); N.H. REV. STAT. ANN. § 168–B:16(IV) (2005); N.M. STAT. ANN. § 32A–5–34(B)(2); VA. CODE ANN. § 20–162(A) (2005).

160. *See, e.g.*, ARIZ. REV. STAT. § 25–218(A) (2006); D.C. CODE § 16–402(b) (2006); KY. REV. STAT. ANN. § 199.590(4) (2006); N.H. REV. STAT. ANN. § 168–B:16(IV) (2006); N.Y. DOM. REL. LAW § 123(2)(b) (McKinney 2006); VA. CODE ANN. § 20–165(A) (2006).

161. At least one state takes a slightly different approach and regulates issues such as parental status in surrogacy relationships. *See* 750 ILL. COMP. STAT. ANN. 47/1–75 (2009) (setting an intent standard as the determining factor of determining the legal mother of a child brought to term by a gestational surrogate).

162. For further discussion regarding the status of surrogacy laws by state *see* Spivack, *supra* note 154, at 101–2; *see also* *Surrogacy Laws by State*, ALL ABOUT SURROGACY, <http://www.allaboutsurgacy.com/surrogacylaws.htm> (last visited Mar. 22, 2010).

D. Voluntary Associations

Two entities promulgate aspects of voluntary embryo regulation, the American Bar Association (“ABA”) and a consortium featuring the American Society for Reproductive Medicine (“ASRM”). The ABA formally adopted its Model Act Governing Assisted Reproductive Technology (“Model Act”) in 2008. The Model Act defines an “embryo” as “a cell or group of cells containing a diploid complement of chromosomes or groups of such cells (not gamete or gametes) that has the potential to develop into a live-born human being if transferred into the body of a woman under conditions in which gestation may be reasonably expected to occur.”¹⁶³ This appears to fall into the “interim” classification previously discussed¹⁶⁴ as the embryo is not life, but has the potential to develop into human life. The Model Act also calls for donation regulation addressing such issues as relinquishment of future parental and inheritance rights¹⁶⁵ and donor screening prior to donation.¹⁶⁶ It is unclear if any person or entity adopted the Model Act.

The ASRM is “. . . a voluntary, non-profit organization devoted to advancing knowledge and expertise in reproductive medicine, including infertility, menopause, contraception, and sexuality.”¹⁶⁷ It is “. . . the leading market force in the field of reproductive medicine.”¹⁶⁸ The Society for Assisted Reproductive Technology (SART) is “. . . the primary organization of professionals dedicated to the practice of assisted reproductive technologies (ART) in the United States.”¹⁶⁹ “SART is also extensively involved in data collection, practice guidelines and standards, government interaction, quality assurance, and research.”¹⁷⁰ SART is also comprehensively involved with a wide variety of entities that have significant ART interests and concerns.¹⁷¹ ASRM and SART, along with

163. AM. BAR ASS'N, MODEL ACT GOVERNING ASSISTED REPROD. TECH. § 102(1) (2008), available at <http://www.abanet.org/family/committees/artmodelact.pdf>.

164. Bender, *supra* note 148, at 414–15.

165. AM. BAR ASS'N, MODEL ACT GOVERNING ASSISTED REPROD. TECH § 102(9).

166. Charles P. Kindregan, Jr. & Steven H. Snyder, *Clarifying the Law of ART: The New American Bar Association Model Act Governing Assisted Reproductive Technology*, 42 FAM. L.Q. 203, 214 (2008).

167. See *Membership Overview*, AMERICAN SOCIETY FOR REPRODUCTIVE MEDICINE (2011), <http://www.asrm.org/join>.

168. See Reddix–Smalls, *supra* note 128, at 673.

169. *What is SART?*, AMERICAN SOCIETY FOR REPRODUCTIVE MEDICINE (2011), <http://www.sart.org/detail.aspx?id=1864>.

170. Reddix–Smalls, *supra* note 128, at 675.

171. See David Adamson, *Regulation of Assisted Reproduction Technologies in the United States*, 39 FAM. L.Q. 727, 735 (2005) (“[B]oth SART and ASRM have continued to cooperate with and lead initiatives with other organizations and institutions that are stakeholders in ART. These include the CDC, FDA, NIH, FTC, and members of Congress as well as professional

the College of American Pathologists (“COP”) created the Reproductive Laboratory Accreditation Program (RLAP).¹⁷² That program proffers standards for reproductive laboratories and performs on-site accreditation every two years.¹⁷³ SART represents 85% of the clinics practicing ART in the United States¹⁷⁴ and as of 2005, two-thirds of SART programs were RLAP accredited.¹⁷⁵ ASRM appears to adopt an “interim” embryo status position, “while an embryo deserves greater respect than accorded other human tissue, since it has the potential to become a human person, it is not accorded the respect of an actual human being.”¹⁷⁶ This standing would seem to dictate heightened standards for embryo laboratories, but that is not the case. The RLAP directives do not discuss embryo donation or storage specifically and they leave particular procedures to the individual facilities.¹⁷⁷ This is problematic as fertility clinic’s voluntary procedures vary tremendously¹⁷⁸ and may not be followed at all.¹⁷⁹ While there is very little voluntary embryo regulation, there is no voluntary surrogate regulation, other than entity specific standards such as screening.¹⁸⁰

organizations such as the American Medical Association (AMA), American College of Obstetricians and Gynecologists (ACOG), the American Bar Association (ABA) and consumer organizations, RESOLVE, the National Fertility Organization, and the American Fertility Association (AFA.”). SART even conducts its compliance visits in conjunction with the FDA. See Reddix–Smalls, *supra* note 128, at 674.

172. Adamson, *supra* note 171, at 732–33.

173. *Id.* at 733.

174. See *supra* note 169.

175. Adamson, *supra* note 171, at 733.

176. Peter Malo, *Deciding Custody of Frozen Embryos: Many Eggs Are Frozen but Who Is Chosen?*, DEPAUL J. HEALTH CARE L. 307, 312 (2000) (citing ETHICS COMM. OF THE AM. FERTILITY SOC’Y, *Ethical Considerations of the New Reproductive Technologies*, 46 FERTILITY & STERILITY iii, 29S–30S, (1986)).

177. Instead of identifying particular processes or procedures, the Standards speak in general terms. COLLEGE OF AMERICAN PATHOLOGISTS, REPRODUCTIVE LABORATORY ACCREDITATION PROGRAM STANDARDS FOR ACCREDITATION 4 (2009), available at: http://www.cap.org/apps/docs/laboratory_accreditation/build/pdf/standards_repro.pdf (“There must be a manual(s) in the laboratory describing all procedures in sufficient detail to assure reproductibility and competence in the handling of gametes.”).

178. See Alvare, *supra* note 129, at 12–19 (describing a variety of procedures that fertility clinics engage egg donation and embryo donation).

179. See CTR. FOR GENETICS & SCI., RESPONSIBLE FEDERAL OVERSIGHT FOR THE NEW HUMAN BIOTECHNOLOGIES: OPPORTUNITIES FOR THE NEW ADMINISTRATION 4 (Jan. 2009), available at <http://www.geneticsandsociety.org/downloads/CGSOabama.pdf> (noting the routine flouting and inadequacy of federal regulatory oversight of assisted reproductive technologies in the United States).

180. See *infra* notes. 227–28.

V. BECOMING OR UTILIZING A "CYBER PARENT"¹⁸¹*A. Potential Parental Rights*

There are three common classifications of reproductive tissue donors, "known,"¹⁸² "unknown"¹⁸³ and "identified."¹⁸⁴ Most embryo donorship is unknown as the recipients never know the identity of the donor(s).¹⁸⁵ When donor identity is unknown the donor has no parental rights, so it is unlikely (although not impossible)¹⁸⁶ that an embryo donor would have parental rights. Surrogates may have a very different legal position.

Surrogacy can create very strong ties between the surrogate and the resulting child¹⁸⁷ and disputes can arise over custody. The fundamental question at issue is whether surrogates have parental rights over resulting children. The deceptively simple answer is, perhaps. Courts currently have very little precedent,¹⁸⁸ but a thread may be developing.

181. "A person who provides, online, human reproductive materials he or she biologically produced."

182. There is not yet any case law on point addressing embryo donorship so we borrow from the well-established case law regarding sperm donation. A "known" sperm donor's identity is known to the prospective mother. See Justyn Lezin, *Misconceptions: Unjust Limitations on Legally Unmarried Women's Access to Reproductive Technology and Their Use of Known Donors*, 14 HASTINGS WOMEN'S L.J. 185, 188 (2003) (noting "known donors" as an alternative to anonymous donors and identifying them as "men with whom they are not otherwise sexually or romantically intimate"). Courts tend to order child support more often from known donors, regardless of any intent of the adult parties. See, e.g., *Phillips v. Irons*, 2005 WL 4694579 at * 2 (Ill. App. Ct. 2005) (support ordered for child conceived after woman self-inseminated following oral sex); *S.F. v. State ex rel T.M.*, 695 So. 2d 1186, 1187 (Ala. Civ. App. 1996) (support ordered for child conceived when father was passed out drunk); *Faske v. Bonanno*, 357 N.W.2d 860, 861 (Mich. Ct. App. 1984) (disallowing misrepresentation of contraceptive protection as a defense).

183. An "unknown" or "anonymous" sperm donor is one whose identity or other personal contact information is undisclosed to either the prospective mother or the child.

184. An "identified" sperm donor donates understanding that any resulting child is given the donor's personal contact information and personal identification (name, address, city of birth, date of birth, etc) once the child reaches the age of 18.

185. See, e.g., N. Y. DEP'T OF HEALTH, *Becoming an Egg Donor*, <http://www.health.state.ny.us/publications/1127> (April 2009) (noting that most programs taking egg donations keep donors information confidential).

186. However it is possible, particularly in a designer embryo purchase, that the true parent(s) could be known as suppliers would likely want aspects of parentage known so as to increase value of the embryo. It is also probable that the parent(s) would be known in a donation that involves no embryo supplier, although, these are likely to be quite rare.

187. Sarah Terman, *Marketing Motherhood: Rights and Responsibilities of Egg Donors in Assisted Reproductive Technology Agreements*, 3 N.W. J. L. & SOC. POL'Y 167, 169 (2008).

188. See See Miriam Perez, *Surrogacy: The Next Frontier for Reproductive Justice*, RH REALITY CHECK (Feb. 23, 2010), <http://www.rhrealitycheck.org/blog/2010/02/23/surrogacy-next-frontier-reproductive-justice> ("The precedents set by the rare cases that do go to court make up the body of case law that affects the practice of surrogacy nationwide.").

The most famous surrogate custody case, and certainly the first to garner strong public attention, was *In the Matter of Baby M*.¹⁸⁹ *Baby M* was a traditional surrogacy case. Mary Beth Whitehead was artificially inseminated with William Stern's sperm and became the surrogate mother of the child.¹⁹⁰ Whitehead gave birth to a daughter.¹⁹¹ Within 24-hours of transferring custody to the Sterns, Whitehead asked for the baby back and threatened suicide.¹⁹² She then refused to return the baby to the Sterns and left New Jersey, taking the infant with her.¹⁹³ The New Jersey Superior Court awarded custody of Baby M to the Sterns.¹⁹⁴

On appeal the Supreme Court of New Jersey invalidated surrogacy contracts as against public policy,¹⁹⁵ remanding the case to family court.¹⁹⁶ That court awarded William Stern custody and Mary Beth Whitehead the parental right of visitation.¹⁹⁷ *Baby M* is the most famous¹⁹⁸ surrogacy/parental rights case, but it is not dispositive of those issues in all jurisdictions. In fact, if similar issues arose in another state the result might be quite different.¹⁹⁹ As examples, Ohio would not invalidate a surrogacy contract under the theory that such contracts per se violate public policy²⁰⁰ and Massachusetts has invalidated a surrogacy agreement on public policy grounds²⁰¹ but the articulated concerns were different from those in *Baby M*

189. 537 A.2d 1227 (N.J. 1988).

190. *Id.* at 1236.

191. *Id.*

192. *Id.* at 1236–1237.

193. *Id.* at 1237.

194. *Id.* at 1238.

195. *Id.* at 1240. Recently, New Jersey built upon *Baby M*'s holding in *A.G.R. v. D.R.H. & S.H.*, No. FD-09-001838-07 (2009) (invalidating a gestational surrogacy contract as it violated public policy).

196. *In re Baby M*, 537 A.2d at 1264.

197. *In re Baby M*, 542 A.2d 52, 53 (N.J. Super. Ct. Ch. Div. 1988).

198. While it is the most famous, it is not the most extreme in terms of result. In *Baby M* the surrogate was awarded the parental right of visitation, but there is one case where the surrogate was awarded primary custody. *See* 70 Pa. D. & C.4th 261, 308 (2005).

199. At least one author argues that surrogacy regulation should be decided exclusively at the state level. Dale Elizabeth Lawrence, *Surrogacy in California: Genetic and Gestational Rights*, 21 GOLDEN GATE U. L. REV. 525, 527 (1991) (arguing that surrogacy regulation should be decided exclusively at the state level).

200. *See, e.g., J.F. v. D.B.*, 879 N.E.2d 740, 741 (Ohio 2007) (“We conclude, therefore, that Ohio does not have an articulated public policy against gestational–surrogacy contracts. Consequently, no public policy is violated when a gestational–surrogacy contract is entered into.”). The court noted that a traditional surrogate might “have a different legal position.” *Id.* at 742.

