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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 wants his child as soon as possible,⁶ so he has the tissues shipped to

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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 (examples included: www.thrdonorsource.com, www.tinytreasuresagency.com, www.eggdonation.com, www.dreamdonation.com, and www.coriseggdonorservices.com).

³ A January 4, 2011, Google search using “sperm donor wanted” returned 127,101 hits in .18 seconds (examples included: www.privatesperm.com, www.sperm-donors-worldwide.com, and www.fairfaxcryobank.com, and www.Xytex.com).

⁴ Although Patrick is intrigued by entities offering “designer” embryos (*see infra* text acc. note 20) 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* Debra Saunders, *Embryos Made to Order*, SAN FRANCISCO CHRONICLE, Aug. 8, 2006, *available at* <http://www.sfgate.com/cgi-bin/article.cgi?file=/c/a/2006/08/08/EDGOBIQOG01.DTL>. It appears the founder has since closed this “bank” due to public pressure and commentary. *See, e.g., Designer Embryos?*, *available at* <http://moraltheology.blogspot.com/2006/08/designer-embryos.html> (last visited Jan. 9, 2011).

⁵ *See* <https://www.paypal.com/> (last visited Jan. 13, 2011).

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 (examples included: www.sperm1.com, www.spermbankcalifornia.com, and www.brusselsivf.be/embryo_bank). “Cryopreservation” means freezing the embryo for future use. *See*

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 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

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 (examples included www.fertilitycenter-uconn.org, www.americanfertility.com, and www.midlandfertility.com).

⁸ A January 2, 2011, Google search using “surrogacy services” generated 429,000 hits in .26 seconds (examples included www.surrogteparenting.com, www.fertlity-docs.com, and www.surrogacyabroad.com).

⁹ See <http://www.sightspeed.com/> (last visited Jan. 13, 2011).

¹⁰ See *What is a PDF File*, available at <http://www.kb.iu.edu/data/aftt.html> (last visited Jan. 13, 2011).

¹¹ See <http://www.skype.com/intl/en-us/features/allfeatures/video-call/> (last visited Jan. 13, 2011).

¹² See *infra* text accompanying note 21.

¹³ See *infra* text accompanying note 23.

¹⁴ See *infra* text accompanying note 24.

¹⁵ See *infra* section I. Necessary Caveat.

combination of need, technological advancement, cost and process effectiveness, and increasing social acceptance will fuel the future use of donor embryos and/or surrogates.

Part III discusses the Internet's impact on ART. Without question, the Internet increased the level of information available on virtually any subject.¹⁶ 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. Second, it fosters new approaches and developments. Third, it shapes where people pursue ART, a development known as "Reproductive Tourism."

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,¹⁷ these areas are the "wild west"¹⁸ 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 will see that there is no guarantee that such agreements will be legally enforceable.

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. We then assess potential surrogate and surrogate provider liability under negligence and breach of contract. The article

¹⁶ See, e.g., eHow, <http://www.ehow.com>, (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); see also HowStuffWorks, Inc., <http://www.HowStuffWorks.com> (providing access to bizarre facts and explanations of how things work).

¹⁷ See, e.g., Susan Donaldson James, *Bringing Out Baby: Who Pays for IVF?*, ABC NEWS, Apr. 8, 2008, available at <http://abcnews.go.com/Health/story?id=4607004&page=1> (last visited Jan. 14, 2011) (reporting that Fay Johnson paid for one IVF child by securing a second home mortgage and a second child using the couple's inheritance, and for two failed procedures).

¹⁸ 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> (last visited Jan. 13, 2011).

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.¹⁹
2. “Designer embryo” – an embryo created to attempt to include or exclude certain resulting characteristics.²⁰
3. “Embryo donor” – the person(s) who causes the embryo to exist.²¹
4. “Embryo donation” – providing an embryo in exchange for compensation.²²

¹⁹ This definition is appropriate for our discussion; however, the development during this time actually encompasses multiple steps with increasing cell division. Initially the sperm fertilizes one or more eggs, resulting in a zygote. The zygote develops in a blastocyst within a few days. The blastocyst becomes an embryo once it has developed cells to support both the fetus and the placenta. *See How Sex Works*, available at <http://health.howstuffworks.com/sexual-health/sexuality/human-reproduction10.htm> (last visited Dec. 30, 2010).

²⁰ *See, e.g., Couples Offered Designer Babies (PGD Embryo Screening)*, available at <http://www.freerepublic.com/focus/f-news/2166642/posts> (last visited Dec. 26, 2011).

²¹ 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.

²² 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”. As analogies to more established tissue markets, *see, e.g., The Egg Donor Program, Becoming an Egg Donor*, available at <http://www.eggdonation.com/becoming-an-egg-donor/BecominganEggDonor.php> (last visited Jan. 14, 2011) (promising to reward donors with gifts and the highest level of compensation); Sperm Donors Inc., available at <http://www.spermdonorsinc.com/Fees.html> (last visited Jan. 14, 2011) (identifying compensation to sperm donors as ranging from \$1,000-2,000 depending on qualifications).

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.”). *See also* Jaime E. Conde, *Embryo Donation: The Government Adopts a Cause*, 13 Wm. & Mary J. of Women & L. 273, 279-283 (2006). *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) (“The terms ‘embryo donation’ and ‘embryo adoption are synonymous....’”). This contention is frequently

5. “Embryo supplier” – the person or entity that provides an embryo to prospective parent(s), but has no biological connection to the embryo.²³
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.²⁴
7. “Surrogate provider” – an entity providing a surrogate to prospective parent(s).

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. There are a number of ART strategies.²⁵ The oldest and most common is Artificial Insemination (AI).²⁶ The next most common is In Vitro

well supported by entities that merge the concepts, likely causing confusion. *See, e.g.*, <http://www.embryoadoptiionn.com/> (last visited Jan. 5, 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.”).

²³ Common examples are fertility clinics offering embryo donation. *See, e.g.*, Conceptual Options, available at <http://www.conceptualoptionn.com> (last visited Jan. 14, 2011).

²⁴ There are two types of surrogates, “traditional” and “gestational”. In a traditional surrogacy the surrogate’s egg(s) are fertilized by donor semen using IVF and re-implanted in the surrogate’s body. In a traditional surrogacy the surrogate is both the biological mother (as the egg donor) and the birth mother. In a gestational surrogacy the surrogate carries an embryo using an egg donated by a third party. Here the surrogate is the birth mother, but not the biological mother as she is not the egg donor. The vast majority of current surrogacy relationships, perhaps as high as ninety-five percent, are gestational. *See* CAROL SANGER, DEVELOPING MARKETS IN BABY-MAKING: IN THE MATTER OF BABY M IN CONTRACT STORIES 127, n. 118 (2007). 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, 1918-1919 (2009).

Surrogacy may also be “commercial” or “altruistic”. A commercial surrogate is compensated, an altruistic surrogate is not. *See* Amy M. Larkey, *Redefining Motherhood: Determining Legal Maternity in Gestational Surrogacy Arrangements*, 51 *DRAKE L. REV.* 605, 608 (2003).

²⁵ 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).

²⁶ AI is the least intrusive ART procedure. AI takes previously ejaculated sperm and implants it into a woman’s cervix or uterine lining. There are several forms of insemination process such as standard vaginal (*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))

Fertilization (IVF).²⁷ 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 surrogates²⁸ and, going forward, these two trends will be increasingly prominent for, at least, four reasons.

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

and intrauterine (see 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. In Artificial Insemination by Husband, the husband is the donor. In Artificial Insemination by Donor, the donor is someone other than the recipient-mother's husband.

²⁷ 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. 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).

²⁸ 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. See Jeffery T. Wise, *Embryo Banking as a Novel Options for the Infertile? Law Policy, and a Proposed Model Act*, 8 *Hous. J. Health L. & Pol'y* 163, n. 82 (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> (last visited Jan. 14, 2011). We can now obtain embryos from diverse entities including Conceptual Oasis (see <http://www.conceptualoptionn.com/embryo-donation> last visited Jan. 11, 2011), Dream a Baby (see <http://www.dreamababy.com/embryo-donation.htm> last visited Jan. 11, 2011) and Bethany Christian Services (see <http://www.bethany.org/a55798/bethanywww.nsf/0/12a23f0bc63400a085257289006eb5d6> (last visited Jan. 11, 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)), but this fails to recognize the pronounced increase recently. See Ronni Berke, *Single Men Turning to Surrogates*, *CNN*, Dec. 23, 2008, available at www.cnn.com/2008/HEALTH/12/23/single.men.parenting/?iref=mpstoryview (last visited Jan. 30, 2011) ("[T]he 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." *Id.*). 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, available at <http://www.ihr.com/infertility/provider/donoregg.html> (last visited Jan. 30, 2011). Additionally domestic physicians are increasingly using foreign surrogates. See *infra* text accompanying notes 91-98.

the fact is that many people have difficulty conceiving,²⁹ and that problem is getting worse.³⁰ For some reproduction is biologically impossible, even though there are no infertility issues.³¹ 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.³² Need is frequently financial. Those unable or unwilling³³ to carry an embryo to term can hire a surrogate. There are many women, both in the United States³⁴ and abroad³⁵, who need the income surrogacy can provide.³⁶

²⁹ An estimated 15% of American women and 10-15% of American men are infertile. *See Spar & Harrington, supra* note 28, at 44.

³⁰ *See* U.S. HEALTH AND HUMAN SERVICES, CENTERS FOR DISEASE CONTROL AND PREVENTION, *Population Fact Sheet*, available at www.cdc.gov (last visited Jan. 15, 2011) (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).

³¹ A significant percentage of those using surrogates are gay men or couples or single, straight men. *See Berke, supra* note 28 (this article discusses two agencies that have each experienced a fifty percent increase in the number of single men using surrogacy services).

³² *See infra* text accompanying notes 82-84.

³³ *See* Ruby L. Lee, *New Trends in Global Outsourcing of Commercial Surrogacy: A Call for Regulation*, 20 *Hastings Women's L.J.* 275, 282 (2009) (discussing "...the trend of fertile, married, career women opting out of bearing their own children in favor of convenience.") ("An IVF consultant and endoscopist, Dr. Sunita Tandulwadkar confirmed that an increasing interest in using surrogates has come from career women who do not want to take a break from their careers." *Id.*).