201. *See R.R. v. M.H.*, 689 N.E.2d 790, 797 (Mass. 1998) (“We simply decline, on public policy grounds, to apply to a surrogacy agreement of the type involved here the general principle that an agreement between informed, mature adults should be enforced absent proof of duress, fraud, or undue influence.”).

and that court recognized that a valid surrogacy agreement could be created in Massachusetts.²⁰² While the above cases focused on public policy, there may be another way to assess the likelihood of surrogate parental rights; determine who “mom” really is.

*Johnson v. Calvert*²⁰³ arose out of a dispute regarding a surrogacy contract. Mr. Johnson’s sperm was mixed with Mrs. Johnson’s eggs and the fertilized eggs were implanted in the surrogate.²⁰⁴ Shortly before birth the surrogate threatened to keep the child unless she was paid monies she contended due under the agreement.²⁰⁵ Both sides sought judicial declaration as the lawful parent(s) of the unborn child.²⁰⁶ The court had to choose between the biological parents and the birth mother. It held that “. . . she who intended to procreate the child – this is, she who intended to bring about the birth of the child that she intended to raise as her own – is the natural mother.”²⁰⁷ The end result was that the biological mother got custody, not the surrogate. So, California law is clear about who the true mother is in a surrogacy arrangement. That should then allow us to conclude that a surrogate has no parental rights, at least in California, but that may not be true.

There is a potentially critical footnote in *Johnson*, it states “. . . in a true ‘egg donation’ situation, where a woman gestates and gives birth to a child formed from the egg of another woman with the intent to raise the child as her own, *the birth mother is the natural mother* under California law (emphasis added).”²⁰⁸ That means that where there is no biological link between the “intended” mother and the resulting child, the birth mother (the surrogate), is the mother. The surrogate would then have full parental rights. This footnote is significant because, while it was not mandatory authority, a New York appellate court cited *Johnson* in *McDonald v. McDonald*²⁰⁹ and held that the non-biological mother, in a true egg donation case, was the lawful mother.²¹⁰ Of course it is possible that the surrogate would not have parental rights if she contacted them away, but that assumes the applicable state recognizes the validity of surrogacy

202. *Id.* (“If no compensation is paid beyond pregnancy-related expenses and if the mother is not bound by her consent to the father’s custody of the child unless she consents after a suitable period has passed following the child’s birth, the objections we have identified in this opinion to the enforceability of a surrogate’s consent to custody would be overcome.”).

203. 851 P.2d 776, 778 (Cal. 1993).

204. *Id.*

205. *Id.*

206. *Id.*

207. *Id.* at 782.

208. *Id.* at 782 n.10.

209. 196 A.D.2d 7, 10 (N.Y. App. Div. 1994).

210. *Id.* at 12.

contracts. That assumption should not be made.²¹¹ So, does a surrogate have parental rights? Perhaps.

B. Potential Parental Responsibilities

Historically, biological parents had financial responsibilities for their children,²¹² but embryo donors would not want such obligations and likely would not have them under common or statutory law. As previously discussed, most embryo donation is anonymous because parties contract with fertility clinics to provide them with an embryo; they have no contact with the donor and do not know the donor's identity.²¹³ This makes them "unknown" donors. Common law is well settled that unknown tissue donors usually have no parental responsibilities, while known donors do.²¹⁴ Twelve states also statutorily address this issue.²¹⁵ The most common position is that a donor is not a parent of a child conceived by means of assisted reproduction.²¹⁶ Additionally, tissue donors may be able to contract away parental responsibilities, although this approach is far from well

211. See *supra* notes 147–150 and accompanying text. See also Vanessa S. Browne–Barbour, *Bartering for Babies: Are Preconception Agreements in the Best Interests of Children?*, 26 WHITTIER L. REV. 429, 445 (2004) (“A survey conducted in December 2000 revealed that approximately eleven states expressly permitted gestational agreements by statute or case law. Six states statutorily declared such agreements void. Approximately eight states enacted statutes to ban gestational agreements that pay compensation to the gestational woman The survey further revealed that courts in two states refuse to recognize gestational agreements.”). For further discussion and breakdown see GEORGIA STATE UNIVERSITY – COLLEGE OF LAW, *Primary Sources – Surrogacy Agreements*, <http://libguides.law.gsu.edu/content.php?pid=122829&sid=1055848> (last visited Mar. 21, 2011).

212. See *Child Support Laws State by State*, CHILD SUPPORT LAWS STATE BY STATE.COM, <http://www.child-support-laws-state-by-state.com/child-support.html> (last visited Jan. 16, 2010).

213. See *supra* note 185 and accompanying text (noting that recipients never learn donor's identity); but see *supra* note 177 (stating that the RLAP directives are general in nature).

214. See, e.g., *Ferguson v. McKiernan*, 60 Pa. D. & C. 4th 353, 364 (2002) (stating the general rule: “[w]e agree with the defendant that if the use of donors in artificial insemination proceedings is permitted in the Commonwealth of Pennsylvania, the donor should be protected from [parental] liability to the donee”).

215. DEL. CODE ANN. tit. 13, §§ 8–102, 8–702 to –703 (2009 & Supp. 2010); FLA. STAT. ANN. §§ 742.11, .13–.14, 17 (2010 & Supp. 2011); LA. REV. STAT. ANN. §§ 9:121–122, :124, :126–127, :129–130, :132 (2008 & Supp. 2011); N.H. REV. STAT. ANN. §§ 168–B:13, :15 (2010); N.D. CENT. CODE §§ 14–20–02, 14–20–60 to –61 (2009); OHIO REV. CODE ANN. § 3111.97 (2008); OKLA. STAT. ANN. tit. 10, § 556 (2009); TEX. FAM. CODE ANN. §§ 160.102, .702–.703, .7031 (2007 & Supp. 2010); UTAH CODE ANN. §§ 78B–15–102, –702–703 (2008); VA. CODE ANN. §§ 20–156, –158 (2008); WASH. REV. CODE ANN. §§ 26.26.011, .705, .710 (2005 & Supp. 2010); WYO. STAT. ANN. §§ 14–2–402, –902–903 (2009).

216. See, e.g., DEL. CODE ANN. tit. 13, §§ 8–102, 8–702 to –703 (2009 & Supp. 2010).

settled.²¹⁷ Currently embryo donors are not likely to have parental responsibilities; that may not be the case for surrogates.²¹⁸

As discussed earlier, a surrogate may have parental rights either due to a biological relationship to the resulting child or because the applicable jurisdiction holds that the birth mother is the legal mother.²¹⁹ If she can have parental rights, it is only logical that she would have parental responsibilities. It is possible that she might contract those away but, as previously discussed, surrogacy contracts are not enforceable in all jurisdictions.²²⁰

VI. POTENTIAL LIABILITY

A. The Embryo Business

1. Warranties

Article 2 of the Uniform Commercial Code (UCC) governs the sale of goods.²²¹ While there is a great deal of discussion of whether or not human reproductive materials *should be* goods,²²² we contend, for purposes of this

217. See, e.g., *Ferguson v. McKiernan*, 60 Pa. D. & C.4th 353, 364 (2002), *aff'd*, 855 A.2d 121 (Pa. 2004), *aff'd*, 868 A.2d 378 (Pa. Super. 2005) (“Nevertheless, this court cannot ignore and callously disregard the interests of the unheard-from third party, a party who without their privity to the contract renders it void. No other party, albeit a parent, can bargain away a child’s support rights.”).

218. The opposite may be true as well. If UPA 2002 was adopted, specifically Article 8, prospective parents who entered into non-validated surrogacy agreements, and later refused to “adopt” the resulting child, could be responsible for support of the child. See UNIF. PARENTAGE ACT art. 8 cmt.

219. See *supra* notes 181–211 and accompanying text.

220. See *supra* text accompanying notes 147–150.

221. U.C.C. § 2–102 (2010).

222. As we will discuss, human embryos are legally be bought and sold. However, the “properness” of such transaction is far from settled on an economic theory, ethical, or moral basis. See, e.g., Kenneth Baum, *Golden Eggs: Towards the Rational Regulation of Oocyte Donation*, 2001 BYU L. REV. 107, 162–63 (2001) (“The rationales for the prohibition of the commodification of organs are either internally irrational or are not applicable to oocyte donation due to its unique technical and social aspects. Additionally, oocyte-specific arguments misconstrue the potential applications of such technology and fail to conform with broader social treatments of noncoital reproduction and freedom to contract.”); Gregory Pence, *De-Regulating and De-Criminalizing Innovations in Human Reproduction*, 39 CUMB. L. REV. 1, 7 (2009) (“Public intellectuals ... claim that such innovation wrongly commodifies life. I believe that the opposite is true: money fueled stupendous breakthroughs in assisted reproduction and such market forces will continue to be good for babies and for the infertile couples who want them.”); Radhika Rao, *Coercion, Commercialization, and Commodification: The Ethics of Compensation for Egg Donors in Stem Cell Research*, 21 BERKELEY TECH. L.J. 1055, 1058 (2006) (“Allowing human eggs to be bought and sold ... treats the sacred components of human life as a form of property, engendering an attitude of disrespect for actual person.”); Camille S. Williams, *Women, Equality, and the Federal Marriage Amendment*, 20 BYU J. PUB. L. 487, 511 (2006) (“In a sense, these

article, that human embryos *are* goods. The UCC defines “good[s]” as “all things . . . which are movable at the time of identification to the contract for sale”²²³ Embryos are transported from place to place²²⁴ and embryos are sold.²²⁵ Embryos are goods and their sale can be governed by the UCC.

a. Express Warranties

Pursuant to UCC Article 2, any oral or written promise relating to the good at issue can create an express warranty.²²⁶ Accordingly, statements that an embryo donor was screened for, or is free from, certain diseases or medical conditions can constitute an express warranty. Embryo suppliers attempt to distinguish themselves by promoting such standards in their web advertising, thus creating express warranties.²²⁷

transactional procreative arrangements reduce the missing sex to the products of their reproductive abilities: sperm, ova, gestation, labor, and birth, and the ultimate product of the transaction, the child, to a commodity.”). See also Matthew H. Baughman, *In Search of Common Ground: One Pragmatist Perspective on the Debate Over Contract Surrogacy*, 10 COLUM. J. GENDER & L. 263, 279–80 (2001) (differentiating contracting to sell and purchase renewable reproductive services from the concept of selling and purchasing a child); Suriya E.P. Jayanti, *Guarantors of Our Genes: Are Egg Donors Liable for Latent Genetic Disease?*, 58 AM. U. L. REV. 405, 426 (2008) (exploring implications of viewing donor eggs as commodities on potential product liability tort actions).

Much of the discussion on this topic focuses on whether or not reproductive materials are, or should be, “property.” See, e.g., Julia D. Mahoney, *The Market for Human Tissue*, 86 VA. L. REV. 163, 181–82 (2000) (“Whoever has the power to donate (or refuse to donate) the organ can be said to possess a property right, albeit it of a limited kind.”); Rao, *supra*, at 1066 (“Constructing the body as a form of property . . . would imply not only freedom from physical invasion, but also freedom to instrumentalize the body by technologically manipulating it or otherwise putting it to productive use.”); Andrew Wancata, *No Value for a Pound of Flesh: Extending Market–Inalienability of the Human Body*, 18 J.L. & HEALTH 199, 223 (2004) (“Legal scholars and property theorists, as well as judges, have found it very difficult to speak of human body parts without resorting to masking them in property terminology.”); see generally Elizabeth E. Appel Blue, *Redefining Stewardship over Body Parts*, 21 J.L. & HEALTH 75, 85–95 (2008) (contrasting benefits and shortcomings of viewing body parts as property); R. Alta Charo, *Skin and Bones: Post–Mortem Markets in Human Tissue*, 26 NOVA L. REV. 421, 424–30 (2002) (examining historical treatments of the market value of corpses and human tissue).

223. UCC § 2–105 (2010).

224. “Movement” occurs when the embryo is implanted into the uterus.

225. See, e.g., *Pregnancy with Donated Embryos: Embryo Adoption*, CALIFORNIA CONCEPTIONS, http://www.californiaconceptions.com/index.php?option=com_content&view=article&id=47&Itemid=69 (last visited Mar. 21, 2011) (noting that the program has a lower cost than alternatives, indicating that a sale of embryos is involved).

226. U.C.C. § 2–313(1)(a) (“Any affirmation of fact or promise made by the seller to the buyer which relates to the goods and becomes part of the basis of the bargain creates an express warranty that the goods shall conform to the affirmation or promise.”).

227. See, e.g., *Pregnancy with Donated Embryos*, *supra* note 225 (“All donors who choose to anonymously donate through this program are thoroughly screened for infectious diseases and meet all state and federal regulation. Donors that provide embryos have also been screened for health risks including inherited disorders, mental illness, and other traits that would be undesirable

Some embryo suppliers also specifically warrant attributes or qualifications of donors through donor profiles,²²⁸ although they may actually warrant more than they expect. While suppliers may believe they only promise that a donor has certain characteristics, they may actually warrant characteristics of a resulting child. An oral or written promise creates an express warranty, but a sample or model also does so when it is “part of the basis of the bargain.”²²⁹ If a photograph or biography of a donor constitutes a model,²³⁰ the purchaser may expect the resulting child to have the model’s characteristics.²³¹ Most reasonable people recognize that a child’s characteristics may differ greatly from those of a genetic parent, but it is not well settled that reliance on an express warranty must be

to most parents.”); UCSF Medical Center, *Embryo Donor Program for Recipients*, http://coe.ucsf.edu/ivf/embryo_donation_program_for_recipient.html (last visited Jan. 11, 2011) (“Donors are carefully screened by our Embryo Donation Program team. In screening donors, we adhere to the guidelines from the American Society for Reproductive Medicine, the United States Food and Drug Administration, and to the university’s institutional ethics board.”).

Unfortunately, it may be that these promises are regularly broken. See Martin Curie-Cohen et al., *Current Practice of Artificial Insemination by Donor in the United States*, 300 NEW ENG. J. MED. 585, 586 (1979) (revealing that many physicians failed to adequately screen donors for diseases and many screenings were limited to merely questioning donors about common familial diseases); Kerry Cork, Comment, *Test-Tube Parents: Collaborative Reproduction in Minnesota*, 22 WM. MITCHELL L. REV. 1535, 1537 (1996) (noting that while it is possible that physicians have engaged in more rigorous screening in intervening years, there are few safeguards to actually ensure such practices).

228. Most profiles and databases are proprietary and cannot be accessed by the general public. See, e.g., MIRACLES WAITING.ORG, <http://miracleswaiting.org/membersonly3/modules/sections/> (last visited Jan. 11, 2011). We expect the embryo market to develop similarly to the human egg market. We provide the following egg examples to give context to what embryo donor advertising is likely to look like.

A link to a sample donor profile form is available at <http://www.elitefertility.com/egg-donor-profile-database.html> (last visited Jan. 16, 2011). For a sense of how many donors may be available see THE EGG DONOR CENTER, http://www.theeggdonor.com/egg_donors.php (last visited Jan. 16, 2011) (noting that the Egg Donor Center Database “has 6412 prescreened egg donors, 642 interviewed and approved egg donors, and 18 currently unavailable egg donors on file”). For a “menu board” of donor photos see EGG DONATIONS, INC., <http://www.eggdonor.com/?page=donordb> (last visited Jan. 16, 2011).

229. U.C.C. § 2-313(2)(a) (2010) (“Any affirmation of fact or promise made by the seller which relates to the goods and becomes part of the basis of the bargain creates an express warranty that the goods shall conform to the affirmation or promise.”).

230. To our knowledge, no court has decided this specific issue. It is impossible to accurately predict how a court would likely rule as the UCC provides no guidance for determining what constitutes a model.

231. See, e.g., *California Cryobank Introduces Celebrity Look-a-Likes™ for Sperm Donors*, CALIFORNIA CRYOBANK, <http://www.cryobank.com/About-us/Press-Releases/template.cfm?id=1396> (“The number one client question we get is ‘Who does this donor look like?’ says Scott Brown, Communications Manager for California Cryobank. ‘We decided this would be a great way to give thorough and consistent answers. Clients love it. Donor Look-a-Likes™ has only been available for a week and our website traffic is up 50%.’”). See also *E:60 Sperm U*, ESPN, <http://espn.go.com/video/clip?id=3554822&categoryid=null> (last visited Jan. 16, 2011)

reasonable.²³² Embryo suppliers that fail to meet promised standards of donor screening would certainly be liable for breaching expressed

232. See James J. White, *Freeing the Tortious Soul of Express Warranty Law*, 72 TUL. L. REV. 2089, 2100 n.31 (1998) (“In many states there are cases taking irreconcilable positions regarding whether reliance by the buyer is required for express warranty liability. While some cases from each of the following jurisdictions require reliance, there are others in most of these jurisdictions that grant recovery without explicitly mentioning reliance. See, for example, in Maryland: *Worm v. American Cyanamid Co.*, Civ. A. No. HAR 90–1424, 1992 WL 368062 at 5 (D. Md. Nov. 30, 1992) (“The court would have to find that such representations induced the Worms to purchase Scepter... Because the literature upon which the plaintiffs rely did not exist in 1987 and plaintiffs therefore could not have relied on it . . . it did not become part of the basis of the bargain.”); Illinois: *Stamm v. Wilder Travel Trailers*, 358 N.E.2d 382, 385 (Ill. App. Ct. 1976) (“Cases under the present day Commercial Code . . . require a reliance by the buyer upon the promise, affirmation or description.”); cf. *Adolphson v. Gardner–Denver Co.*, 553 N.E.2d 793, 798 (Ill. Ct. App. 1990) (“The trial court was not obligated to accept the plaintiff’s argument that the sales brochure created an express warranty . . . given the fact that Adolphson testified that he did not rely on the sales brochure. . . .”); but see *Weng v. Allison*, 678 N.E.2d 1254, 1256 (Ill. App. 1997) (citation omitted) (“The trial court’s ruling that the statements of the seller could not have been part of the basis of the bargain simply because no reasonable persons could have relied upon those statements was erroneous. The trial court misconstrued the role of reliance in determining whether an affirmation of fact or description is part of the basis of the bargain. Affirmations of fact made during the bargain are presumed to be part of the basis of the bargain unless clear, affirmative proof otherwise is shown It is not necessary, therefore, for the buyer to show reasonable reliance upon the seller’s affirmation. . . .”); New York: *Scaringe v. Holstein*, 477 N.Y.S.2d 903, 904 (N.Y. App. Div. 1984) (citation omitted) (“A necessary element in the creation of an express warranty is the buyer’s reliance upon the seller’s affirmations or promises.”); *Pilch, Inc. v. L & L Started Pullets, Inc.*, No. 84 Civ. 6513 (CSH), 1987 WL 9430, at 4 (S.D.N.Y. Apr. 9, 1987) (citation omitted) (“In order to succeed on an express warranty theory under [2–313], it is necessary for the purchaser to plead and prove that the written promotional literature in question was furnished to buyer prior to the purchase, and relied upon him [sic] in making the purchase.”); *Shapiro Budrow & Assocs., Inc. v. Microdata Corp.*, No. 84 Civ. 3589 (CBM), 1986 WL 2756, at *7 (S.D.N.Y. Feb. 24, 1986) (quoting *Eddington v. Dick*, 386 N.Y.S.2d 180, 181 (City Court, Geneva County, 1976)) (“In order to make out a cause of action for breach of express warranty, the buyer must demonstrate by a preponderance of the evidence, 1) an affirmation of fact or promise by the seller; 2) the natural tendency of the said affirmation or promise was to induce the buyer to purchase goods; 3) that the buyer purchased goods in reliance thereon...”); cf. *Tecnoclima, S.p.A. v. PJC Group of New York, Inc.*, No. 89 Civ. 4437 (CSH), 1993 WL 404109, at *7 (S.D.N.Y. Oct. 1, 1993) (“The finder of fact could determine that Circle relied on the specifications in assessing the marketability of the boiler/burner combination. Such a finding would support a claim for breach of express warranty.”); but see *CBS Inc. v. Ziff–Davis Publ’g Co.*, 553 N.E.2d 997, 1001 (N.Y. 1990) (citation omitted) (“This view of ‘reliance’ – i.e., as requiring no more than reliance on the express warranty as being a part of the bargain between the parties – reflects the prevailing perception of an action for breach of express warranty as one that is no longer grounded in tort, but essentially in contract. The express warranty is as much a part of the contract as any other term. Once the express warranty is shown to have been relied on as part of the contract, the right [to damages] for its breach does not depend on proof that the buyer thereafter believed that the assurances of fact made in the warranty would be fulfilled.”); *Rogath v. Siebenmann*, 129 F.3d 261, 264 (2d Cir. 1997) (quoting *Galli v. Metz*, 973 F.2d 145, 151 (2d Cir. 1992) (emphasis in original) (““Where a buyer closes on a contract in the full knowledge and acceptance of facts disclosed by the seller which would constitute a breach of warranty under the terms of the contract, the buyer should be foreclosed from later asserting the breach . . . unless the buyer expressly preserves his rights under the warranties On the other hand, if the seller is not the source of the buyer’s knowledge, e.g., if it is merely ‘common knowledge’ that the facts

warranties. Suppliers making a promise of resulting characteristics through a model, and failing to deliver those characteristics, may also be liable for such breach.

warranted are false . . . , the buyer may prevail in his claim for breach of warranty“); Massachusetts: *Sprague v. Upjohn Co.*, Civ. A. No. 91-40035-NMG, 1995 WL 376934, 3 (D. Mass. May 10, 1994) (citation omitted) (“In an express warranty claim, plaintiff must show reliance on such warranty.”); *Stuto v. Corning Glass Works*, Civ. A. No. 88-1150-WF, 1990 WL 105615, 5 (D. Mass. July 23, 1990) (“This court believes that some minimum of reliance is a required element of a breach of express warranty claim. . . .”); cf. *Roth v. Bay-Stel's Hair Stylists, Inc.*, 470 N.E.2d 137, 138 (Mass. App. 1984) (noting that “the hairdresser testified that he had read the information printed on the box, and, relying on it, he recommended its use to Judith Roth”); *Hannon v. Original Gunitite Aquatech Pools, Inc.*, 434 N.E.2d 611, 617 (Mass. 1982) (noting that “the trial judge found that Hannon relied on Aquatech's brochure”); *Jacquot v. Wm. Filene's Sons Co.*, 149 N.E.2d 635, 637 (Mass. 1958) (noting that “Mrs. Jacquot ... relied upon these express warranties”); *but see Wechsler v. Long Island Rehabilitation Ctr. of Nassau, Inc.*, No. Civ. A. 93-6946-13, 1996 WL 590679, at 22 (Mass. Super. Ct. Sept. 4, 1996) (“The trustee is not required to establish that in connection with a specific account receivable it purchased, Towers relied on the factual truth of each of the representations and warranties; what must be shown is that Towers relied on the fact of the warranties, that is, the promise itself that the representations and warranties were true. . . .”); Kentucky: *Overstreet v. Norden Lab., Inc.*, 669 F.2d 1286, 1291 (6th Cir. 1982) (citation omitted) (“A warranty is the basis of the bargain if it has been relied upon as one of the inducements for purchasing the product.”); Nebraska: *Vlasin v. Shuey*, No. A-91-324, 1993 WL 61875, 1 (Neb. Ct. App. Mar. 9, 1994) (“Nebraska case law has long held that the assertion of a fact or promise by a seller concerning goods, which is relied upon by the buyer and which tends to induce the buyer to purchase the goods, is an express warranty.”); *Hillcrest Country Club v. N.D. Judds Co.*, 461 N.W.2d 55, 61 (Neb. 1990) (citation omitted) (“This court has held that “since an express warranty must have been “made part of the basis of the bargain,” it is essential that the plaintiffs prove reliance upon the warranty.”); *Wendt v. Beardmore Suburban Chevrolet, Inc.*, 366 N.W.2d 424, 428 (Neb. 1985) (citation omitted) (“Since an express warranty must have been “made part of the basis of the bargain,’ it is essential that the plaintiffs prove reliance upon the warranty.”); Indiana: *Royal Bus. Machs., Inc. v. Lorraine Corp.*, 633 F.2d 34, 44 n.7 (7th Cir. 1980) (citation omitted) (“The requirement that a statement be part of the basis of the bargain in order to constitute an express warranty “is essentially a reliance requirement....”); Kansas: *Ray Martin Painting, Inc. v. Ameron, Inc.*, 638 F. Supp. 768, 772 (D. Kan. 1986) (citation omitted) (“Whether the statements about the coating ability of the Amerlock created an express warranty depends on whether they were “part of the basis of the bargain’ which, under Kansas law, requires some type of reliance on the part of the buyer.”); Mississippi: *Global Truck & Equip. Co., Inc. v. Palmer Mach. Works, Inc.*, 628 F. Supp. 641, 652 (N.D. Miss. 1986) (“Given the express language used in U.C.C. section 2-313 and the majority of the cases holding that the buyer must both be knowledgeable of and rely on the affirmation of fact before an express warranty is created, the court concludes that the plaintiff failed to prove by a preponderance of the evidence that the statements contained in the Palmer brochure were relied upon by Randall prior to or contemporaneously with the making of the contract between Global and Palmer. Therefore, recovery under the theory of breach of express warranty is also precluded.”); Washington: *Casper v. E.I. Du Pont de Nemours & Co.*, 806 F. Supp. 903, 909 (E.D. Wash. 1992) (citation omitted) (“If, in fact, Mr. Warr assured Brad Casper that Velpar could be applied safely during November or December of 1990, and Mr. Casper relied upon that affirmation of fact in deciding to have PureGro treat his fields, an express warranty was created.”).

b. Merchantability

“Unless excluded or modified, a warranty that the goods shall be merchantable is [automatically] implied in a contract for their sale if the seller is a merchant with respect to goods of that kind.”²³³ “Merchantable” means the goods “are fit for the ordinary purposes for which [they] are used.”²³⁴ The U.C.C. defines a merchant as:

A person who deals in goods of the kind or otherwise by his occupation holds himself out as having knowledge or skill peculiar to the practices or goods involved in the transaction or to whom such knowledge or skill may be attributed by his employment of an agent or broker or other intermediary who by his occupation holds himself out as having such knowledge or skill.²³⁵

Most embryo suppliers are merchants, for purposes of the U.C.C., pursuant to the “deals in” definition, and quite probably under “knowledge and skill” as well. Most embryo donors probably are not merchants under “knowledge and skill,”²³⁶ but might be under the “deals in” standard.²³⁷

Embryo donors and suppliers have little to fear when it comes to the issue of breach of warranty of merchantability because this warranty only requires that embryos be “reasonably fit” for their ordinary use (attempted conception). The warranty does not guarantee a resulting child, much less one with specific characteristics. Absent extreme circumstances²³⁸ it is unlikely that donors or suppliers would breach this warranty.²³⁹

233. U.C.C. § 2-104(1).

234. *Id.* at § 2-314(2)(c).