³⁴ *See* 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> (last visited Jan. 3, 2011) (discussing the trend by U.S. military wives to serve as surrogates at least in part to supplement family income). Surrogacy contracts in the United States appear to range between \$40,000 and \$100,000. *See* Nick Williams, *India Adopts Surrogate Mother Hotspot*, *VIDETTE REP.*, Nov. 11, 2006, 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, (last visited Jan. 5, 2011). 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." *Id.*). *See also* the Open Arms Egg Donation and Surrogacy Agency, available at <http://www.openarmsconsultants.com/index.php?action=sg> (last visited Jan. 11, 2011) (this service pays surrogates a minimum fee of \$18,000).

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. & Another*, 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.").

³⁵ *See* Lee, *supra* note 33, at 278 ("The average Indian surrogate receives between \$2,800 and \$5,600 for

There are many people who 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.³⁷ Although there is no published data, anecdotally it appears that the use of surrogates has grown exponentially over just the past few years.³⁸

her services. That is roughly equal to ten years salary for rural Indian women.” *Id.*) See also Kritivas Mukherjee, *Rent-a-Womb in India Fuels Debate*, EZILON INFOBASE, Dec. 10, 2010, available at http://www.ezilon.com/information/article_17613.shtml (last visited Jan. 5, 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.”)

³⁶ See, e.g., Margot Cohen, *A Search for a Surrogate Leads to India*, WALL ST. J., Oct. 9, 2009, at W8, available at <http://online.wsj.com/article/SB10001424052748704252004574459003279407832.html?KEYWORDS=Margot+Cohen> (last visited Oct. 10, 2010) (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.” *Id.*)

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. Fertility clinics report a dramatic increase in the number of egg donations and procedures performed each year. This is particularly true during the recent economic times. Fertility clinics nationwide report a significant increase in the number of donors coming forward. See, e.g., Stephanie Smith, *Dim Economy Drives Women to Donate Eggs for Profit*, CNN NEWS, Aug. 8, 2008, available at <http://cnn.com/2008/HEALTH/08/05/selling.eggs/index.html> (last visited Jan. 17, 2011) (reporting Chicago clinics fielding 30 to 50 inquiries a day from potential donors 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); see Juju Chang and Kiran Khalid, *Less Money Means More Egg Donors*, ABC NEWS, Oct. 27, 2008, available at <http://abcnews.go.com/GMA/OnCall/story?id=6119578&page=1> (last visited Jan. 17, 2011) (stating fertility experts throughout the country reported a 30% to 40% increase in applicants); see also 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). As of 2008 more than 100,000 young women sold or donated eggs to approximately 470 IVF clinics in the United States. See W. Kramer, et al., *U.S. Oocyte Donors: A Retrospective Study of Medical and Psychosocial Issues*, OXFORD J. OF HUM. REPROD., vol 24, No. 12, at 3144, available at <http://humrep.oxfordjournals.org/content/24/12/3144.full> (last visited Jan. 17, 2011).

³⁷ As an example, in Japan infertility carries serious social stigma, adoption is frowned upon, and clinics cannot provide surrogates. 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. See 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, (last visited Dec. 30, 2010). Japanese customers use Indian surrogates a well. See, e.g., *Japanese Girl Born to Indian Surrogate Arrives Home*, CNN WORLD NEWS, Nov. 2, 2008, available at http://articles.cnn.com/2008-11-02/world/india.baby_1_indian-law-japanese-girl-jaipur?_s=PM:WORLD (last visited Dec. 30, 2010).

³⁸ See Cohen, *supra* note 36 (“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.”) See also *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> (last visited Jan. 2, 2010); Lorraine Ali, *The Curious Lives of Surrogates*, NEWSWEEK, Mar. 29, 2008, available

Second, reproductive technology advances at a truly astounding rate.³⁹

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;⁴⁰ just twenty-five years later at least 54,656 babies were born in the United States using IVF and IVF-related procedures.⁴¹ We have only been able to store human eggs since 2004.⁴² In 2007, the world's first in vitro maturation babies were born.⁴³ We may have even gotten to the point where women do not need men to create babies.⁴⁴ There is

at <http://www.newsweek.com/2008/03/29/the-curious-lives-of-surrogates.html> (last visited Jan. 2, 2011); and *Foreign Couples Turn to India for Surrogate Mothers*, N.Y. TIMES, Mar. 4, 2008, available at <http://www.nytimes.com/2008/03/04/world/asia/04iht-mother.1.10690283.html> (last visited Jan. 2, 2010).

³⁹ This may be particularly true of medical technology regarding embryos. See generally Liza Mundy, *Souls on Ice: America's Embryo Glut and the Wasted Promise of Stem Cell Research*, MOTHER JONES, July/August 2006, available at <http://motherjones.com/politics/2006/07/souls-ice-americas-embryo-glut-and-wasted-promise-stem-cell-research> (last visited Jan. 14, 2011) (This article discusses 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. The last occurrence 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.) See also *Conceived Together, Born 11 Years Apart: Deep-frozen Third Sister Arrives After Record Gap*, available at <http://www.dailymail.co.uk/health/article-1341766/Conceived-born-11-years-apart-Deep-frozen-sister-arrives-record-gap.html> (last visited Jan. 3, 2010).

⁴⁰ 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).

⁴¹ See CENTERS FOR DISEASE CONTROL & PREVENTION, 2006 ASSISTED REPRODUCTIVE TECHNOLOGY (ART) REPORT: SECTION 5 – ART TRENDS, 1996-2006 (hereinafter "2006 ART Trends"), available at <http://www.cdc.gov/ART/ART2006/section5.htm> (last visited Jan. 15, 2011).

⁴² See Aina Hunter, *Why Worry? Put Your Eggs on Ice!* ABC NEWS, April 9, 2008, available at <http://abcnews.go.com/Health/story?id=4591877&page=1> (last visited Jan. 14, 2011). 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. See also Cherie Black, *Seattle Women Now Have Option to Freeze Eggs*, available at www.seattlepi.com/printer2/index.asp?ploc=t&refer=http://www.seattlepi.com/local/350763_eggfreezing11.html (last visited Jan. 14, 2011).

⁴³ In vitro maturation ("IVM") is similar to IVF. 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. In IVM no hormones are used and the eggs are removed before maturation. See Tracy Connor, *Have a Baby at New Low, Low Price, Says Fertility Doctor Joel Batzofin*, available at http://www.nydailynews.com/news/2009/04/13/2009-04-13_have_a_baby_at_new_low_low_price.html (last visited Dec. 30, 2010).

⁴⁴ In 2009 British researchers announced that they had taken stem cells from an embryo and used them to create human sperm. See *Sperm from Stem Cells*, CBS NEWS, July 9, 2009, available at <http://www.cbsnews.com/stories/2009/07/09/uttm/main5148372.shtml> (last visited Jan. 9, 2011) ("Sperm

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”⁴⁵ 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.⁴⁶ And, while the rate of success has grown considerably, most women need more than one cycle to accomplish pregnancy.⁴⁷ It is not uncommon for a person or couple to spend \$100,000 just attempting to conceive using traditional IVF based procedures.⁴⁸ 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.⁴⁹ Using

could be produced from female stem cells. That would mean women would no longer need men to create babies.”)

⁴⁵ “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.” See CENTERS FOR DISEASE CONTROL & PREVENTION, 2006 ASSISTED REPRODUCTIVE TECHNOLOGY SUCCESS RATES NATIONAL SUMMARY AND FERTILITY CLINIC REPORTS (2008) (hereinafter CDC SUCCESS RATES), at 4, available at <http://www.cdc.gov/ART/ART2006/508PDF/2006ART.pdf>, (last visited Jan. 14, 2011).

⁴⁶ See Marcia C. Inhorn & Michael Hassan Fakh, *Arab Americans, African Americans, and Infertility: Barriers to Reproduction and Medical Care*, 85 *Fertility & Sterility* 844 (2006) (estimating the mean cost of IVF in the United States in 2002 at \$9,547). Cost varies by region and clinic. *Id.*

⁴⁷ See CENTERS FOR DISEASE CONTROL & PREVENTION, 2005 ASSISTED REPRODUCTIVE TECHNOLOGY SUCCESS RATES NATIONAL SUMMARY AND FERTILITY CLINIC REPORTS (hereinafter 2005 ART Report), 6, available at <http://www.cdc.gov/art/ART2005/508PDF/2005ART508.pdf> (last visited Aug. 19, 2009). Ironically success rates actually decrease with each additional cycle. *Id.* at 17.

⁴⁸ See Spar, *supra* note 18, at 46. 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). 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).

⁴⁹ See 50 State Summary of State Laws Related to Insurance Coverage for Infertility Therapy, Nat'l. Conference of State Legislatures, available at <http://www.ncsl.org/programs/health/50infert.htm> (last visited Feb. 1, 2011).

embryos and/or surrogates may decrease total costs, perhaps by 50% or more,⁵⁰ while also increasing the likelihood of success.⁵¹

Finally, ART use is increasingly common and possibly more socially acceptable.⁵² In 1996, there were 64,681 ART cycles performed in the United States,⁵³ 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.⁵⁴ Although ART use is still relatively rare, it has doubled over the past decade.⁵⁵

It is also, arguably, acceptable not only to use ART to try to create life, but to attempt to create life through designer embryos.⁵⁶ While some contend there is no need for such

⁵⁰ The Abraham Center (*see* Stein, *supra* note 28) charged \$2,500 per embryo and estimated total costs for a pregnancy at \$10,000. *See also* Wise *supra* notes 28, 37.