235. *Id.* at § 2-104(1).

236. For an analogy, see Jayanti *supra* note 222, at 433 (“[T]he egg [donor] is usually less knowledgeable than the ‘consumer,’ the recipient parents.”).

237. See Jayanti, *supra* note 222, at 432 (contending that human tissue donors are “...not often ‘engaged in the business’ of selling or otherwise distributing [tissue]” and cannot be merchants under the U.C.C.). See, e.g., *County of Milwaukee v. Northrop Data Systems, Inc.*, 602 F.2d 767, 771 (7th Cir.1979) (noting that the question of whether a party is a merchant for purposes of the U.C.C. is a question of law). As such determination must be made on a case by case basis, we cannot say that all embryo donors are merchants and subject to the U.C.C.. Certainly some may be and it is likely that most, if not all, egg suppliers are merchants for purposes of the U.C.C. as well.

238. Obvious examples are providing embryos damaged during collection, storage, or transportation such that they cannot be gestated.

239. While rare, embryo donors and suppliers are protected by statute in some jurisdictions from this cause of action and the one discussed next. As an example, South Carolina has a statute that states “The implied warranties of merchantability and fitness shall not be applicable to a contract for the sale, procurement, processing, distribution, or use of human tissues” S.C. Code Ann. § 44-43-10 (2002 & Supp. 2010). As previously discussed, the FDA classifies human embryos as reproductive tissue. See *supra* text accompanying note 123.

c. Fitness for a Particular Purpose

An implied warranty of fitness for a particular purpose exists “where the seller at the time of contracting has reason to know any particular purpose for which the goods are required and that the buyer is relying on the seller’s skill or judgment to select or furnish suitable goods.”²⁴⁰ Responsible embryo donors and suppliers presently have little to fear from this warranty because embryos satisfy only the general purpose of attempted procreation, not any promise of characteristics in a resulting child. ART has not yet advanced to the point where we can control specific aspects of reproduction.²⁴¹ However ART is evolving rapidly and, if the time comes when we can control those types of characteristics, then donors and suppliers must be aware that asking prospective recipients to designate a donor’s personal characteristics can create a warranty of fitness for a particular purpose. A prospective client could view such questions as a “checklist” for the desired characteristics of the resulting child. They could then view such items as akin to a menu and they would expect to get what they ordered. Human tissue suppliers currently ask recipients for certain designations but, for now, they remain attempts to discern preferences, not actionable promises.²⁴²

2. Strict Product Liability

The rationale for the tort of strict product liability is simple; products can cause harm or injury to users and manufacturers, sellers, and distributors should absorb the cost of these injuries rather than end-users.²⁴³ Strict product liability has specific elements that an injured party must

240. U.C.C. § 2-315.

241. As examples, it cannot yet control characteristics such as height, eye color, intelligence, or athleticism.

242. This is a different conclusion than reached under breach of express warranty because it is a different cause of action. The seller creates an express warranty, but a warranty of fitness for a particular purpose is actually created by the buyer, when he or she causes a seller to know that the buyer is relying on the seller’s expertise in making a purchase decision. *See supra* text accompanying note 231. Admittedly it is an assumption, but we assume that an embryo donor or supplier (seller) who is aware that a would-be donee (buyer) is relying on their expertise, would inform the would-be donee that there is no guarantee that a child will have the characteristics of the donor. We also understand that a donor or supplier may know of a donee’s particular purpose (donee said that she wants an embryo that used eggs from a 5’4”, 115 lb., brown-haired, blue-eyed world class cyclist because donee wants a child that will grow up to be a 5’4”, 115 lb., brown-haired, blue-eyed world class cyclist) but might not inform the donee that a child conceived using eggs from this donor may not have these characteristics. In that case there is a breach of warranty of fitness for a particular purpose.

243. *See* Seldon J. Childers, *Don’t Stop the Music: No Strict Products Liability for Embedded Software*, 19 U. FLA. J.L. & PUB. POL’Y 125, 134 (2008).

satisfy to recover. While these elements are addressed collectively and separately, all discussions encompass the following:

1. There must be a product²⁴⁴ that causes an injury. The product must be sold in the same condition, or substantially the same condition, as when reaching the consumer or user.²⁴⁵

2. The product must contain a defect and the defective condition must make the product “unreasonably dangerous.”²⁴⁶ “Unreasonably dangerous” is “. . . dangerous to an extent beyond that which would be contemplated by the ordinary consumer who purchases it, with the ordinary knowledge common to the community as to its characteristics.”²⁴⁷ There are three potential types of defects: manufacturing, design, and warning.²⁴⁸

3. Finally, the plaintiff must prove actual injury caused by the product. An injury is actual harm or loss to the party’s person, land, or chattel.²⁴⁹

There is no question that reproductive tissue can cause damage to a recipient, resulting fetus, or resulting child,²⁵⁰ but this does not automatically mean that strict product liability is a viable cause of action in such situations. In order to assess potential liability under this doctrine we must determine if the requisite elements can be satisfied. While no case has decided this issue, one can provide a partial template for analysis.

*American Economy Insurance v. Schoolcraft*²⁵¹ contained a variety of strict product liability derivative claims²⁵² In that case one of the plaintiffs was implanted with embryos that carried the cystic fibrosis gene. She gave birth to fraternal twins. The daughter was quickly diagnosed with the disease.²⁵³ *American Economy* did not address the merits of any of its strict product liability causes of action, so we begin by addressing a question it did not: are embryos “products?”

244. See MARSHALL S. SHAPO, *THE LAW OF PRODUCT LIABILITY* 7.031 (4th ed. 1990) (noting that the courts define “product” very broadly).

245. See RESTATEMENT (SECOND) OF TORTS § 402A (1965).

246. *Id.* at § 402A(1) (“One who sells any product in a defective condition unreasonably dangerous to the user or consumer or to his property is subject to liability for physical harm thereby caused to the ultimate user or consumer, or to his property”).

247. *Id.* at § 402(A), cmt. i.

248. See generally William Powers, Jr., *A Modest Proposal to Abandon Strict Products Liability*, 1991 U. ILL. L. REV. 639, at n. 50 (1991) (“[Other courts] use a different test depending on whether the case involves a manufacturing defect, a design defect, or a warning.”).

249. FRUMER AND FRIEDMAN, 1–8 PRODUCTS LIABILITY 8.01[4] (2004).

250. See, e.g., Laurence Mascola & Mary E. Guinan, *Screening to Reduce Transmission of Sexually Transmitted Diseases in Semen Used for Artificial Insemination*, 314 NEW ENG. J. MED. 1354, 1354 (1986) (“[S]exually transmitted organisms have been transmitted during artificial insemination by donor, and such transmission can cause . . . disease in the recipient woman and may harm the fetus or newborn.”).

251. 551 F.Supp. 2d 1235 (D. Colo. 2007).

252. *Id.* at 1237.

253. *Id.*

A product is defined as “something produced by human or mechanical effort or by a natural process.”²⁵⁴ It is also a “commodit[y] for sale.”²⁵⁵ Embryos are created by a natural process in the female body and can be sold to prospective parents. Embryos are products.

The second element is that the embryo had a defect that made it unreasonably dangerous. A product is defective when it is dangerous beyond the expectations of an ordinary user.²⁵⁶ If an ordinary user would not expect an embryo to carry a strong predisposition toward a specific disease, in this case cystic fibrosis, the embryo is defective.

Finally, there must be an actual injury or loss to person or property caused by the defective embryo. At a minimum, a child who is born with cystic fibrosis has experienced, and will experience, several legally recognized and compensable injuries: she has been damaged in her enjoyment of life, suffered and will suffer physical and mental pain, endured past medical expenses, and is very likely to incur future medical expenses.²⁵⁷ The end result of this analysis is that human embryos can be products that have defects resulting in injury and triggering strict product liability. Embryo donors and suppliers have significant reason to fear this cause of action.²⁵⁸

3. Negligence

Claimants have alleged negligence in holding facilities' methods, storage and dissemination of human reproductive materials. These suits involved two different contentions. In the first, the claimant wanted reproductive materials stored and distributed to a specified recipient, but the facility failed.²⁵⁹ For purposes of this article, we term these “lost embryo”

254. See RANDOM HOUSE, <http://dictionary.reference.com/browse/product> (last visited Jan. 16, 2011).

255. See *Wordnet Search*, PRINCETON UNIVERSITY, <http://wordnetweb.princeton.edu/perl/webwn> (last visited Jan. 30, 2011).

256. See *supra* notes 246–47 and accompanying text.

257. J. Brad Reich & Dawn R. Swink, *You Can't Put the Genie Back in the Bottle: Potential Rights and Obligations of Egg Donors in the Cyberprocreation Era*, 20 ALB. L.J. SCI. & TECH. 1, 52 (2010).

258. One author would likely disagree with this conclusion and presents a number of possible defenses. See Jayanti, *supra* note 222, at 432–35. She appears to be alone in this contention and, as previously discussed, we find her logic repeatedly flawed. See Reich & Swink, *supra* note 257, at 302–315.

259. See, e.g., *Stanton v. Univ. of Tex. Health Sci. Ctr.*, 997 S.W.2d 628, 628 (Tex. Ct. App. 1998) (stating that a lawsuit against the health center came after the claimant's sperm was disposed without notifying him); *Harnicher v. Univ. Utah Med. Ctr.*, 962 P.2d 67, 68 (Utah 1998) (stating that the plaintiffs brought suit after the center used a different donor's sperm for in vitro fertilization than the couple had selected); see also Dorinda Elliot & Friso Endt, *Twins – with Two Fathers: A Fertility Clinic's Startling Error*, NEWSWEEK, July 3, 1995, at 38 (reporting that one mother found that a technician reused a pipette that still contained sperm from a previous

cases because, even if the embryo was used for conception, it did not reach the intended recipient. In the second, a child was born with a birth defect attributable to an embryo that should have been removed through adequate screening or testing. We term these “defective embryo” cases.

a. Lost Materials and Wrongful Birth

There are a number of reported embryos cases.²⁶⁰ According to one source, such accidents are exceedingly rare,²⁶¹ but perhaps not as rare as he espouses. In fact, they might happen with disturbing regularity.²⁶² We contend that lost materials cases will become even more common as people increasingly utilize forms of ART, but are claimants likely to recover under a negligence theory? We must review the traditional elements of that cause

insemination so she was pregnant with another man’s baby); Michael Lasalandra, *Woman, Ex and Hospital Settle over Sperm Mixup*, BOSTON HERALD, Aug. 27, 1998, at 12 (reporting that a couple settled with a hospital after learning that the wrong sperm was used to impregnate her during an in-vitro fertilization).

260. See, e.g., *Jeter v. Mayo Clinic Ariz.*, 121 P.3d 1256, 1260 (Ariz. Ct. App. 2005) (the central claim of the case was negligent destruction or loss of pre-implantation embryos, the claimants were very concerned that the missing embryos may have been mistakenly implanted in another woman); *Robert B. & Denise B. v. Susan B.*, 135 Cal. Rptr. 2d 785 (2003) (involving a lawsuit against a woman who gave birth to a child as a result of the fertility clinic placing the wrong embryo in the woman’s uterus); *Creed v. United Hosp.*, 600 N.Y.S.2d 151, 152 (N.Y. App. Div. 1993) (involving an action for negligence against a company, hospital, and physician for implanting a wife’s fertilized ova in the wrong woman); *Perry-Rogers v. Obasaju*, 282 A.2d 231 (N.Y. App. Div. 2001) (involving a couple whose embryo was planted into another woman’s uterus); Stephanie Smith, *Fertility Clinic to Couple: You Got the Wrong Embryos*, CNN NEWS (Sept. 23, 2009), http://articles.cnn.com/2009-09-22/health/wrong.embryo.family_1_fertility-clinic-embryos-savages?_s=PM:HEALTH; *Quincy Couple Sue Boston Hospital Over Destroyed Embryos*, PATRIOT LEDGER (May 21, 2009), available at http://www.patriotledger.com/news/cops_and_courts/x1125039407/Quincy-couple-sue-Boston-hospital-over-destroyed-embryos.

261. See Smith, *supra* note 260 (“Cases like these, while tragic, are exceedingly rare, said Dr. David Adamson, a reproductive endocrinologist and past president of the American Society for Reproductive Medicine (ASRM).”). This article further states that “[t]here are well in excess of 100,000 embryo transfers every year in this country,” and “[t]he fact that this happens once in several hundred thousand embryo transfers means the majority of the time, systems do protect this from taking place.” *Id.* This is suspect because the “systems” the doctor appears to refer to are ASRM protocol recommendations such as labeling embryos with the patient’s name and/or social security number or otherwise specifically identifying ownership. *Id.* However, these are recommendations only and, as previously discussed, there is no mandated quality control. See *supra* notes 176–80 and accompanying text.

262. A representative of the United Kingdom IVF clinics estimates that one in one thousand IVF embryos are implanted into the wrong woman. Raizel Liebler, *Are You My Parent? Are You My Child? The Role of Genetics and Race in Defining Relationships after Reproductive Technological Mistakes*, 5 DEPAUL J. HEALTH CARE L. 15, 25 (2002). For a comprehensive history of ART “mix-up” cases and events, see Leslie Bender, “To Err is Human” ART Mix-ups: A Labor-Based, Relationship Proposal, 9 J. GENDER RACE & JUST. 443, 446–53 (2006).

of action: duty, breach, proximate causation, and harm²⁶³ to determine potential liability.