⁵¹ *See* <http://www.embryooptionn.com/> (last visited Jan. 5, 2011). (“A recent study in the medical journal Fertility and Sterility shows an average 35% pregnancy success rate using frozen embryos vs. an average 32% for fresh [IVF] cycles.”) We were unable to locate the study referenced. Further, 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 28, at 21 (“[T]hey can increase the chance of a successful pregnancy from approximately thirty percent to an impressive seventy percent.” *Id.*)

⁵² Examples of celebrities who publicly acknowledge using IVF to conceive include David and Courtney Cox, Marcia Cross, Penn Jillette, while Angela Bassett, Robert DeNiro, Peri Gilpin, Kelsey Grammar, and Deidre Hall used surrogates. *See* No Baby on Board, *available at* www.nobabyonboard.com/moviestv.html (last visited Jan. 14, 2011). It may even be the case that ART discussions have become social events. *See* Non-profit Organization Holds Egg Donor/Surrogacy Event in Popular Beverly Hills Nail Salon: Need an egg donor? How about a surrogate? Know someone who does? Yes? Then this event is for you (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.”) *available at* <http://www.gaynewswire.com/nonprofit-organization-holds-egg-donorsurrogacy-event-popular-beverly-hills-nail-salon/6192> (last visited Dec. 29, 2010).

⁵³ *See supra* note 41.

⁵⁴ *See* <http://www.cdc.gov/art/> (last visited Jan. 5, 2010).

⁵⁵ *Id.*

⁵⁶ 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* (discussing a California fertility clinic’s decision to withdraw its screening plan due to “...apparent negative social impacts.”) and Daniel Martin, *Couple Pay 9,000 to Have First British Web Baby*, *available at* <http://www.dailymail.co.uk/health/article-429393/Couple-pay-9-000-British-web-baby.html> (last visited Jan. 14, 2011) (“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.””).

embryos⁵⁷ the reality is that there will be demand for three reasons. First, while there are embryos in storage,⁵⁸ the vast majority is unavailable to prospective parent(s).⁵⁹ Second, even if those embryos were readily available, there are questions about potential viability.⁶⁰ Third, it is simply ridiculous to discount the reality that would-be parents hope to “produce” a child with certain characteristics or abilities.⁶¹

III. SYMBIOSIS

The embryo market is, at least domestically, a very recent development⁶² and surrogate use increased dramatically over the past few years.⁶³ The logical explanation for these developments is the Internet. As recently as 1999 people advertised in

⁵⁷ See, e.g., *The Slope is Really Slippery*, CHRISTIANITY TODAY, Mar. 24, 2007, available at <http://www.christianitytoday.com/ct/2007/march/24.29.html> (last visited Jan. 14, 2011).

⁵⁸ *Id.* (alleging that there are some 500,000 embryos in cryopreservation in the United States).

⁵⁹ See Susan Crockin, *How do you “Adopt” a Frozen Egg?* available at http://www.boston.com/news/globe/editorial_opinion/oped/articles/2005/12/04/how_do_you_adopt_a_frozen_egg/ (last visited Jan. 14, 2011):

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.

⁶⁰ See Jennalee Ryan, *The World's First Embryo Bank*, FREE REPUBLIC, June 25, 2006, available at <http://www.freerepublic.com/focus/f-news/1676440/posts> (last visited Jan. 29, 2011)

⁶¹ See, e.g., Joan O’C.Hamilton, *What are the Costs?*, STANFORD MAGAZINE, Nov/Dec 2000, available at <http://www.stanfordalumni.org/news/magazine/2000/novdec/articles/eggdonor.html> (last visited Jan. 14, 2011):

[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*, available at <http://www.timesonline.co.uk/tol/news/uk/health/article3087367.ece> (last visited Dec. 30, 2010).

⁶² See *supra* note 38.

⁶³ *Id.*

newspapers for human tissue donors⁶⁴ and only 40% of the American population aged 16-years and older accessed the Internet.⁶⁵ Ten-years later, 74% did⁶⁶ and the United States currently has more than 266,224,500 Internet users.⁶⁷ Global Internet use increased 444.8% from 2000 to 2010.⁶⁸ As of June 2010, there were approximately 1,966,514,816 Internet users worldwide.⁶⁹ In 1993 the United States ART industry was estimated at \$164 million per year.⁷⁰ By 2010, that figure grew to at least \$1.7 billion.⁷¹ Eighty percent of adult Internet users seek health information online⁷² and reproductive health questions are one of the most common areas of interest.⁷³ 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

⁶⁴ 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. See Barbara Katz Rothman, *The Potential Cost of the Best Genes Money Can Buy*, CHRONICLE OF HIGHER EDUC., June 11, 1999, at A52.

⁶⁵ See *Internet Use (U.S.)*, INTELLIQUEST, May 23, 1999, available at http://www.media-awareness.ca/english/resources/research_documents/statistics/internet/internet_use.cfm (last visited Jan. 14, 2011).

⁶⁶ See Sydney Jones, PEW INTERNET & AMERICAN LIFE PROJECT, Jan. 29, 2009, available at <http://pewresearch.org/pubs/1093/generations-online> (last visited Jan. 14, 2011).

⁶⁷ See <http://www.internetworldstats.com/stats.htm> (last visited Jan. 13, 2011).

⁶⁸ *Id.*

⁶⁹ *Id.*

⁷⁰ See Judith Gaines, *A Scandal of Artificial Insemination*, N.Y. TIMES MAGAZINE, Oct. 7, 1990, § 6, at 23.

⁷¹ See Spar & Harrington, *supra* note 28, at 47.

⁷² See 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) (citing Harris Interactive, Number of “Cyberchondriacs”- Adults Who Have Ever Gone Online for Health Information-Increases to an Estimated 136 Million Nationwide). Searching health information ranks behind only email use and consumer goods and services searches online. *Id.*

⁷³ See Wolfgang Himmel, et al., *Information Needs and Visitors' Experience of an Internet Expert Forum on Infertility*, available at <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1550645> (last visited Jan. 15, 2011).

no doubt that some people get the initial idea to pursue ART activities from the Internet.⁷⁴

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.⁷⁵ The Internet makes ART developments available to broader constituencies. Prominent user groups now include non-married, career heterosexual women,⁷⁶ gay⁷⁷ or lesbian⁷⁸ couples, individuals,⁷⁹ and straight single men.⁸⁰ The Internet also cultivates the development of “radical” ART concepts.⁸¹

⁷⁴ See *Want to Buy My Eggs for \$4,000?*, available at 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.

⁷⁵ See, e.g., Liza Mundy, *EVERYTHING CONCEIVABLE: HOW ASSISTED REPRODUCTION IS CHANGING OUR WORLD*, 27 (1st ed. 2007) (“We limited our cases at first to those women who had had their Fallopian tubes removed...”)

⁷⁶ See Deborah Apton, *More Women Choosing Single Motherhood*, available at <http://abcnews.go.com/Nightline/story?id=1995278&page=1> (last visited Jan. 15, 2011) (“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.”).

⁷⁷ There is a gay men’s baby boom developing fed by the Internet See Stephen H. Miller, *Gay Men’s Baby Boom*, available at <http://www.indegayforum.org/news/show/26805.html> (last visited Aug. 9, 2009). See also Guy Ringer, M.D., *Gay Man, Gay Dad: Gay Men Can Become Fathers*, available at http://www.theafa.org/library/article/gay_man_gay_dad_gay_men_can_become_fathers/ (last visited Aug. 9, 2009).

⁷⁸ See Paula Amato, M.D. & Marcy Casey Jacob, M.D., *Providing Fertility Services to Lesbian Couples: The Lesbian Baby Boom* (2004), available at [http://www.srmjournal.org/article/S1546-2501\(04\)00106-9/fulltext](http://www.srmjournal.org/article/S1546-2501(04)00106-9/fulltext) (last visited Jan. 15, 2011) (“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., <http://www.thiemd.com/infertility.html> (last visited Jan. 15, 2011). See also http://www.co-parentmatch.com/sperm_donors/lesbian_sperm_donors.php (last visited Jan. 15, 2011).

⁷⁹ See Berke, *supra* note 28.

⁸⁰ *Id.*

⁸¹ See, e.g., Martin, *supra* n. 58 (discussing the Abraham Center, the “World’s First Embryo Bank” who marketed its services, and attracted clients, online. The Center was based in Texas. Its first two successful procedures involved women from Canada and California and quickly gained potential clients from England).

Third, the Internet is epicenter of the idea of Reproductive Tourism (“RT”). While authors discuss the concept of RT differently,⁸² 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 unavailable⁸³ or procedures are locally illegal),⁸⁴ but users pursue RT for a variety of reasons⁸⁵ including lack of local medical expertise, lengthy waiting lists,⁸⁶ cost considerations,⁸⁷ and

⁸² See, e.g., Guido Pennings, *Legal Harmonization and Reproductive Tourism in Europe*, 19 *Human Reproduction* 2689, 2990 (2004) (“...the practice of citizens leaving their home country for another in hopes of receiving treatment that has been banned in their home country, typically for safety or moral reasons”). 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.”)

⁸³ 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 (2005) (survey 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 *States Summary of Legislation Related to Infertility Insurance Coverage*, available at <http://www.ncsl.org/default.aspx?tabid=14391> (last visited Jan. 15, 2011).

⁸⁴ “[R]egulation that is overly restrictive towards the practice of surrogacy has not eliminated the practice. Rather it has boosted demand for [reproductive] tourism.” See *supra* note 33, at 285.

⁸⁵ See Elizabeth Ferrari Morris, *Reproductive Tourism and the Role of the European Union*, 8 *Chi. J. Int’l L.* 701, 703 (2008). For a comprehensive discussion see *supra* note 74, at 71.

⁸⁶ See *A Growing Number of Brits Cross the Atlantic for Donor Egg IVF Treatment at Shady Grove Fertility Center*, PR NEWSWIRE, June 16, 2009, available at <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., Shady Grove Fertility, available at <http://www.shadygrovefertility.com/international> (last visited Jan. 15, 2011).