It is easy to envision victims in lost embryo situations suing both the medical professionals involved and the storage entity (such as a fertility clinic), however there is one initial, and critical, difference. While medical professionals' duties are well established,²⁶⁴ the legal duty of storage entities is not.²⁶⁵ This uncertainty is the direct result of a lack of laws governing the embryo industry. As previously discussed there is little federal regulation addressing embryo donor storage²⁶⁶ and we are not aware of any at the state level. Statutes can create legal duties, but statutory regulation is almost non-existent, so we cannot say there is any truly established duty. Without a clearly defined duty, it is very difficult to prove a resulting breach.²⁶⁷

Unlike duty and breach, proximate cause in lost embryo cases is easily established. When embryos did not reach the intended recipient, and additional materials are not available from that donor, the contention is that but for defendant's failure to provide the appropriate embryos to the appropriate recipient, conception from that particular donor would have been possible. In the case where embryos were provided to the wrong recipient, and conception resulted, the contention is that but for the defendant's failure to provide the embryos to the intended recipient, the resulting child would not exist.

Harm is highly problematic in lost embryo cases because a court must determine whether a) a party has suffered actual damage and, if so b) how to calculate such damage.²⁶⁸ As discussed under causation, lost embryo damages could arise in two different scenarios. The first is where the opportunity to procreate using a specific donor is simply gone because

263. See *Grubbs v. Barbourville Family Health Ctr.*, 120 S.W.3d 682, 696 (2003) (involving a case of negligence where the court went through each element and analyzed them).

264. For example, in New York, a physician has a duty to use reasonable care and exercise the degree of skill and knowledge that is ordinarily possessed by physicians in the community. See *Pepe v. United States*, 599 F. Supp. 798, 802 (E.D.N.Y. 1984) (stating that the standard of whether a doctor is liable for malpractice is if he fails to use his best judgment in applying his knowledge and skill); *Pike v. Honsinger*, 49 N.E. 760, 762 (N.Y. 1898) (stating that the doctor had a duty to use reasonable care and diligence in exercising his skill); and *Zellar v. Tompkins Cmty. Hosp.*, 508 N.Y.S.2d 84, 86 (N.Y. App. Div. 1986) (stating that a doctor must use his professional skill and judgment).

265. *But see* *Jaynti*, *supra* note 222, at 441 (arguing that a duty could be recognized under a "risk imports relation" theory). There are no cases of record finding such a duty.

266. See *supra* notes 121-29 and accompanying text.

267. See *Jaynti*, *supra* note 222, at 436 (stating that the egg donation child must prove the egg donor owed him or her a duty of care before proving that it was breached in order to have a negligence case).

268. See generally *Frisina v. Women & Infants Hosp.*, 2002 WL 1288784 at *1 (R.I. Super. 2002) (showing that the claim will generally be emotional distress).

embryos were lost and the donor cannot produce more. There are two cases on point here. In *Doe v. Irvine Scientific Sales Co.*²⁶⁹ stored embryos were contaminated and rendered unusable.²⁷⁰ In *Frisina v. Women and Infants Hosp. of R.I.*,²⁷¹ the hospital lost or destroyed stored embryos.²⁷² The court denied recovery in *Doe* because the donors could not establish the requisite physical injury,²⁷³ but the *Frisina* court allowed recovery based on emotional distress absent physical trauma.²⁷⁴ While this is, admittedly, a very small sample of cases, it appears that the majority of jurisdictions would follow the *Doe* rationale because most jurisdictions deny recovery absent physical injury.²⁷⁵ Assuming this is correct, it is unlikely that defendants will be found liable when stored embryos are lost.

In the second lost embryo scenario a recipient received, and utilized, materials from someone other than the anticipated donor, resulting in the birth of a healthy baby. At least one author has been highly critical of the basis for damages under such circumstances.²⁷⁶ And, while the suit did not assert a negligence cause of action, at least one court held that a couple whose healthy child was conceived using lost embryos was not entitled to recovery.²⁷⁷ This decision is not surprising when this lost embryo claim is juxtaposed with the “wrongful birth” cause of action.

269. 7 F. Supp. 2d 737 (E.D. Va. 1998).

270. *Id.* at 739.

271. 2002 WL 1288784 (R.I. Super. 2002).

272. *Id.* at *1–2.

273. *Doe*, 7 F. Supp. 2d at 741.

274. 2002 WL 1288784 at *9.

275. See generally Ingrid H. Heide, *Negligence in the Creation of Healthy Babies: Negligent Infliction of Emotional Distress in Cases of Alternative Reproductive Technology Malpractice without Physical Injury*, 9 J. MED. & L. 55, 57 (2005) (stating that the lack of a physical injury seems to leave the victims of fertility malpractice without a compensable injury). However, a claimant may recover for loss of property in such claims and physical injury would not be required. See *Jeter v. Mayo Clinic Ariz.*, 121 P.3d 1256, 1273 (Ariz. Ct. App. 2005) (“While a party cannot bring a claim for negligent infliction of emotional distress based merely on the negligent destruction of property, a party can recover damages for emotional distress arising from the tortious loss of property if the emotional distress is unrelated to the pecuniary loss.”); *Frisina*, 2002 WL 1288784 at *10 (“[T]he Court finds . . . that recovery for damages for emotional distress based on the ‘loss of irreplaceable property,’ the loss of their pre-embryos, is permissible”).

276. See Liebler, *supra* note 262, at 15.

277. See Chris Snow, Note, *Harnicher v. University of Utah Medical Center: Fertility Treatment and the Duty of Care*, 2 J.L. FAM. STUD. 63, 67–68 (2000) (addressing the tort of “negligent infliction of emotional harm” and denying recovery as plaintiffs could not prove the requisite element of resulting “bodily harm” as part of their injury and damage). *But see* *Chambliss v. Health Sci. Found.*, 626 S.E.2d 791, 794 (N.C. Ct. App. 2006) (awarding \$85,000 in compensatory damages and \$350,000 in punitive damages to a woman who was inseminated with lost materials, although the cause of action and the jury finding regarding bodily injury are unclear in the appellate opinion).

Wrongful birth actions are brought by the parents of an impaired child for the emotional and financial damages they suffer from the birth of that child.²⁷⁸ At least one author contends that wrongful birth cases have some judicial support and acceptance.²⁷⁹ If true, this could increase the likelihood that damages are awarded in lost embryo cases because, at base, both wrongful birth and lost materials actions seek damages for birth of a child. However there are two significant differences in the claims that make it unlikely that such damages would be awarded in lost embryo cases. First, in a wrongful birth claim the child is impaired,²⁸⁰ in a lost embryo case the child is not. Second, the assertion that wrongful birth is judicially acceptable is true, but far from universal.²⁸¹ There are few recorded wrongful birth decisions,²⁸² and none since the 1980s.²⁸³ Some state courts refuse to recognize wrongful birth causes of action absent statutory creation.²⁸⁴ Some state legislatures have passed laws refusing to recognize wrongful birth causes of action.²⁸⁵ Only one state, Maine, statutorily recognizes wrongful birth, and then only for a limited cause of action.²⁸⁶

278. Timothy J. Dawe, Note, *Wrongful Life: Time for a "Day in Court"*, 51 OHIO ST. L.J. 473, 476 (1990).

279. See Megan D. McIntyre, *The Potential for Products Liability Actions When Artificial Insemination by an Anonymous Donor Produces Children with Genetic Defects*, 98 DICK. L. REV. 519, 539-40 (1993).

280. Wrongful Birth damages are predicated on the existence of a congenital defect. See, e.g., *Hall v. Dartmouth Hitchcock Med. Ctr.*, 899 A.2d 240, 245, 249 (N.H. 2006).

281. See Wendy F. Hensel, *The Disabling Impact of Wrongful Birth and Wrongful Life Actions*, 40 HARV. C.R.-C.L. L. REV. 141, 160 (2005) (stating that as of 2005, more than half of all United States jurisdictions recognized wrongful birth).

282. See, e.g., *Moore v. Lucas*, 405 So.2d 1022, 1023 (Fla. Dist. Ct. App. 1981) (involving a lawsuit of negligence in that the parents were not warned of pregnancy risks which resulted in the birth of a deformed child); *Blake v. Cruz*, 698 P.2d 315, 317 (Ida. 1984) (involving a lawsuit against a physician for negligent failure to diagnose rubella); *Siemieniec v. Lutheran Gen. Hosp.*, 512 N.E.2d 691 (Ill. 1987) (involving a case of a child who was born with hemophilia); *Berman v. Allan*, 404 A.2d 8, 15 (Ill. 1979) (involving a lawsuit for wrongful birth when their child was born congenitally defective); *Becker v. Schwartz & Park v. Chessin*, 413 N.Y.S.2d 895, 895 (N.Y. App. Div. 1978) (involving a wrongful life lawsuit alleging the physician failed to inform the parents of the risks of the pregnancy); *Jacobs v. Theimer*, 519 S.W.2d 846 (Tex. 1975) (involving a case where a child was born physically impaired because his mother contracted rubella); *Dumer v. St. Michael's Hosp.*, 233 N.W.2d 372, 372 (Wis. 1975) (involving wrongful life caused by rubella).

283. The most recent decision we are aware of is *Gallagher v. Duke Univ.*, 852 F.2d 773 (4th Cir. 1988).

284. See, e.g., *Etkind v. Suarez*, 519 S.E.2d 210 (Ga. 1999) (holding that Georgia does not recognize wrongful birth claims); *Campbell v. United States*, 962 F.2d 1579 (11th Cir. 1992) (recognizing that Georgia does not recognize wrongful birth claims).

285. See, e.g., MINN. STAT. § 145.424(2) (2005) (stating that in Minnesota, "no person shall maintain a cause of action or receive an award on the claim that but for the negligent conduct of another, a child would have been aborted.").

286. See ME. REV. STATE ANN. tit. 24, § 2931 (West 1997) (stating that damages are limited in the birth of an unhealthy child).

Even where wrongful birth exists, a highly pragmatic consideration exists when it comes to assessing damage because “[j]uries would have an extremely difficult time trying to calculate how much the life of a disabled child is worth.”²⁸⁷

If it is difficult for a jury to calculate damages to parents based on birth of a disabled child, it is even more difficult to calculate damages to parents for the birth of a healthy child. Finally, this type of claim seeks damages for birth and subsequent child rearing expenses. Such damages are seldom awarded.²⁸⁸ Claimants likely cannot succeed in lost materials cases because, regardless of which scenario their claim falls under, they cannot satisfy the requisite elements.²⁸⁹

b. Defective Embryos and Wrongful Life

Defective reproductive materials can cause children born with defects.²⁹⁰ The questions addressed in this subsection are whether the parents, and/or the child, can recover damages for such an existence.

i. Traditional Negligence

The elements of duty and breach raise the same concerns previously discussed;²⁹¹ because specific legal duties are largely uncertain, resulting breach is difficult to prove.

287. See Monique Ann-Marie Croon, Note, *Taylor v. Kurapati: The Court of Appeals of Michigan's Decision of Refusing to Recognize the Tort of Wrongful Birth*, 5 DEPAUL J. HEALTH CARE L. 317, 339 (2002); but see *Grubbs v. Barbourville Family Health Ctr.* 120 S.W.3d 682, 689 (Ky. 2003) (“[S]uccessful plaintiffs in wrongful birth actions have received various types of damages ranging from the expenses resulting from the impairment but not the normal costs of raising the child, to the entire cost of raising the child with no reduction for the cost of raising a healthy child, to only the parents' own suffering and mental anguish resulting from the child's birth but not the expense of raising the child.”) That case did not cite other decisions in support of this contention. See *Jacobs v. Theimer*, 519 S.W.2d 846, 849 (Tx. 1975) (asserting that suits seeking recovery of damages due solely to the existence of life have not been met favorably by courts).

288. See, e.g., *Johnson v. Univ. Hosp.*, 540 N.E.2d 1370, 1376 (Ohio 1989) (“Another rationale is that the cost of child-rearing would be too speculative to measure with any certainty.”).

289. There is a third possible scenario under this subsection and it combines the two lost materials scenarios discussed. Material could be lost and delivered to an incorrect recipient, who then uses it to conceive a child who is impaired. We could not find any record of this occurring, and we have no sense of how common this scenario might be, but we have to assume it could happen. If it did occur, it would suffer the same fate as the other lost materials scenarios and for many of the same reason. First, any legal duty is uncertain. Second, that uncertainty makes proving breach difficult or impossible. Third, proximate causation may be extremely difficult to establish because birth defects may be caused by many sources. Finally, it is extremely difficult for juries to value the harm created by the birth of an impaired child.