⁸⁷ Fertility treatments in foreign countries may be significantly cheaper. As an example, the average cost for a cycle of IVF is \$10,500 in the United States. That same treatment costs \$5,100 in Cyprus, \$4,200 in Argentina, and almost 80% less, \$2,200, in India. See <http://www.visitandcare.com/infertility-treatment-abroad/guides/treatment/ivf-with-sperm-donation/cost> (last visited Jan. 15, 2011). Prospective users can comparison shop online utilizing estimated costs and user reviews. See, e.g., *You are Comparing IVF (In-Vitro Fertilization) Traveling from the USA*, available at <http://www.allmedicaltourism.com/usa/fertility/ivf-in-vitro->

convenience.⁸⁸ RT is a prevalent,⁸⁹ and based on growth patterns, soon to be an enormous ART/Internet consideration because the Internet “facilitates nearly all facets of medical tourism.”⁹⁰

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.”⁹¹ An estimated 150,000 medical tourists visited India in 2005, but that number was projected to increase to 450,000 by 2008.⁹² 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.⁹³ A significant portion of this growth is attributable to the Internet, specifically user-friendly websites⁹⁴ and effective, although not necessarily reliable,⁹⁵

fertilization/?mic=m62tl88kjf&gclid=CNmwwYWOrpwCFQMNDQodiWSM7w (last visited Jan. 15, 2011).

⁸⁸ Foreign clinics use online promotions to target frazzled, infertile couples with an attractive combination: fertility treatments and vacation. *See e.g.*, My IVF Alternative, *available at* <http://www.myivfalternative.com/> (last visited Jan. 15, 2011) (offering “vacation style” IVF procedures in the Czech Republic); Go Sculptura, *available at* http://www.ivfmexicoexperts.com/conversion/mexico_conv_fertility.htm?OVRAW=IVF%20Vacation&OVKEY=ivf%20abroad&OVMTTC=advanced&OVADID=44419002522&OVKWID=220392856522 (last visited Jan. 15, 2011) (offering a “pleasurable” IVF vacation experience in Mexico).

⁸⁹ “Reproductive Tourism has become an unmistakable part of the European landscape.” *See supra* note 87, at 712.

⁹⁰ *See supra* note 74, at 85.

⁹¹ *See* Rupa Chinai & Rahul Goswami, *Medical Visas Mark Growth of Indian Medical Tourism*, 85 Bull of World Health Org. 161 (2007), *available at* www.who.int/bulletin/volumes/85/3/07-010307/en/index.html (last visited Jan. 15, 2011).

⁹² *Id.*

⁹³ *See* Usha Rengachary Smerdon, *The Baby Market: 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*, THE SCIENTIST, Mar. 2006, at 79.

⁹⁴ *See supra* note 73, 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.

⁹⁵ *See supra* note 94, at 30:

online advertising.⁹⁶ The United States, while not attempting to grow RT as India, still has a \$3 billion dollar per year industry⁹⁷ and many domestic physicians are increasingly embracing aspects of RT.⁹⁸

IV. Regulation⁹⁹

*“[T]he plain fact is that medical technologies have raced ahead of the law without the heed of the general public or legislators.”*¹⁰⁰

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

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”. *Id.* at 30.

⁹⁶ “Between 2004 and 2006, the number of websites advertising ART more than quadrupled with marketing heavily geared to foreigners.” *Id.* at 24.

⁹⁷ See Mundy, *supra* note 76, at 4.

⁹⁸ See *supra* note 36 (“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.”)

⁹⁹ 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.

¹⁰⁰ See UNIF. PARENTAGE ACT 9B U.L.A. (as amended 2002) (UPA 2002), comment on Art. 8, Gestational Agreement, available at <http://www.law.upenn.edu/bll/archives/ulc/upa/final2002.htm> (last visited Jan. 23, 2011).

entirely,¹⁰¹ limited to one-year,¹⁰² two-years,¹⁰³ three-years,¹⁰⁴ five-years,¹⁰⁵ ten-years,¹⁰⁶ or unlimited.¹⁰⁷

There is more developed surrogacy regulation, both by action and inaction. Some countries flatly prohibit it;¹⁰⁸ others regulate surrogacy by prohibiting compensation to surrogates,¹⁰⁹ while still others allow surrogate compensation.¹¹⁰ Many countries, likely even most, have no national regulation.¹¹¹

B. FEDERAL LAW

¹⁰¹ That country is Italy. It also bans the use of donor egg or sperm and prohibits freezing embryos for later use. See Healthy Living, available at www.hc-sc.gc.ca/hl-vs/reprod/hc-sc/general/international-eng.php (last visited Jan. 15, 2011).

¹⁰² Austria and Denmark. See Embryo Bank, available at www.ivf-worldwide.com/Education/embryo-bank.html (last visited Jan. 4, 2011).

¹⁰³ Belarus, the Netherlands, Russia, Switzerland, and the Ukraine. *Id.*

¹⁰⁴ Norway and Sweden. *Id.*

¹⁰⁵ Belgium, Croatia, France, Iceland, and the United Kingdom. *Id.*

¹⁰⁶ Finland, Israel, and Spain. *Id.*

¹⁰⁷ Such as the United States. *Id.*

¹⁰⁸ Austria, China, Finland, France, Germany, Italy, Latvia, Norway, Poland, Singapore, Slovenia, Sweden, Switzerland, Thailand, Tunisia, Turkey, and Vietnam. See IVF-Surrogacy (Worldwide) available at www.ivf-woldwide.com/Education/surrogacy-rw.html (last visited Jan. 3, 2011).

¹⁰⁹ Australia, Canada, Denmark, Greece, Netherlands, New Zealand, and the United Kingdom. *Id.*

¹¹⁰ India, Russia, Ukraine, Pakistan (*Id.*) and Israel (see Richard F. Storrow, *Quests for Conception: Fertility Tourists, Globalization and Feminist Legal Theory*, 57 *Hastings L.J.* 295 (2005)).

¹¹¹ Argentina, Belgium, Brazil, Columbia, Croatia, Czech Republic, Ecuador, Egypt, Jordan, Malaysia, Morocco, Peru, Philippines, Portugal, Romania, South Africa, South Korea, Thailand, United States, Uruguay, Venezuela (see *supra* n. 110) and Ireland (see Eric Scott Sills and Clifford M. Healy, *Building Irish Families Through Surrogacy: Medical and Judicial Issues for the Advanced Reproductive Technologies*, available at <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2585562/> (last visited Dec. 30, 2010)).

This simply means there is nothing preventing commercial surrogacy in these countries; certainly some provide such services. See, e.g., *The Latest About Surrogacy in South Africa*, available at <http://www.prlog.org/10512636-the-latest-about-surrogacy-in-south-africa.html> (last visited Jan. 4, 2011); *Surrogacy and Adoption in Thailand*, available at <http://www.hg.org/article.asp?id=19371> (last visited Jan. 4, 2011); *Womb for Hire*, available at <http://www.abs-cbnnews.com/special-report/06/16/09/womb-hire-part-1> (last visited Jan. 4, 2010) (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., *supra* note 102 (discussing regulation in Australia and noting that Victoria prohibits compensated surrogacy and Queensland prohibits all surrogacy.).

One author asserts that there are federal laws requiring “strict medical and genetic screenings of the [embryo] donating couple to determine the embryo’s viability and whether the couple is ‘free of any genetic and communicable diseases.’”¹¹² 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”),¹¹³ and the Center for Disease Control (“CDC”). The FDA’s term “other reproductive tissue” should encompass embryos.¹¹⁴ 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.¹¹⁵ The second

¹¹² See Alexia M. Baiman, *Cryopreserved Embryos as America’s Prospective Adoptees: Are Couples Truly “Adopting” or Merely Transferring Property Rights?*, 16 Wm. & Mary J. of Women & L. 133, 138 (2009).

¹¹³ Laboratory testing is largely governed by the CMS. See 21 C.F.R. § 1271.55, .80 (2006).

¹¹⁴ 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 Human Tissue Intended for Transplantation, 21 C.F.R. § 1270 (2000); Human Cells, Tissues, and Cellular and Tissue-Based Products; Establishment Registration and Listing, 66 Fed. Reg. 5447 (Jan. 19, 2001) (codified at 21 C.F.R. § 1271.1 et seq. (2005):

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.

¹¹⁵ 21 C.F.R. § 1271.85(a), (c) (2006).

states only that human tissue must be stored at an “appropriate temperature.”¹¹⁶ 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 embryo laboratories.¹¹⁷ The Act defined an “embryo laboratory” as “a facility in which human oocytes and sperm, or embryos, are subject to ART laboratory procedures.”¹¹⁸ 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.¹¹⁹ In sum, if there is any federal embryo quality control regulation, it is minimal¹²⁰ and this minimal level is intentional.

There is no federal surrogacy legislation¹²¹ 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”).¹²² That Act recognized the need for clarification regarding parentage and surrogacy.¹²³ UPA 2002 mandated that surrogacy agreements

¹¹⁶ 21 C.F.R. § 1271.260(2)(b).

¹¹⁷ See DEP’T OF HEALTH AND HUMAN SERVICES CTRS. FOR DISEASE CONTROL AND PREVENTION IMPLEMENTATION OF THE FERTILITY CLINIC SUCCESS RATE AND CERTIFICATION ACT OF 1992; Proposed Model Program for the Certification of Embryo Laboratories, 60178, available at <http://wwwn.cdc.gov/dls/art/fr06no98n.txt> (last visited Jan. 15, 2011).

¹¹⁸ *Id.* at 60181.

¹¹⁹ See 42 U.S.C. §§ 263a-1 to -7 (2009). The Act has been termed by one author as “...governmental regulation at its weakest”. See Brenda Reddis-Small, *Assessing the Markey 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.*

¹²⁰ 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).

¹²¹ See Pamela Laufer-Ukeles, *Gestation: Work for Hire or the Essence of Motherhood? A Comparative Legal Analysis*, 9 Duke J. Gender L. & Policy 91, 103 (2002).

¹²² See generally *supra* note 100, UNIF. PARENTAL ACT 9B U.L.A. (AS AMENDED 2002), comment on Art. 8, GESTATIONAL AGREEMENTS, available at <http://www.law.upenn.edu/bll/archives/ulc/upa/final2002.htm> (last visited Jan. 7, 2011).

¹²³ See generally *supra* note 100, UPA 2002, Comment on Art. 7 CHILD OF ASSISTED REPRODUCTION,

were not void per se,¹²⁴ defined that a surrogate may be paid for her services,¹²⁵ and clarified that gestational surrogate services were not “baby selling.”¹²⁶ 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.¹²⁷ While ambitious, the Act does not provide definitive guidance. To date only nine states enacted it, none of them without change,¹²⁸ and at least two of those states did not adopt Article 8, the provision addressing gestational agreements.¹²⁹ 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.¹³⁰ That status is a particularly compelling issue on many levels but, for

([T]housands of children are born each year pursuant to [surrogacy] agreements. One thing is clear, a child born under these circumstances is entitled to have its status clarified.”)

¹²⁴ See UNIF. PARENTAGE ACT 9B U.L.A. (AS AMENDED 2002), at comment following §801.

¹²⁵ *Id.* at § 801(e).

¹²⁶ See UNIF. PARENTAGE ACT 9B U.L.A. (AS AMENDED 2002), at comment following §801.

¹²⁷ *Id.* at comment following §807. However, if the gestational agreement is not judicially validated, the gestational mother is the legal mother. See UNIF. PARENTAGE ACT 9B U.L.A. (AS AMENDED 2002) at comment following §809.

¹²⁸ Alabama, Delaware, New Mexico, North Dakota, Oklahoma, Texas, Utah, Washington, and Wyoming (citations omitted). See *CSG Approves Two Uniform Acts as “Suggested State Legislation”*, available at <http://www.nccsl.org/Update/DesktopModules/NewsDisplay.aspx?ItemID=213> (last visited Jan. 15, 2011). The first draft of a “Model Act” has also been published. See 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.

¹²⁹ See Del. Code Ann. Tit. 13, 801-819 (2004); Wyo. Stat. Ann. 14-2-401 to -907 (2005).

¹³⁰ However 38 states have “fetal homicide” statutes; laws that punish people who kill a pregnant women 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. See *Ashby Jones, Unusual New York Wrongful Death Suit Allowed to Move Forward*, available at <http://blogs.wsj.com/law/2010/12/09/unusual-new-york-wrongful-death-suit->

purposes of this article, one aspect is critical. If embryos are “people,” they cannot be bought or sold.¹³¹ If they are “property,” disposition can be contracted like other goods.¹³² 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,¹³³ while pending Georgia legislation declares that embryo life begins at the single-cell stage and that embryos have rights and responsibilities under state law.¹³⁴ New Mexico gives embryos the status of “fetus” by its broad statutory definition¹³⁵ and Missouri law is that “the life of each human being begins at conception.”¹³⁶ At the other end of the continuum Michigan recently passed a statute treating some embryos as property¹³⁷ and Florida law grants sperm and egg donors joint decision-making regarding embryo disposition.¹³⁸ At common law, Texas

allowed-to-move-forward/ (last visited Jan. 16, 2011). This case also indicates that the un-born have some legal rights.

¹³¹ 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> (last visited Jan. 6, 2011).

¹³² *Id.*

¹³³ 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.

¹³⁴ See *Georgia Passes Nation’s First Embryo Adoption Law*, available at <http://www.thevoicemagazine.com/headline-news/headline-news/georgia-passes-nations-first-embryo-adoption-law.html> (last visited Dec. 30, 2010). The text of the law is available at http://www.legis.state.ga.us/legis/2009_10/fulltext/hb388.htm (last visited Dec. 10, 2010). The Governor had not signed the bill at the time this article was drafted.

¹³⁵ See N.M. STAT. § 24-9A-3 (2008) (the statute defines a “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.”).

¹³⁶ See § 1.205 R.S.MO. (2010).

¹³⁷ 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).

¹³⁸ See FLA. STAT. § 742.17(2) (2009).

treats embryos as property by allowing contract law to determine disposition.¹³⁹ It appears that Maine, Massachusetts, North Dakota, and Pennsylvania statutorily recognize a special “interim” status making embryos more than property but less than human¹⁴⁰ 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.”¹⁴¹ While there is little definitive status regulation, there is even less regarding the sale of human embryos. Louisiana¹⁴² and Florida¹⁴³ statutorily prohibit such transactions, while Virginia exempts human ovum from its statutory restriction on the sale of human body parts.¹⁴⁴

It may appear fortunate that more states have surrogacy regulation, at least as compared to embryo regulation, but more is not better¹⁴⁵ 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

¹³⁹ See, e.g., *Roman v. Roman*, 193 S.W.2d 40, 49-50 (Tex. App. 2006). But see Jodi L. Bender, *Snowflakes in Texas? Enacting Legislation to Allow for Embryo Adoption*, 16 Tex. Wesleyan L. Rev. 413, 414 (2010) (arguing that “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 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.

The author made that contention in a 2010 article. It does not appear accurate. In 2007 the Texas House of Representatives had the opportunity to address HB 1703. 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.* See HOUSE COMM. ON STATE AFFAIRS, BILL ANALYSIS, Tex. H.B. 1703, 8th Leg. R.S. (2007). The bill apparently expired during session. See http://www.thbi.com/storage/pdf-files/end_of_session_report_80.pdf (last visited Jan. 3, 2011). There is no record of similar proposed legislation since. We are more than a little surprised that this legislation died so quietly as it was clearly in response to the formation of the highly controversial Abraham Life Center in San Antonio in 2006. See *supra* note 55.

¹⁴⁰ See Baiman, *supra* note 112, at 145.

¹⁴¹ *Davis v. Davis*, 842 S.W.2d 588, 597 (1992).

¹⁴² See LA. REV. STAT. ANN. § 9:122 (LexisNexis2006).

¹⁴³ See FLA. STAT. ANN. § 873.05 (LexisNexis 2006).

¹⁴⁴ See VA. CODE ANN. § 32.1-289.1 (LexisNexis 2006).

¹⁴⁵ As succinctly summarized by one author, “The law of surrogate motherhood in the United States is in a state of flux and confusion.” See Carla Spivack, *SECTION IIA: CIVIL LAW: The Law of Surrogate Motherhood in the United States*, 58 Am. J. Comp. 97, 97 (2010).

surrogacy agreements completely,¹⁴⁶ some limit agreements,¹⁴⁷ while still others recognize the enforceability of surrogacy contracts.¹⁴⁸ 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 services¹⁴⁹ or make only altruistic surrogacy legal.¹⁵⁰ Other jurisdictions prohibit payment to intermediaries used to help provide surrogates,¹⁵¹ thus likely decreasing the number of potential surrogates actually available.¹⁵² The end result is that, similar to state embryo regulation, state level surrogacy regulation varies greatly, in the oft chance it exists at all.¹⁵³

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

¹⁴⁶ See State by State Surrogacy Laws, available at <http://www.rainbowlaw.com/surrogacy-adoption-and-ivf/188-state-by-state-surrogacy-laws> (last visited Jan. 3, 2010). Examples include Delaware, Indiana, Louisiana, Michigan, New York, New Jersey, and the District of Columbia.

¹⁴⁷ Examples include Nevada, New Hampshire, Tennessee, Texas, Utah, and Virginia. *Id.*

¹⁴⁸ 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 (Rachel Cook, et al. eds., 2003).

¹⁴⁹ See, e.g., KY. REV. STAT. ANN. § 199.590(4) (WEST 2006); LA. REV. STAT. ANN. § 9:2713(A) (WEST 2005); NEB. REV. STAT. § 25-21,200 (2005); N.Y. DOM. REL. LAW § 123(1) (McKinney 2006); N.C. GEN. STAT. § 48-10-102(a) (2006); WASH. REV. CODE § 26.26.230 (2006).

¹⁵⁰ 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).

¹⁵¹ 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).

¹⁵² At least one state takes a slightly different approach and regulates issues such as parental status in surrogacy relationships. See 750 ILL. COMP. STAT. 47/1-75 (2006).

¹⁵³ For further discussion regarding the status of surrogacy laws by state see *supra* note 146 at 101-102; Surrogacy Laws by State, available at <http://www.allaboutsurgacy.com/surrogacylaws.htm> (last visited Dec. 30, 2010).

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.”¹⁵⁴ This appears to fall into the “interim” classification previously discussed¹⁵⁵ 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 rights¹⁵⁶ and donor screening prior to donation.¹⁵⁷ 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.”¹⁵⁸ It is “...the leading market force in the field of reproductive medicine.”¹⁵⁹ 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.”¹⁶⁰ “SART is extensively involved in data collection, practice guidelines and standards, government interaction, quality assurance, and research.”¹⁶¹ SART is also comprehensively involved with a wide variety of entities that have significant ART interests and concerns.¹⁶² ASRM and SART, along

¹⁵⁴ See AM. BAR ASS'N MODEL ACT GOVERNING ASSISTED REPROD. TECH. § 102(1) (2008), available at <http://www.abanet.org/family/committees/artmodelact.pdf> (last visited Jan. 6, 2010).

¹⁵⁵ See *supra* note 140.

¹⁵⁶ See *supra* note 154, at § 102(9).

¹⁵⁷ See Charles P. Kindregan, Jr. and 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).

¹⁵⁸ See *Welcome to the American Society for Reproductive Medicine*, available at <http://asrm.org/> (last visited Aug. 2, 2009).

¹⁵⁹ See Reddis-Small, *supra* note 119, at 673.

¹⁶⁰ See Society for Assisted Reproductive Technology, available at <http://www.sart.org/detail.aspx?id=1864> (last visited Feb. 1, 2011).

¹⁶¹ See Reddis-Small, *supra* note 119, at 675.

¹⁶² 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 organizations such as the American

with the College of American Pathologists (“COP”) created the Reproductive Laboratory Accreditation Program (RLAP).¹⁶³ That program proffers standards for reproductive laboratories and performs on-site accreditation every two years.¹⁶⁴ SART represents 85% of the clinics practicing ART in the United States¹⁶⁵ and as of 2005, two-thirds of SART programs were RLAP accredited.¹⁶⁶ 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.”¹⁶⁷ 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.¹⁶⁸ This is problematic as fertility clinic’s voluntary procedures vary tremendously¹⁶⁹ and may not be followed at all.¹⁷⁰ While there is very little voluntary embryo regulation, there is no voluntary surrogate regulation, other than entity specific standards such as screening.¹⁷¹

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* Reddis-Small, *supra* note 119, at 674.

¹⁶³ *See* Adamson, *supra* note 162, at 732-33.

¹⁶⁴ *Id.*

¹⁶⁵ *See supra* note 160.