290. McIntyre, *supra* note 279, at 521.

291. See Lars Noah, *Assisted Reproductive Technologies and the Pitfalls of Unregulated Biomedical Innovation*, 55 FLA. L. REV. 603, 638–39 (2003) (“[C]ourts may well conclude that

Perhaps more significantly, proximate causation is problematic. Pursuant to that element, a claimant must prove, by a preponderance of the evidence, there is a direct causal link between the materials provided and the resulting condition.²⁹² Such a tie is extremely difficult to establish because “the majority of genetic and nongenetic birth defects occur as the result of spontaneous mutations such that causation cannot be attributed to either biological parent.”²⁹³ If the claimant can establish causation, damages for harm should be much more readily available than in a lost materials case and should encompass “economic damages of raising [a] disabled child over and above the ordinary child-bearing expenses.”²⁹⁴ Additionally, depending on the conduct of the defendant, compensatory damages could provide the basis for punitive damages in defective materials cases.²⁹⁵ However, much like lost embryo cases, claimants asserting this cause of action are unlikely to succeed due to their inability to satisfy the elements. It does not appear that embryo donors or suppliers currently have much to fear from this claim.²⁹⁶

c. *Wrongful Life Claims*

Wrongful Life is a specific claim under the general umbrella of negligence. It is made by, or on behalf of, an impaired child asserting that the he or she would have been spared impaired existence, either through parental choice not to conceive or through an abortion, were it not for the negligence of a defendant.²⁹⁷

fertility doctors and clinics have a duty of care running to the class of intended offspring.”). This is a potentially significant development, and a discussion that could shape much regarding this cause of action, but the author does not propose what that duty is or should be and none of the cases the he cites in support of this contention involve lost materials. *Id.*

292. Reich & Swink, *supra* note 257, at 62.

293. McIntyre, *supra* note 279, at 537.

294. Schirmer v. Mt. Auburn Obstetrics & Gynecological Ass’n., 802 N.E.2d 723 (Ohio Ct. App. 2003).

295. See, e.g., Paretta v. Med. Offices for Human Reprod., 760 N.Y.S.2d 639 (N.Y. App. Div. 2003) (stating that punitive damages may be awarded). However, punitive damage recovery may not be possible in some jurisdictions, especially if embryo suppliers are treated as some sperm banks have been. See Kenneth Ofgang, *Sperm Bank Protected as “Health Care Provider,” Court Rules*, METROPOLITAN NEWS CO., Sept. 3, 2002, at 1 (“A sperm bank is a ‘health care provider,’ entitled to special statutory protection from punitive damage claims.”).

296. It is also possible that the holding facility could assert a “state of the art” defense, admitting it had a duty to act reasonably and did so, but alleging that medical technology existing at the time of the donation and transfer was not sufficient to reveal any pre-existing defect in the reproductive material. See McIntyre, *supra* note 279, at 544. (“The state-of-the-art defense is properly invoked only if there was no technologically feasible way of discovering the defect in the [material]. In these particular cases, the state-of-the-art defense acts as an absolute bar to negligence.”) The viability of this defense then depends on the type of defect and the technology available at the time of donation and transfer. *Id.*

297. Dawe, *supra* note 278, at 475.

Wrongful life has the same elements previously discussed under negligence; duty breach, proximate causation and harm. The first three elements continue to suffer the same deficiencies. The legal duties are uncertain,²⁹⁸ making breach difficult to prove,²⁹⁹ and proximate causation remains difficult to establish. Only three states currently recognize a cause of action for wrongful life³⁰⁰ and several refused to do so, either by statute³⁰¹ or common law.³⁰² This lack of acceptance is, at least partially, a product of the courts' inability to address the legal issue of harm, separate from a moral or societal issue:

In wrongful life claims...the child usually asserts as "general" damages the pain and suffering he will endure during his lifetime as a result of the defect, but presumably less the benefits he will derive from his existence, if any. This "net burden" is then measured not against the value of a "normal" life, but against the nullity of nonexistence.³⁰³

The response has been that:

Courts have consistently refused to recognize claims for wrongful life because of the deep-seated ethical dilemma

298. See *Huddleston v. Infertility Ctr. of Am., Inc.*, 700 A.2d 453, 460 (Pa. Super. Ct. 1997) (holding that a surrogacy business had a special relationship with the parties and, therefore, owed a duty to protect the resulting child from foreseeable risks).

299. *But see Dawes*, *supra* note 278, at 477 ("With few exceptions modern courts have had little trouble accepting the elements of duty and breach in wrongful life cases."). However, the author cites only one case in support of this contention. See *Albala v. City of New York*, 445 N.Y.S.2d 108 (1981) (holding that the action fails to lie in favor of the child for the injuries suffered as a result of the preconception tort committed against the mother).

See *Turpin v. Sortini*, 643 P.2d 954, 966 (Cal. 1982) (holding that while general damages cannot be recovered in wrongful life actions, damages for extraordinary expenses can); *Procanik ex rel. Procanik v. Cillo*, 478 A.2d 755, 765 (N.J. 1984) (holding that plaintiffs can recover medical expenses resulting from wrongful life actions, but not general damages); *Harbeson v. Parke-Davis, Inc.*, 656 P.2d 483, 497 (Wash. 1983) (en banc) (allowing for a wrongful life action).

301. See, e.g., IDAHO CODE ANN. § 5-334(1) (2010); IND. CODE ANN. § 34-12-1-1 (LexisNexis 2008); MICH. COMP. LAWS ANN. § 600.2971(2) (West 2010), *following* *Eisbrenner v. Stanley*, 308 N.W.2d 209, 211 (Mich. Ct. App. 1981), *abrogated by* *Taylor v. Kurapati*, 600 N.W.2d 670, 691 (Mich. 1999); MINN. STAT. ANN. § 145.424(1) (West 2005 & Supp. 2010); MO. ANN. STAT. § 188.130(1) (West 2004 & Supp. 2011); N.D. CENT. CODE § 32-03-43 (2010); 42 PA. CONS. STAT. ANN. § 8305(b) (West 2007 & Supp. 2010), *following* *Ellis v. Sherman*, 515 A.2d 1327, 1329-30 (Pa. 1986); S.D. CODIFIED LAWS § 21-55-1 (2004); UTAH CODE ANN. § 78B-3-109 (2008).

302. See *Ronen Perry, It's a Wonderful Life*, 93 CORNELL L. REV. 329, 336-37 (2008) (listing more than 20 states where courts rejected such claims). See also *Doolan v. IVF Am. (MA), Inc.*, 2000 Mass. Super. LEXIS 581, at *8-*12 (rejecting a tort claim brought on behalf of a child born with cystic fibrosis against a fertility clinic for negligence in genetic screening of IVF embryos before implantation because it amounted to a claim for Wrongful Life not recognized in Massachusetts).

303. *Dawe*, *supra* note 278, at 479-80.

involved.³⁰⁴ Few courts have been willing to say that children, no matter how severely impaired, would have better off had they never been born. “One of the most deeply held beliefs in our society is that life—whether experienced with or without major physical handicap—is more precious than non-life.”³⁰⁵

Courts have held “. . . that life itself cannot constitute injury.”³⁰⁶ As a result the harm element cannot be satisfied when there is a birth, even the birth of an impaired child. In the unlikely event that a wrongful life cause of action is recognized, a claimant will find it very difficult to establish any of the first three elements, and the fourth may be judicially impossible for the parent(s)³⁰⁷ or the child.³⁰⁸

4. Embryo Disposal – the Liability Mystery

We discussed specific causes of action that may make embryo donors or suppliers liable above, but we would be remiss if we did not also address potential liability for embryo storage facilities intentionally destroying embryos. The challenge is that we cannot identify one primary cause of action likely at issue because liability would depend on the legal status of embryos. What we do believe is that there are more than 500,000 embryos currently in cryopreservation.³⁰⁹ Those embryos belong³¹⁰ to the

304. See, e.g., *Becker v. Schwartz*, 386 N.E.2d 807, 812 (“[W]hether it is better never to have been born at all than to have been born with even gross deficiencies is a mystery more properly to be left to the philosophers and the theologians.”).

305. See McIntyre, *supra* note 279, at 539 (quoting *Berman v. Allan*, 404 A.2d 8, 12 (N.J. 1979)).

306. Deana A. Pollard, *Wrongful Analysis in Wrongful Life Jurisprudence*, 55 ALA. L. REV. 327, 328 (2004).

307. See, e.g., *Gleitman v. Cosgrove*, 227 A.2d 689, 693 (N.J. 1967) (“A considerable problem is raised by the claim of injury to the parents. In order to determine their compensatory damages a court would have to evaluate the denial to them of the intangible, unmeasurable, and complex human benefits of motherhood and fatherhood and weigh these against the alleged emotional and money injuries. Such a proposed weighing is similar to that which we have found impossible to perform for the infant plaintiff. When the parents say their child should not have been born, they make it impossible for a court to measure their damages in being the mother and father of a defective child. Though we sympathize with the unfortunate situation in which these parents find themselves, we firmly believe the right of their child to live is greater than and precludes their right not to endure emotional and financial injury.”).

308. *Id.* at 692 (“The infant would have us measure the difference between his life with defects against the utter void of nonexistence, but it is impossible to make such determination.”).

309. See Mundy, *supra* note 48 (estimating that there are approximately a half of a million embryos in storage).

310. See LA. REV. STAT. ANN. § 9:126 (West 2008) (describing that the fertilized ovum is not the property of the doctor who conducted the fertilization or the facility, but rather the property of the invitro fertilization patient or other guardian appointed if the invitro fertilization patient cannot be located).

prospective parents, at least until certain contractual events do or do not occur³¹¹ and many of those prospective parents eventually place the holding facility in a position where it has the legal right to dispose of the embryos.³¹² While many of these facilities would like to do so,³¹³ they are very afraid of litigation.³¹⁴ They might gain guidance from a very small pool of decisions holding that embryo disposition is usually dictated by contract.³¹⁵ However, not all courts hold such agreements enforceable and

311. See Fontini Antonia Skouvakis, Comment, *Defining the Undefined: Using a Best Interests Approach to Decide the Fate of Cryopreserved Preembryos in Pennsylvania*, 109 PENN. ST. L. REV. 885, 902 (2005) (stating that the author spoke to twenty infertility clinics posing as a potential customer with all of the clinics claiming they utilized “informed consent” forms identifying how pre-embryos would be disposed of). *But see* Mundy, *supra* note 48 (nothing that doctors, while commonly contractually empowered to dispose of embryos in events such as patient divorce, disappearance, or failure to make payment, do not dispose out of fear of unknown litigation).

Interestingly such agreements may restrict the recipient’s disposition options as well. *See id.* For an interesting hypothetical scenario, see Jonathan Penn, Note, *A Different Kind of Life Estate: The Laws, Rights, and Liabilities Associated with Donated Embryos*, 21 REGENT U.L. REV. 207, 208 (2008–2009) (stating that the scenario involves a contract specifying that “notwithstanding the foregoing, the Intended Parents...shall not donate, see, or otherwise transfer any donated ova, pre-embryos, or embryos that result from the Procedure to another person or couple (other than a gestational surrogate working with the Intended Parents) for the purpose of conception”).

312. *See* Mundy, *supra* note 48 (“The way this happens is: When patients agree to have embryos frozen, they sign forms stating what should be done with the embryos should the patients divorce, disappear, or stop paying storage fees. After treatment has concluded, many patients eventually do stop paying, disappear, move [and] leave no forwarding address.”). Many embryo owners cannot be located, period. *Id.*

313. *See id.* (“People do not want to inherit embryos.”). This article further states:

And the risk of holding them is considerable. “I have tons of embryos, and I can’t track down the owners,” said one Los Angeles doctor, Vicken Sahakian of the Pacific Fertility Center... “It’s one of the main problems I have. I have thousands of embryos from patients who have been through this program for, what, 10–, 12–plus years, changing addresses, and never called back, never paid storage fees—you can’t track them down... His “biggest nightmare,” he said, is that he will be unable to sell his practice when he is ready to retire, because no doctor will want to buy a practice that comes with a closetful of unclaimed embryos and the vague, terrible responsibility they entail. “The person buying it does not want to buy the embryos. That’s the rule,” he said. “People do not want to inherit embryos. So what do you do with them? I have embryos that have been here since 1992.”

Id.

314. *See id.* (“‘Nobody does it [destroys abandoned embryos],’ says Alan DeCherney, the editor of Fertility and Sterility and a reproductive endocrinologist who is now at the National Institute of Health. ‘It’s a hot topic. People think the risk of holding them is less than the risk of destroying them.’”).

315. *See, e.g.,* Kass v. Kass, 696 N.E.2d 174, 180 (New York 1984) (contract indicates the disposition of pre-zygote embryos); Litowitz v. Litowitz, 48 P.3d 261, 263–64 (Wash. 2002) (holding the contract signed between intended parents was intended to apply to both parents together and not intended separately and awarded embryos to parent not wishing to use them); York v. Jones, 717 F.Supp. 421, 424, 427 (E.D. Va. 1989) (describing the pre-zygote embryo contract provisions).

almost all of the existing cases arose out of disputes that addressed some aspect of potentially unwanted familial relationships.³¹⁶ Only one case is possibly on point in terms of the independent disposition by a holding facility with no inter-related “custody” issues, *New York-Del Zio v. Presbyterian Hospital*.³¹⁷

In *New York-Del Zio*, the Del Zios underwent in vitro fertilization using Mr. Del Zio’s sperm and Mrs. Del Zio’s egg.³¹⁸ The co-mingled materials were placed in an incubator.³¹⁹ A supervisor learned of the embryo, felt it was his ethical duty to destroy it, consulted hospital officials, and did destroy it.³²⁰ The Del Zios brought suit for intentional infliction of emotional distress and wrongful conversion.³²¹ The jury returned a verdict for the Del Zios on the intentional infliction claim, but for the hospital on the wrongful conversion cause of action.³²² We glean two things from *New York-Del Zio*. First, a holding facility disposing of an embryo, without contractual right, can be liable to the prospective parents in tort. Second, if the embryo is viewed as other than property, the facility is not liable under wrongful conversion, as conversion is predicated on wrongful possession of property.³²³ This is extremely interesting because, if embryos are not property, some disposal would open the door for wrongful death³²⁴ claims, but one court found that it unlikely a defendant could be held responsible

316. See, e.g., *In re Marriage of Witten*, 672 N.W.2d 768, 780–81 (Iowa 2003) (arguing that it is against public policy to enforce contracts regarding reproductive choice); *A.Z. v. B.Z.*, 725 N.E.2d 1051, 1058–59 (Mass. 2000) (declining to impose on parents whether or not to have a child); *J.B. v. M.B.*, 751 A.2d 613, 619–20 (N.J. Super. Ct. App. Div. 2000) (refusing to bind people to familial relationships).