¹⁶⁶ *Id.*

¹⁶⁷ *See* ETHICS COMM. OF THE AM. FERTILITY SOC’Y, *Ethical Considerations of the New Reproductive Technologies*, 46 *Fertility & Sterility* 30, (Sept. 1986).

¹⁶⁸ Instead of identifying particular processes or procedures, the Standards speak in general terms. *See, e.g., supra* note 160, at 4. “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.”

¹⁶⁹ *See* Alvare, *supra* note 120, at 12.

¹⁷⁰ *See* CENTER FOR GENETICS AND SCIENCE, *Possible Federal Oversight for the New Human Biotechnologies, Opportunities for the New Administration*, 4, (Jan. 2009), available at <http://www.geneticsandsociety.org/downloads/CGSObama.pdf>.

¹⁷¹ *See infra* notes. 218-19.

V. BECOMING OR UTILIZING A “CYBER PARENT”¹⁷²

A. POTENTIAL PARENTAL RIGHTS

There are three common classifications of reproductive tissue donors, “known,”¹⁷³ “unknown”¹⁷⁴ and “identified.”¹⁷⁵ Most embryo donorship is unknown as the recipients never know the identity of the donor(s).¹⁷⁶ When donor identity is unknown the donor has no parental rights, so it is unlikely (although not impossible)¹⁷⁷ 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 child¹⁷⁸ and disputes can arise over custody. The fundamental question at issue is whether

¹⁷² “A person who provides, online, human reproductive materials he or she biologically produced.”

¹⁷³ 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. 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*, No. 1-03-2992, 2005 WL 4694579 (Ill. App. 1 Dist. 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 (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. App. 1984) (disallowing misrepresentation of contraceptive protection as a defense).

¹⁷⁴ 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.

¹⁷⁵ 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.

¹⁷⁶ *See, e.g.*, *Rotunda Fertility Clinic's Adoption Policies*, available at <http://iwannagetpregnant.com/embryo.asp> (last visited Jan. 16, 2011) (clinic handles embryo “adoption” like a closed adoption, with no contact between the parties).

¹⁷⁷ 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.

¹⁷⁸ *See 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).

surrogates have parental rights over resulting children. The deceptively simple answer is, perhaps. Courts currently have very little precedent,¹⁷⁹ but a thread may be developing.

The most famous surrogate custody case, and certainly the first to garner strong public attention, was *In the Matter of Baby M*.¹⁸⁰ *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.¹⁸¹ Whitehead gave birth to a daughter.¹⁸² Within 24-hours of transferring custody to the Sterns, Whitehead asked for the baby back and threatened suicide.¹⁸³ She then refused to return the baby to the Sterns and left New Jersey, taking the infant with her.¹⁸⁴ The New Jersey Superior Court awarded custody of Baby M to the Sterns.¹⁸⁵

On appeal the Supreme Court of New Jersey invalidated surrogacy contracts as against public policy,¹⁸⁶ remanding the case to family court.¹⁸⁷ That court awarded William Stern custody and Mary Beth Whitehead the parental right of visitation.¹⁸⁸ *Baby M* is the most famous¹⁸⁹ surrogacy/parental rights case, but it is not dispositive of those

¹⁷⁹ See Miriam Perez, *Surrogacy: The Next Frontier for Reproductive Justice*, available at <http://www.rhrealitycheck.org/blog/2010/02/23/surrogacy-next-frontier-reproductive-justice> (last visited Dec. 30, 2010) (“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.”)

¹⁸⁰ 1988 N.J. LEXIS 1.

¹⁸¹ *Id.* at nn. 11-12.

¹⁸² *Id.* at n. 12.

¹⁸³ *Id.* at nn.13-14.

¹⁸⁴ *Id.* at n. 14.

¹⁸⁵ *Id.* at 18-19.

¹⁸⁶ *Id.* at 25. Recently New Jersey built upon *Baby M*'s holding in *A.G.R. v. D.R.H. & S.H.*, unpublished opinion Docket #FD-09-001838-07 (2009) (invalidating a gestational surrogacy contract as it violated public policy).

¹⁸⁷ 1988 N.J. LEXIS 105.

¹⁸⁸ See *In the Matter of Baby M*, 225 N.J. Super. 267 (1988).

¹⁸⁹ 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 *Flynn v. Bimber*, 2005 Pa. Dist. & Cnty. Dec. LEXIS 188.

issues in all jurisdictions. In fact, if similar issues arose in another state the result might be quite different.¹⁹⁰ As examples, Ohio would not invalidate a surrogacy contract under the theory that such contracts per se violate public policy¹⁹¹ and Massachusetts has invalidated a surrogacy agreement on public policy grounds¹⁹² but the articulated concerns were different from those in *Baby M* and that court recognized that a valid surrogacy agreement could be created in Massachusetts.¹⁹³ 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*¹⁹⁴ 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.¹⁹⁵ Shortly before birth the surrogate threatened to keep the child unless she was paid monies she contended due under the agreement.¹⁹⁶ Both sides sought judicial declaration as the lawful parent(s) of the unborn child.¹⁹⁷ 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.”¹⁹⁸ The end result was

¹⁹⁰ At least one author argues that surrogacy regulation should be decided exclusively at the state level. See Dale Elizabeth Lawrence, *Surrogacy in California: Genetic and Gestational Rights*, 21 Golden Gate U. L. Rev. (1991).

¹⁹¹ See, e.g., *J.F. v. D.B., et al.*, 879 N.E.2d 740, 741 (“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. See also *S.N. v. M.B.*, 2010 Ohio LEXIS 1910 (finding a gestational surrogacy contract valid and enforceable).

¹⁹² See *R.R. v. M.H. & Another*, 689 N.E.2d 790 (Mass. 1998).

¹⁹³ *Id.* at 797 (“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.”)

¹⁹⁴ 5 Cal. 4th 84 (1993).

¹⁹⁵ *Id.* at 87.

¹⁹⁶ *Id.* at 88.

¹⁹⁷ *Id.*

¹⁹⁸ 5 Cal. 4th 84, at 93.

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).”¹⁹⁹ 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*²⁰⁰ and held that the non-biological mother, in a true egg donation case, was the lawful mother.²⁰¹ 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 contracts. That assumption should not be made.²⁰² So, does a surrogate have parental rights? Perhaps.

B. POTENTIAL PARENTAL RESPONSIBILITIES

¹⁹⁹ *Id.* at 10.

²⁰⁰ 196 A.D.2d 7 (1994).

²⁰¹ *Id.* at 12.

²⁰² *See supra* text acc. notes 147-150 . *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 . . . [t]he survey further revealed that courts in two states refuse to recognize gestational agreements.

For further discussion and breakdown *see Surrogacy Agreements*, available at <http://libguides.law.gsu.edu/content.php?pid=122829&sid=1055848> (last visited Dec. 30, 2010). *See also* <http://www.thesurrogacyexperience.com/surrogates.cfm?sc=23&p=99> (last visited Dec. 30, 2010).

Historically, biological parents had financial responsibilities for their children,²⁰³ 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.²⁰⁴ This makes them "unknown" donors. Common law is well settled that unknown tissue donors usually have no parental responsibilities, while known donors do.²⁰⁵ Twelve states also statutorily address this issue.²⁰⁶ The most common position is that a donor is not a parent of a child conceived by means of assisted reproduction.²⁰⁷ Additionally, tissue donors may be able to contract away parental responsibilities, although this approach is far from well settled.²⁰⁸ Currently embryo donors are not likely to have parental responsibilities; that may not be the case for surrogates.²⁰⁹

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.²¹⁰ If she can have parental rights, it is only logical that

²⁰³ See Child Support Laws State by State, available at <http://www.child-support-laws-state-by-state.com/child-support.html> (last visited Jan. 16, 2010).

²⁰⁴ But see *supra* note 177.

²⁰⁵ See, e.g., *Ferguson v. McKiernan*, 60 Pa. D. & C. 4th 353, 364 (Pa. C.P. 2002) (stating the general rule: "We 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.")

²⁰⁶ See DEL. CODE ANN. tit. 13, §§ 8-102, 8-702 to -703 (Supp. 2006); FLA. STAT. ANN. §§ 742.11, .13-.14, 17 (West 2005); LA. REV. STAT. ANN. §§ 9:121-122, :124, :126-127, :129-130, :132 (2008); N.H. REV. STAT. ANN. §§ 168-B:13, :15 (LexisNexis 2001); N.D. CENT. CODE §§ 14-20-02, 14-20-60 to -61 (Supp. 2007); OHIO REV. CODE ANN. § 3111.97 (LexisNexis Supp. 2008); OKLA. STAT. ANN. tit. 10, § 556 (West 2007); TEX. FAM. CODE ANN. §§ 160.102, .702-.703, .7031 (Vernon 2002 & Supp. 2008); UTAH CODE ANN. §§ 78B-15-102, -702-703 (West 2008); VA. CODE ANN. §§ 20-156, -158 (Supp. 2008); WASH. REV. CODE ANN. §§ 26.26.011, .705, .710 (West 2005); WYO. STAT. ANN. §§ 14-2-402, -902-903 (2007).

²⁰⁷ See, e.g., DEL. CODE ANN. tit. 13, §§ 8-102, 8-702 to -703 (Supp. 2006).

²⁰⁸ See, e.g., 60 Pa. D. & C. 4th 353, 355-6 (Pa. Com. Pl. 2002), *aff'd*, 855 A.2d 121 (Pa. 2004), *aff'd*, 581 Pa. 629, 868 A.2d 378 (Pa. Super. 2005).

²⁰⁹ The opposite may be true as well. If the UNIF. PARENTAGE ACT 9B (as amended 2002) were to be 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 *supra* note 100, at ART. 8 GESTATIONAL AGREEMENT, Comment.

²¹⁰ See *supra* text accompanying notes 181-203.

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.²¹¹

VI. POTENTIAL LIABILITY

A. THE EMBRYO BUSINESS

1. WARRANTIES

Article 2 of the Uniform Commercial Code (UCC) governs the sale of goods.²¹² While there is a great deal of discussion of whether or not human reproductive materials *should be* goods,²¹³ we contend, for purposes of this article, that human embryos *are* goods. The

²¹¹ See *supra* text accompanying notes 147-150.

²¹² UCC § 2-102, available at <http://www.law.cornell.edu/ucc/2/article2.htm> (last Jan. 16, 2011).

²¹³ 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 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)

UCC defines “good[s]” as “all things . . . which are movable at the time of identification to the contract for sale”²¹⁴ Embryos are transported from place to place²¹⁵ and embryos are sold.²¹⁶ 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.²¹⁷ 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.²¹⁸

(“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).

²¹⁴ UCC § 2-105.

²¹⁵ “Movement” occurs when the embryo is implanted into the uterus.

²¹⁶ *See, e.g.*, California Conceptions, *available at* http://www.californiaconceptionn.com/index.php?option=com_content&view=article&id=47&Itemid=69 (last visited Jan. 11, 2011)

²¹⁷ 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.”

²¹⁸ *See, e.g., supra* note 216 (“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 to most parents.”); UCSF Medical Center, *available at* 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. One study, though dated, revealed that many physicians failed to adequately screen donors for diseases and many screenings were limited to merely questioning donors about common familial diseases. *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). It is possible that physicians have engaged in more rigorous screening in intervening years, but there are few safeguards to actually ensure such practices. *See* Kerry Cork, Comment, *Test-Tube Parents: Collaborative Reproduction in Minnesota*, 22 Wm. Mitchell L. Rev. 1535, 1537 (1996).

Some embryo suppliers also specifically warrant attributes or qualifications of donors through donor profiles,²¹⁹ 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.”²²⁰ If a photograph or biography of a donor constitutes a model,²²¹ the purchaser may expect the resulting child to have the model’s characteristics.²²² 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 reasonable.²²³ Embryo suppliers that fail to meet promised standards of donor screening

²¹⁹ Most profiles and databases are proprietary and cannot be accessed by the general public. *See, e.g.,* Miracles Waiting, available at <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, available at http://www.theeggdonor.com/egg_donors.php (last visited Jan. 16, 2011) (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., available at <http://www.eggdonor.com/?page=donordb> (last visited Jan. 16, 2011).

²²⁰ U.C.C. § 2-313(1):

A seller who makes an affirmation of fact or promise relating to the goods or who supplies a description, sample or model of the goods that becomes part of the basis of the bargain makes an express warranty that the goods will conform to that affirmation of fact, promise, description, sample or model.

²²¹ 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.

²²² There is little doubt that reproductive materials sellers want precisely that perception. Sales of athletes’ sperms jumped 150% in one month after the athletes were shown as “Donors of the Month” at California Cryobank. *See* E:60 Sperm U, available at <http://espn.go.com/video/clip?id=3554822&categoryid=null> (last visited Jan. 16, 2011). *See also* <http://www.cryobank.com/About-us/Press-Releases/template.cfm?id=1396> (last visited Jan. 16, 2011) (where customers can shop for donors who look like famous people).

²²³ For a very comprehensive analysis *see* James J. White, *Freeing the Tortious Soul of Express Warranty Law*, 72 Tul. L. Rev. 2089, at 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 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.

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

b. MERCHANTABILITY

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 Gunite 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.”).

“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.”²²⁴ “Merchantable” means the goods “are fit for the ordinary purposes for which [they] are used.”²²⁵ 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.²²⁶

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,”²²⁷ but might be under the “deals in” standard.²²⁸

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 circumstances²²⁹ it is unlikely that donors or suppliers would breach this warranty.²³⁰

²²⁴ U.C.C. § 2-104(1).

²²⁵ *Id.* at § 2-314(2)(c).

²²⁶ *Id.* at § 2-104(1).

²²⁷ For an analogy, *see* Jayanti *supra* note 213, at 433 (“[T]he egg [donor] is usually less knowledgeable than the ‘consumer’, the recipient parents.”)

²²⁸ One author flatly contends 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 Id.* at 432. However, the question of whether a party is a merchant for purposes of the U.C.C. is a question of law. *See, e.g.,* County of Milwaukee v. Northrop Data Systems, Inc., 602 F.2d 767 (7th Cir.1979). 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.

²²⁹ Obvious examples are providing embryos damaged during collection, storage, or transportation such that they cannot be gestated.

²³⁰ 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” *See* S.C. Code Ann. § 44-43-10 (2005). As

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.”²³¹ 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.²³² 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.²³³

2. STRICT PRODUCT LIABILITY

previously discussed, the FDA classifies human embryos as reproductive tissue. *See supra* text accompanying note 115.

²³¹ U.C.C. § 2-315.

²³² As examples, it cannot yet control characteristics such as height, eye color, intelligence, or athleticism.

²³³ 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* 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.

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.²³⁴ Strict product liability has specific elements that an injured party must satisfy to recover. While these elements are addressed collectively and separately, all discussions encompass the following:

1. There must be a product²³⁵ 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.²³⁶
2. The product must contain a defect and the defective condition must make the product “unreasonably dangerous.”²³⁷ “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.”²³⁸ There are three potential types of defects: manufacturing, design, and warning.²³⁹

²³⁴ 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):

The rationales for imposing strict liability for commercial products take two forms. The first is a set of moral arguments, based on fairness, positing that manufacturers are ethically responsible to innocent consumers who have been harmed because the consumers had a reasonable expectation that the manufacturer would supply a safe product. The second group of rationales is based on economic arguments or efficiency. For example, it is argued that manufacturers are best able to insure against losses and to spread the cost of such insurance among all the consumers who purchase their products, and that strict liability creates socially desirable economic incentives for manufacturers to produce safer products.

²³⁵ Courts define “product” very broadly. See MARSHALL S. SHAPO, *THE LAW OF PRODUCT LIABILITY* 7.03[1] (4th ed. 1990).

²³⁶ See RESTATEMENT (SECOND) OF TORTS § 402A (1965).

²³⁷ *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....”)

²³⁸ *Id.* at § 402(A), cmt. i.

²³⁹ See generally William Powers, Jr., *A Modest Proposal to Abandon Strict Products Liability*, 1991 U. Ill. L. Rev. 639 (1991).

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.²⁴⁰

There is no question that reproductive tissue can cause damage to a recipient, resulting fetus, or resulting child,²⁴¹ 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*²⁴² contained a variety of strict product liability derivative claims²⁴³ 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.²⁴⁴ *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?”

A product is defined as “something produced by human or mechanical effort or by a natural process.”²⁴⁵ It is also a “commodit[y] for sale.”²⁴⁶ 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

²⁴⁰ See FRUMER AND FRIEDMAN, 1-8 PRODUCTS LIABILITY 8.01[4] (2004).

²⁴¹ 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.”)

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

²⁴³ *Id.* at 1237.

²⁴⁴ *Id.*

²⁴⁵ See <http://dictionary.reference.com/browse/product> (last visited Jan. 16, 2011).

²⁴⁶ See Wordnet Search, <http://wordnetweb.princeton.edu/perl/webwn> (last visited Jan. 30, 2011) (search “product”).

ordinary user.²⁴⁷ 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. 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.²⁴⁸

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.²⁴⁹ For purposes of this article, we term these "lost embryo" 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

²⁴⁷ See *supra* text accompanying notes 236-37.

²⁴⁸ One author would likely disagree with this conclusion and presents a number of possible defenses. See Jayanti, *supra* note 213, at 432-35. She appears to be alone in this contention and, as previously discussed, we find her logic repeatedly flawed. See J. Brad Reich and 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, 302-315 (2010).

²⁴⁹ See, e.g., *Stanton v. Univ. of Tex. Health Sciences Ctr.*, 997 S.W.2d 628 (Tex. App. 1998); *Harnicher v. Univ. of Utah Med. Ctr.*, 962 P.2d 67, 68 (Utah 1998); see also Dorinda Elliot & Friso Endt, *Twins – with Two Fathers: A Fertility Clinic's Startling Error*, NEWSWEEK, July 3, 1995, at 38; Barbara Kantrowitz & David Kaplan, *Not the Right Father*, NEWSWEEK, Mar. 19, 1990, at 50; Michael Lasalandra, *Woman, Ex and Hospital Settle over Sperm Mixup*, BOSTON HERALD, Aug. 27, 1998, at 12.

There are a number of reported embryos cases.²⁵⁰ According to one source, such accidents are exceedingly rare,²⁵¹ but perhaps not as rare as he espouses. In fact, they might happen with disturbing regularity.²⁵² 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 of action: duty, breach, proximate causation, and harm²⁵³ 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,²⁵⁴ the legal duty of storage entities is not.²⁵⁵ This uncertainty is the direct

²⁵⁰ See, e.g., *Fertility Clinic to Couple: You Got the Wrong Embryos*, WIBW NEWS, Sept. 23, 2009, available at <http://www.wibw.com/home/headlines/60765137.html> (last visited Dec. 28, 2010); *Quincy Couple Sue Boston Hospital Over Destroyed Embryos*, WICKED LOCAL QUINCY NEWS, May 21, 2009, available at http://www.wickedlocal.com/quincy/news/police_and_fire/x1125039411/Quincy-couple-sue-Boston-hospital-over-destroyed-embryos (last visited Dec. 30, 2010); *Creed v. United Hosp.*, 600 N.Y.S.2d 151 (App. Div. 1993); *Perry-Rogers v. Obasaju*, 282 A.2d 231 (N.Y. App. 2001); *Robert B. and Denise B. v. Susan B.*, 2003 Cal. App. LEXIS 873. See also *Jeter v. Mayo Clinic Arizona*, 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).

²⁵¹ See *Fertility Clinic to Couple: You Got the Wrong Embryos, id.* "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)." "There are well in excess of 100,000 embryo transfers every year in this country," said Adamson, "The 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 (*see supra* text accompanying notes 167-71), there is no mandated quality control.

²⁵² A representative of the United Kingdom IVF clinics estimates that one in one thousand IVF embryos are implanted into the wrong woman. See Lois Rogers, *Women Given Wrong Embryos at IVF Clinics*, SUNDAY TIMES (LONDON), Nov. 12, 2000, at 4. 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).

²⁵³ See *Grubbs v. Barbourville Family Health Center*, 2003 Ky, LEXIS 178 at 11-12.