317. 1978 U.S. Dist. LEXIS 14450, at *16 (noting that the jury could have found the defendant’s guilty under the conversion claim).

318. *Id.* at *2.

319. *Id.* at *2–*3.

320. *Id.* at *3.

321. *Id.* at *1.

322. *Id.* at *11.

323. See Penn, *supra* note 311, at 213 (Presumably, the jury in the Del Zio case found for the Del Zios on the emotional distress claim because they viewed the embryo as the only opportunity for the Del Zios to become pregnant and hopefully give birth to a child. Viewing the embryo as the potential for human life is also consistent with the jury’s finding for the defendants on the wrongful conversion claim, a claim where it must be proven that “one who, without authority, intentionally exercised control over the property of another and thereby interfered with the other’s right of possession” Presumably, the jury considered the embryo to be human life or the potential for human life, rather than property. Therefore, the jury denied the Del Zios’ property claim of wrongful conversion.”).

324. For purposes of this article “wrongful death” is defined as “[t]he taking of the life of an individual resulting from the willful or negligent act of another person or persons.” WEST’S ENCYCLOPEDIA OF AMERICAN LAW, available at <http://www.answers.com/topic/wrongful-death-claim> (last visited Mar. 11, 2011); See also BLACK’S LAW DICTIONARY 1752 (9th ed. 2009)(defining wrongful death action as “[a] lawsuit brought on behalf of a decedent’s survivors for their damages resulting from a tortious injury that caused the decedent’s death).

for the wrongful death of a human embryo because the claim would be too speculative,³²⁵ while another found that the state Wrongful Death Act was not applicable to situations where the embryo was destroyed pre-implantation.³²⁶ On the other hand, if embryos are property, it seems only logical that facilities disposing of them, in violation of an existing contract, could face liability from conversion³²⁷ claims, and possibly other causes of action such as trespass to chattels³²⁸.

B. The Surrogacy Trade³²⁹

*"In the absence of statutory law positively governing our decision,
we must innovate."*³³⁰

I. Negligence

The well-established elements of negligence are duty, breach, proximate causation, and damage or injury.³³¹ As we discuss next, in a surrogacy arrangement the surrogate providers, and the surrogate herself, may face negligence liability. The surrogate provider may be liable for

325. *Jeter v. Mayo Clinic Ariz.*, 121 P.3d 1256, 1270 (Ariz. Ct. App. 2005).

326. *See Miller v. American Infertility Group*, 897 N.E.2d 837, 844–45 (2008) (finding that the Wrongful Death Act had never been applied to *in vitro* fertilization situations or the cryopreservation of embryos and thus cannot be applied to situations resulting from the embryo destruction because of *in vitro* fertilization). The case, *in dicta*, left open the issue of applicability post-implantation. *Id.* at 846.

327. While the specific elements of torts vary by jurisdiction, a common definition of "conversion" is "[t]he unlawful turning or applying the personal goods of another to the use of the taker, or of some other person than the owner; or the unlawful destroying or altering their nature." *Legal Definition of Conversion*, THE ELECTRIC LAW LIBRARY, <http://www.lectlaw.com/def/c309.htm> (last visited Mar. 11, 2011); *See also* BLACK'S LAW DICTIONARY 381 (9th ed. 2009) (defining conversion as "[t]he act of changing from one form to another; the process of being exchanged).

328. *See* Luize E. Zubrow, *Rethinking Article 9 Remedies: Economic and Fiduciary Perspectives*, 42 UCLA L. REV. 445, 522–23 n. 307 (1994) ("The early common law distinguished between trespass to chattel, a lesser form of conversion involving negligent interference with the property of others, and conversion, an intentional exercise of dominion or control which seriously interferes with the right of another to control the property."). *See also* RESTATEMENT (SECOND) OF TORTS §§ 217 cmt. b, 222 cmt. a & 222(A) (1965).

329. While discussion of the employment relationship between surrogates and surrogate providers is beyond the scope of this article, we do note that potential provider liability for surrogate actions or inaction could differ depending on whether surrogates are employed as employees or independent contractors. *See, e.g.*, Barbara A. Noah, *The Managed Care Dilemma: Can Theories of Tort Liability Adapt to the Realities of Cost Containment?*, 48 MERCER L. REV. 1219, 1237 (1996–1997) (noting that the doctrine of respondeat superior depends on existence of employer–employee, or closely analogous, relationship and generally does not apply to acts of independent contractor).

330. *Stiver v. Parker*, 975 F.2d 261, 267 (6th Cir. 1992).

331. *Grubbs v. Barbourville Family Health Ctr.*, 120 S.W.3d 682, 687 (Ky. 2003).

failing to screen materials used or the prospective parties. The surrogate may be liable for care taken of the embryo while in her possession, as the relationship between her and the prospective parent(s) may be a bailment.

a. Screening

Tissues potentially involved in surrogacy include sperm, eggs, and embryos. While there are no cases on point regarding eggs and embryos, there is a sperm case that may provide insight regarding potential surrogate provider liability.³³² *Stiver v. Parker*³³³ addressed the situation where the surrogate (Stiver) was artificially inseminated with the untested sperm of the prospective father (Malahoff).³³⁴ The resulting child suffered from cytomegalic inclusion disease (“CID”), transmitted through his father’s sperm.³³⁵ The child’s CID symptoms included hearing loss, mental retardation, and severe neuro-muscular disorders.³³⁶ The surrogate, and her husband, brought suit under a negligence claim against the clinic.³³⁷ The trial court granted summary judgment, finding that the broker in a surrogacy arrangement had no legal duty.³³⁸ The court of appeals reversed³³⁹ holding:

We conclude that . . . the surrogacy business designer and broker and other defendant professionals who profited from the program, owed affirmative duties to the Stivers and to Malahoff, the surrogacy program beneficiaries. This duty, an affirmative duty of protection, marked by heightened diligence, arises out of a special relationship because the defendants engaged in the surrogacy business and expected to profit thereby.³⁴⁰ Our view is that surrogate arrangements for the transfer of babies present significant dangers for society and therefore require careful regulation and control through the development of the common law of

332. The analogy is appropriate as sperm and embryos are both reproductive tissues. *See supra* note 123 and accompanying text.

333. 975 F.2d 261 (6th Cir. 1993).

334. *Id.* at 263.

335. *Id.*

336. *Id.* Interestingly, it was later learned that the surrogate was already pregnant when inseminated. *Id.* The father of the resulting child was, in fact, the surrogate’s husband and not the clinic’s client. *Id.*

337. *Id.* at 264.

338. *Id.*

339. *See id.* (“We conclude under the Michigan law of negligence that the defendants owed an affirmative duty to act to protect the plaintiffs against harm, a duty that may have been breached.”).

340. *Id.* at 268.

negligence. . . [t]his strong state interest justifies regulation. . . in new areas of “baby transfer” made possible by technology.³⁴¹

While *Stiver* was not mandatory authority, a later case adopted its “special relationship” basis for establishing a legal duty in surrogacy arrangements. In *Huddleston v. Infertility Center of America*³⁴² the child of a traditional surrogate died after suffering serious abuse by his father.³⁴³ The surrogate (Huddleston) brought a variety of claims, including negligence, against the infertility clinic contracting her services.³⁴⁴ The court first distilled the issue; “Is there a duty owed by a surrogacy clinic to the participants of a program which is specifically designed to create a child outside the boundaries of the traditional nuclear family setting?”³⁴⁵ It then concluded, much like *Stiver*, that:

[A] business operating for the sole purpose of organizing and supervising the very delicate process of creating a child, which reaps handsome profits from such endeavor, must be held accountable for the foreseeable risks of the surrogacy undertaking because a “special relationship” exists between the surrogacy business, its client-participants, and, most especially, the child which the surrogacy undertaking creates. Such a special relationship existed between ICA, Appellant and Jonathan in this case and thus, ICA owed them an affirmative duty of protection.³⁴⁶

That “protection” meant that the surrogate provider had the duty to screen prospective parents. It is also clear from the court’s discussion that providers had the duty to screen prospective surrogates as well.³⁴⁷ The above cases identify duties that could be breached and provide facts that could allow proximate causation determination. However the damage element may again be difficult to meet in jurisdictions requiring physical injury.³⁴⁸ If embryos are “people”, there could be requisite physical

341. *Id.* at 269.

342. 700 A.2d 453 (Pa. Super. Ct. 1997).

343. *Id.* at 455–56.

344. *Id.* at 456.

345. *Id.* at 457.

346. *Id.* at 460.

347. *See id.* (failing to reach a conclusion on that issue but noting that other jurisdictions required parties to prospective surrogacy agreements to undergo psychological testing); Mercer, *supra* note 29, at 80 (“Since there may be potential liability to clinics and agencies involved with embryo transfer. . . it would be in the clinic or agency’s best interest to perform background checks on recipient couples in order to reduce potential liability.”).

348. *See supra* note 273 and accompanying text.

injury.³⁴⁹ If, on the other hand, embryos are property, liability assessment may be assessed under the traditional concept of “bailment.”

2. Bailment

A bailment is “[a] delivery of personal property by one person (the *bailor*) to another (the *bailee*) who holds the property for a certain purpose, . . . [usually] under an express or implied-in fact contract.”³⁵⁰ There are three types of bailments: (1) for mutual benefit to the bailor and bailee; (2) for the sole benefit of the bailor; and (3) for the sole benefit of the bailee.³⁵¹ When embryos are property, surrogacy is legally a mutual bailment. In a mutual bailment the bailee must take reasonable care of the bailed property.³⁵² A bailee who fails to do so may be held liable for any damages incurred from his or her negligence.³⁵³ While the contention that surrogacy is a bailment will be unconscionable to those against commodification of human reproductive tissue,³⁵⁴ at least one court has applied bailment law when deciding ownership rights of an embryo.³⁵⁵ That court was correct. Bailment provides the proper liability analysis where embryos do not have some sort of heightened legal status because, in those jurisdictions, embryos are property.

349. *See, e.g.*, *Smith v. Brennan*, 157 A.2d 497, 500, 503 (N.J. 1960) (noting that some jurisdictions also recognize prenatal torts without specifically finding that an unborn child is a “person in being”).

350. BLACK’S LAW DICTIONARY 163 (9th ed. 2009).

351. RICHARD A. LORD, A TREATISE ON THE LAW OF CONTRACTS, § 53:3 (4th ed. 2001).

352. *Id.* at § 53:5.

353. *Id.*

354. *See supra* note 222. One author believes this discussion is much less heated than in the past. *See* Elizabeth Scott, *Surrogacy and the Politics of Commodification*, 72 LAW & CONTEMP. PROBS. 109, 121 (2009) (“Today the issue is seldom framed as baby selling and exploitation; instead the discourse emphasizes the service provided by surrogates to couples who otherwise could not have genetically related children.”). However, it is difficult to imagine a dearth of heated opinions should a surrogate seek to exercise a “lien” over a resulting child in order to enforce payment and it appears some surrogacy agreements anticipate just such situation. *See* Indian Surrogacy Law Centre, *Surrogacy Agreement*, <http://indiansurrogacylaw.com/surrogacy-agreement.html> (last visited Mar. 16, 2011) (listing “[c]hild no lien for dispute over the compensation” under a “checklist for every surrogacy agreement”). While seeking to enforce such a lien would, undoubtedly, create an emotional fervor, the legal issue is clearly addressed under the 13th Amendment to the United States Constitution. *See* U.S. Const. amend. XIII, § 1 (“Neither slavery nor involuntary servitude . . . shall exist within the United States. . . .”). No such lien would be enforceable. *Id.*

355. *See* *York v. Jones*, 717 F. Supp. 421, 425 (E.D. Va. 1989) (explaining that a “Cryopreservation Agreement created a bailor–bailee relationship between the plaintiffs and defendants”).

3. *Breach of Contract*

This potential cause of action may correlate with aspects of negligence assessment. The first element of negligence is duty. The existence of that element is well established, but its definition is always subjective as it is predicated upon the “reasonable person” standard.³⁵⁶ Clarification of a surrogate’s duties may come from a surrogacy contract.³⁵⁷ Breach of any such duty would then not only satisfy the first two elements of negligence, but also trigger breach of contract. Surrogates should face liability when failing to do what that agreement requires,³⁵⁸ while surrogate providers should face liability when failing to meet contractual duties to surrogates or prospective parents.³⁵⁹ This cause of action is viable, but determination of controlling law may be difficult³⁶⁰ and breach of contract may be impossible in jurisdiction invalidating any form of surrogacy agreement.

VII. LOOKING AHEAD

The increasingly symbiotic relationship between ART and the Internet fundamentally changes how human procreation can be facilitated. Much is uncertain in the Cyberprocreation Era, but issues regarding embryo donation and/or surrogacy will be significant on many levels, and likely manifest quickly. Accordingly we offer the following predictions and recommendations:

1. Prediction – a group, or groups, will call for an absolute ban on embryo donation and/or commercial surrogacy worldwide.