²⁵⁴ 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); *Pike v. Honsinger*, 49 N.E. 760, 762 (N.Y. 1898); and *Zellar v. Tompkins Community Hosp.*, 508 N.Y.S.2d 84, 86 (App. Div. 1986).

result of a lack of laws governing the embryo industry. As previously discussed there is little federal regulation addressing embryo donor storage²⁵⁶ 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.

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. 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 embryos were lost and the donor cannot produce more. There are two cases on point here. In *Doe v. Irvine Scientific Sales Co.* stored embryos were contaminated and rendered unusable.²⁵⁷ In *Frisina v. Women and Infants Hosp. of R.I.*, the hospital lost or destroyed stored embryos.²⁵⁸ The court denied recovery in *Doe* because the donors could not establish the requisite physical injury,²⁵⁹ but the *Frisina* court allowed recovery based on emotional distress absent physical trauma.²⁶⁰ While this is, admittedly, a very small sample of cases, it appears that the majority of jurisdictions

²⁵⁵ *But see* Jaynti, *supra* note 213, 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.

²⁵⁶ *See supra* text accompanying notes 117-20.

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

²⁵⁸ 2002 WL 1288784 (R.I. Super. 2002).

²⁵⁹ 7 F. Supp. 2d at 741.

²⁶⁰ 2002 WL 1288784 at 10.

would follow the *Doe* rationale because most jurisdictions deny recovery absent physical injury.²⁶¹ 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.²⁶² 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.²⁶³ This decision is not surprising when this lost embryo claim is juxtaposed with the “wrongful birth” cause of action.

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.²⁶⁴ At least one author contends that wrongful birth cases have some judicial support and acceptance.²⁶⁵

²⁶¹ 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 (2005). However, a claimant may recover for loss of property in such claims and physical injury would not be required. See *Jeter*, *supra* note 250, at 1273 (“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 37 (“[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....”) *Id.*

²⁶² See generally Raïzel 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 (2002).

²⁶³ See Chris Snow, Note, *Harnicher v. University of Utah Medical Center: Fertility Treatment and the Duty of Care*, 2 J. L. Fam. Stud. 63 (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 (N.C. Ct. App. 2006) (A North Carolina jury awarded \$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.).

²⁶⁴ See Timothy J. Dawe, Note, *Wrongful Life: Time for a “Day in Court”*, 51 Ohio St. L.J. 473, 476 (1990).

²⁶⁵ 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):

The child's mother would have a better chance of recovering if she brings a products liability claim in her own right, seeking damages based on a wrongful birth theory. The wrongful birth claim enjoys far greater judicial acceptance than wrongful life because it does not define the wrong as the child being given

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,²⁶⁶ in a lost embryo case the child is not. Second, the assertion that wrongful birth is judicially acceptable is true, but far from universal.²⁶⁷ There are few recorded wrongful birth decisions,²⁶⁸ and none since the 1980s.²⁶⁹ Some state courts refuse to recognize wrongful birth causes of action absent statutory creation.²⁷⁰ Some state legislatures have passed laws refusing to recognize wrongful birth causes of action.²⁷¹ Only one state, Maine, statutorily recognizes wrongful birth, and then only for a limited cause of action.²⁷² Even where wrongful birth exists, a highly pragmatic consideration exists when it comes to assessing damage because “[j]uries

life, but rather as the denial of the mother's right to choose to abort or to never even initiate the pregnancy. Thus, if the mother can show that she would not have carried the child to term or that she would not have consented to the insemination if she had known the truth about the sperm donor's medical history, many courts may award her compensation for wrongful birth.

²⁶⁶ Wrongful Birth damages are predicated on the existence of a congenital defect. *See, e.g.,* Hall v. Dartmouth Hitchcock Med. Ctr., 899 A.2d 249, 245 (N.H. 2006).

²⁶⁷ As of 2005, more than half of all United States jurisdictions recognized Wrongful Birth. *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).

²⁶⁸ *See, e.g.,* Berman v. Allan, 80 N.J. 421, 404 A.2d 8 (1979); Becker v. Schwartz/Park v. Chessin, 46 N.Y.2d 401, 413 N.Y.S.2d 895, 386 N.E.2d 807 (1978); Jacobs v. Theimer, 519 S.W.2d 846 (Tex. 1975); Dumer v. St. Michael's Hospital, 69 Wis.2d 766, 233 N.W.2d 372 (1975); and Moores v. Lucas, 405 So.2d 1022 (1981); Blake v. Cruz, 108 Idaho 253, 698 P.2d 315, 319, 322 (Idaho 1984); Siemieniec v. Lutheran Gen. Hosp., 1987 Ill. LEXIS 208.

²⁶⁹ The most recent decision we are aware of is Gallagher v. Duke University, 1988 U.S. App. LEXIS 10022.

²⁷⁰ *See, e.g.,* Etkind v. Suarez, 519 S.E.2d 210 (Ga. 1999); Campbell v. United States, 1992 U.S. App. LEXIS 13381.

²⁷¹ *See, e.g.,* MINN. STAT. § 145.424(2) (1997).

²⁷² *See* ME. REV. STATE. ANN. tit. 24, § 2931 (West 1997).

would have an extremely difficult time trying to calculate how much the life of a disabled child is worth.”²⁷³

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.²⁷⁴ Claimants likely cannot succeed in lost materials cases because, regardless of which scenario their claim falls under, they cannot satisfy the requisite elements.²⁷⁵

b. DEFECTIVE EMBRYOS AND WRONGFUL LIFE

Defective reproductive materials can cause children born with defects. 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;²⁷⁶ because specific legal duties are largely uncertain, resulting breach is difficult to prove.

²⁷³ 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, *supra* note 253 at 21 (“[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 also Siemienic, *supra* note 268 at 50-51 (asserting that the majority of jurisdictions limit recovery to “extraordinary expenses” – or those costs which are necessary to treat the disorder).

²⁷⁴ 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.”).

²⁷⁵ 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.

²⁷⁶ But see Lars Noah, *Assisted Reproductive Technologies and the Pitfalls of Unregulated Biomedical Innovation*, 55 Fla. L. Rev. 603, 638-39 (2003) (“...courts may well conclude that fertility doctors and

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. 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.”²⁷⁷ 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.”²⁷⁸ Additionally, depending on the conduct of the defendant, compensatory damages could provide the basis for punitive damages in defective materials cases.²⁷⁹ 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.²⁸⁰

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

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.

²⁷⁷ See *supra* note 265, at 537.

²⁷⁸ *Schirmer v. Mt. Auburn Obstetrics & Gynecological Ass’n*, 2003 Ohio App. LEXIS 6471 at 1.

²⁷⁹ See, e.g., *Paretta v. Medical Offices for Human Reproduction*, 2003 N.Y. Misc. LEXIS 321 at 20. 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.”).

²⁸⁰ 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 277, 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.”) *Id.* The viability of this defense then depends on the type of defect and the technology available at the time of donation and transfer.

impaired existence, either through parental choice not to conceive or through an abortion, were it not for the negligence of a defendant.²⁸¹

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,²⁸² making breach difficult to prove,²⁸³ and proximate causation remains difficult to establish. Only three states currently recognize a cause of action for wrongful life²⁸⁴ and several refused to do so, either by statute²⁸⁵ or common law.²⁸⁶ 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.²⁸⁷

²⁸¹ See Dawe, *supra* note 264, at 475.

²⁸² *But 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).

²⁸³ *But see supra* note 264, at 477 (asserting that “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, *Albala v. City of New York*, 54 N.Y.2d, 269, 429 N.E.2d 786, 445 N.Y.S.2d 108 (1981) in support of this contention.

²⁸⁴ See *Turpin v. Sortini*, 643 P.2d 954, 966 (Cal. 1982); *Harbeson v. Parke-Davis, Inc.*, 656 P.2d 483, 497 (Wash. 1983); *Procanik ex rel. Procanik v. Cillo*, 478 A.2d 755, 765 (N.J. 1984), *rev'd*, 543 A.2d 985 (N.J. Super. Ct. App. Div. 1988).

²⁸⁵ See, e.g., IDAHO CODE ANN. § 5-334(1) (2004); IND. CODE ANN. § 34-12-1-1 (LexisNexis 1998); MICH. COMP. LAWS ANN. § 600.2971(2) (West Supp. 2007), following *Eisbrenner v. Stanley*, 308 N.W.2d 209, 212-13 (Mich. Ct. App. 1981), abrogated by *Taylor v. Kurapati*, 600 N.W.2d 670 (Mich. 1999); MINN. STAT. ANN. § 145.424(1) (West 2005); MO. ANN. STAT. § 188.130(1) (West 2004); N.D. CENT. CODE § 32-03-43 (1996); 42 PA. CONN. STAT. ANN. § 8305(b) (West 2007), following *Ellis v. Sherman*, 515 A.2d 1327, 1329-30 (Pa. 1986); S.D. CODIFIED LAWS § 21-55-1 (2004); UTAH CODE ANN. § 78-11-24 (2002);

²⁸⁶ 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).

²⁸⁷ See *supra* note 65, at 479-80.

The response has been that:

Courts have consistently refused to recognize claims for wrongful life because of the deep-seated ethical dilemma involved.²⁸⁸ 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.”²⁸⁹

Courts have held “...that life itself cannot constitute injury.”²⁹⁰ 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)²⁹¹ or the child.²⁹²

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

²⁸⁸ See, e.g., *Becker v. Schwartz*, 46 N.Y.2d 401, 411-12 (1978) (“[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 theologian.”)

²⁸⁹ See *supra* note 277, at 539 (citing *Berman v. Allan*, 404 A.2d 8, 12 (N.J. 1979)).

²⁹⁰ See Deanna A. Pollard, *Wrongful Analysis and Wrongful Life Jurisprudence*, 55 Ala. L. Rev. 327, 328 (2004).

²⁹¹ See, e.g., *Gleitman v. Cosgrove*, 1967 N.J. LEXIS 203 at 11-12:

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. *Id.* at 14.

²⁹² *Id.* at 10 (“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.”)

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.²⁹³ Those embryos belong²⁹⁴ to the prospective parents, at least until certain contractual events do or do not occur²⁹⁵ 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.²⁹⁶ While many of these facilities would like to do so,²⁹