356. See, e.g., Robert J. Rhee, *A Principled Solution for Negligent Infliction of Emotional Distress Claims*, 36 ARIZ. ST. L.J. 805, 810 (2004) (“Duty in negligence actions is substantially defined by foreseeability of risk as measured by the reasonably prudent person.”).

357. See *Stiver v. Parker*, 975 F.2d 261, 272 (6th Cir. 1992) (quoting *Clark v. Dalman*, 150 N.W.2d 755, 760 (1967)) (“Although affirmative duties in negligence law are imposed ‘by operation of law,’ a contract frequently operates in the background and the specific obligations ‘may and frequently do[] arise out of a contractual relationship.’”).

358. Agreements may require the to-be surrogate promise to refrain from activities such as smoking tobacco, drinking alcohol, or taking other drugs. Golnar Modjtahedi, *Nobody’s Child: Enforcing Surrogacy Contracts*, 20 WHITTIER L. REV. 243, 249 (1998); see also INFORMATION ON SURROGACY, *Common Sense Clauses for the Best Surrogacy*, <http://www.information-on-surrogacy.com/best-surrogacy.html> (last visited Mar. 16, 2011) (suggesting that drafters include anti-smoking and drinking clauses in surrogacy contracts).

359. See *supra* notes 222–42 and accompanying text (discussing contractual liability in surrogacy agreements under the UCC).

360. See Baiman, *supra* note 121, at 135 (“[I]s the applicable state law the law of the home state of the genetic parents, the law of the state in which the embryos were created, or the law of the state where the recipient party lives?”). One could go further and add the law of the state where the embryos are currently located and the law of the state where the contract was created to this list.

Recommendation – it is unlikely that such restriction would be adopted globally due to political volatility³⁶¹ and economic necessity.³⁶² Such a ban would really create fewer good and service providers, likely with even less regulation.³⁶³ We do not recommend this ban.

2. Prediction – there will be a call for the United States to ban embryo donation³⁶⁴ and/or commercial surrogacy.

Recommendation – we cannot endorse this proposal, as it would likely result in fewer providers with less regulation. We do recommend that Congress use its interstate commerce power to regulate collection, storage, and screening of human embryos.³⁶⁵ While some authors favor “double decker” ART regulation, meaning directives at both the federal and state levels,³⁶⁶ we recommend any other embryo, and all surrogacy regulation, only at the state level.³⁶⁷ We do so for two reasons. First, state courts decide family law issues.³⁶⁸ Second, as detailed in the case law³⁶⁹ and

361. See Morris, *supra* note 94, at 704–05 (discussing Italy’s extreme shift from one of the least ART regulated countries to one that now prohibits egg donorship for ART). The article also stated that “[t]his problem will only be inflamed as countries continue to change their laws, which are becoming increasingly divergent from one another.” *Id.* at 708.

362. Market demands may sway countries to defy international agreements in pursuit of RT dollars. See *Id.* at 707–08. Additionally, clinics are sourcing reproductive materials from poorer countries. See *Buying Babies, Bit By Bit; Assisted Conception*, THE ECONOMIST, Dec. 23, 2006 at 117–118.

363. See Cortez, *supra* note 81, at 104 (“As medical tourism becomes more lucrative, countries may compete by offering treatments that other countries do not offer. Poor countries may be tempted to offer treatments that are illegal or highly experimental elsewhere.”).

364. See, e.g., Ann Bindu Thomas, *Avoiding Embryos "R" Us: Toward A Regulated Fertility Industry*, 27 WASH. U. J.L. & POL'Y 247, 271 (2008) (advocating for three components of such regulation: “(1) embryos should not be bought or sold in a monetary exchange, (2) donors’ decisions should be fully informed and truly voluntary, and (3) embryo procurement organizations should be non-profit and conform to standards similar to [the National Organ Transplant Act]”).

365. *But see* Debra Spar, *Reproductive Tourism and the Regulatory Map*, 352 NEW ENG. J. MED. 531, 533 (2005) (“Americans, with their distrust of bureaucratic authority, would never condone the extension of federal power into the intimate affairs of reproduction.”); Alicia Ouellette et al., *Lessons From Across the Pond: Assisted Reproductive Technology in the United Kingdom and the United States*, 31 AM. J. L. & MED. 419, 433 (2005) (arguing that federal regulation of ART is problematic). These perspectives may or may not be prescient, but the sale of some body parts is already federally regulated. See 42 U.S.C. § 274e(a) (2006) (“It shall be unlawful for any person to knowingly acquire, receive, or otherwise transfer any human organ for valuable consideration for use in human transplantation if the transfer affects interstate commerce.”).

366. Jennifer L. Rosato, *The Children of ART (Assisted Reproductive Technology): Should the Law Protect them from Harm?*, 207 PLI/CRIM 325, 328 (2004); Wise, *supra* note 36, at 188–189.

367. This would also be in accord with the most current version of the UPA. See UNIF. PARENTAGE ACT, *supra* note 109, at § 802 cmt. (2002) (“[T]he core sections of this article provide for state involvement, through judicial oversight, of the gestational agreement before, during, and after the assisted reproductive processes.”).

368. See Helene S. Shapo, *Assisted Reproduction and the Law: Disharmony on a Divisive Social Issue*, 100 N.W. U. L. REV. 465, 466 (2006) (“[D]omestic relations law is generally reserved for the states.”). However, the author goes on to recognize, with regard to ART issues, “a

demonstrated statutorily,³⁷⁰ the states may have very different public policies regarding embryos and surrogacy.³⁷¹ We understand this recommendation will create a lack of uniformity,³⁷² and that some will attempt to exploit lax or nonexistent state laws,³⁷³ but it appropriately respects the divergent interests of the individual states.

3. Prediction – there will be an increasing market for designer embryos, likely a significant one, despite inevitable controversy. This market will be fueled by customers seeking a cheaper and more effective alternative to IVF and fed by suppliers providing embryos created outside the human body.³⁷⁴ Individual suppliers will attempt to stand out in that market by implying, but not outright promising, that resulting children will have, or not have, certain characteristics.

Recommendation – we cannot speak to the non-domestic markets as there is too much uncertain or unknown in terms of policy or priority, but United States embryo suppliers, supplying to American clients, should pay close attention to what has happened and what that portends for the future. The technological advances that may make market participation attractive will also present increasing liability under causes of action for strict product liability and breach of warranty of fitness for a particular purpose. While

fractured, state-by-state approach to the subject has arisen.” *Id.* Another author would likely contend those differences are acceptable, and the key is that parties considering surrogacy arrangements have clear statutory directive so that they can make informed decision. *See* Baiman, *supra* note 121, at 135 (“Without a clear statutory scope, parties and courts will remain in the dark as to which state law applies in a dispute.”).

369. *See supra* notes 189–211 and accompanying text.

370. *See supra* notes 130–62 and accompanying text.

371. It seems a safe assumption that this is one of the reasons so few states adopted UPA 2002 and none without changes. *See supra* notes 139–62 and accompanying text. There was another uniform law proposed as well. UNIF. STATUS OF CHILDREN OF ASSISTED CONCEPTION ACT (1988). <http://www.law.upenn.edu/bll/archives/ulc/fnact99/usca88.htm>. We find no record of any state adopting this Act.

372. *See* Hugh McLachlan and J. Kim Swales, *Commercial Surrogate Motherhood and the Alleged Commodification of Children: A Defense of Legally Enforceable Contracts*, 72 LAW & CONTEMP. PROBS. 91, 92 (2009) (“In federations like the United States or the European Union, the unevenness of legal restriction or regulation by individual states or countries compounds the problem.”); *but see* Buzzanca v. Buzzanca, 72 Cal. Rptr. 2d. 280, 293 (Ct. App. 1998) (“[E]ven though [that] might not be perfect on a case-by-case basis, [it] would bring some predictability to those who seek to make use of artificial reproductive techniques.”).

373. In fact, that is precisely what attorney Noel Keane did. Frustrated that his home state of Michigan treated compensation to surrogates as illegal, he sent couples to Kentucky where there was no such restriction. *See* Spivak, *supra* note 154, at 98. Keane would become known as the “father of surrogate motherhood.” *Id.*

374. It is unlikely that prospective parents will be able to find true embryo donors. At least one study demonstrates that parents of preserved embryos cannot make a donation or “disposition decision”. *See* Mundy, *supra* note 48, at 5. “The average embryo had been in storage for four years. Even after that much time had elapsed, 72 % had not decided what to do, and a number echoed the words of one patient: ‘We can’t talk about it.’” *Id.*

these are “unheard of” now, they likely will become quite strident in the not too distant future.

4. Prediction – states will struggle with the legal status of embryos and this will impact disposal of stored embryos and potential surrogate liability.

Recommendation – states not concluding that embryos have some “additional” rights, or otherwise regulating surrogacy arrangements, should apply bailment analysis as embryos are property. States statutorily defining embryos as “people” must address disposal and surrogate liability under wrongful death causes of action. States that have elevated embryo status, either at common law or by statute, should follow a case-by-case analysis similar to *Davis v. Davis*,³⁷⁵ with the understanding that a) *Davis* was decided on different grounds;³⁷⁶ b) at a point in time before dramatic ART use growth commenced;³⁷⁷ and c) these are potentially highly volatile issues.³⁷⁸ States that have fetal homicide statutes, or otherwise at least tacitly treat embryos as more than property, should adopt case-by-case analysis as well.

5. Prediction – prospective parties will continue to develop and rely on surrogacy contracts.

Recommendation – would-be parties must be aware of the laws and public policies of the jurisdictions that may interpret their agreements.³⁷⁹ If

375. 842 S.W.2d 588, 604 (Tenn. 1992).

376. *Id.* (“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 the use of the [embryos] in question.”).

377. So, potentially, there could be a lot of case-by-case analysis going forward. This may prove unwieldy to courts seeking efficiency and clear precedent.

378. See *supra* note 222. On a related note, these are exactly the types of legal issues, ones with potentially polarizing moral underpinnings, that could be potentially problematic for judges, particularly elected judges engaging in case-by-case analysis. For example, all three Iowa Supreme Court Justices failed to withstand retention vote after the Court unanimously upheld a pro-gay marriage ruling in the prior term. It was the first time any Justice had been removed since 1962. Adam Cohen, *Iowa Vote Shows the Injustice of Electing Judges*, TIME, Nov. 10, 2010, <http://www.time.com/time/nation/article/0,8599,2030526,00.html>. This type of movement may just be getting started and elected Judges may lose office due to “unpopular” decisions. See Michael J. Crumb & Nomaan Merchant, *Ouster of Iowa Judges May Inspire Activists Rights Groups, Legal Experts Fear Loss of Impartial, Free Judiciary*, HOUS. CHRON., Nov. 7, 2010, at A32 (discussing further potential activism in this area).

379. In one instance, a New York male contracted with a Minnesota female for surrogacy services. *P.G.M. v. J.M.A.*, 2007 Min. App. LEXIS 1189, *2 (Minn. Ct. App. 2007). The couple executed a written gestational surrogacy agreement “(GSA)” that specified the agreement was governed by Illinois law. *Id.* at *3. The IVF and implantation procedures took place at an Illinois clinic. *Id.* at *4–*5. The Minnesota court applied Illinois law. *Id.* at *6. While this holding is straight-forward, this case should not be read too broadly. The court reasoned that “Minnesota courts ‘traditionally enforce[] parties’ contractual law provisions.’” *Id.* at *7. However, the court also noted that “Minnesota courts will not enforce an otherwise validly executed contract that contravenes public policy. Contracts violate public policy when they injure some established societal interest.” *Id.* at *15 (citations omitted). The decision came down to the fact that there was

not, they may be unpleasantly surprised to learn that a) the contract is not enforceable; b) the surrogate may have parental rights; c) the surrogate may have parental responsibilities; and even d) parties may face criminal charges for pursuing services abroad that are illegal domestically.³⁸⁰ This multitude of uncertainties epitomizes the plight of embryo donors and suppliers, surrogates and surrogate providers, and prospective parents in the Cyberprocreation era. Ongoing discussion and analysis is vital because, in terms of human reproduction, the Internet generates more questions than answers.

no established public policy in Minnesota prohibiting GSAs or the enforcement of GSAs. *See id.* at *16. (“[T]here is no Minnesota statute or caselaw that prohibits GSAs.”). This holding can certainly be read to mean that the contract would not have been enforced, despite the selection of Illinois law, if the result would have violated Minnesota public policy. This is important to note as there are certainly states where a GSA would violate such policy. Similar uncertainty may even exist within a state. *Compare* *Hodas v. Morin*, 814 N.E.2d 320, 327 (Mass. 2004) (upholding a choice of law provision in a surrogacy agreement) *with* *R.R. v. M.H.*, 689 N.E.2d 790, 797 (Mass. 1998) (refusing to uphold a choice of law provision in a surrogacy agreement).

380. *See* Gilles Cuniberti, *Flying to California to Bypass the French Ban on Surrogacy* (Nov. 5, 2007), <http://conflictoflaws.net/2007/flying-to-california-to-bypass-the-french-ban-on-surrogacy/> (discussing a French couple who flew to California to use the services of an American commercial surrogate because such services are illegal in France but returned home – with twin girls – to find multiple criminal charges for their actions; the counts were dismissed, but only on pleading technicalities, and not for lack of merit).

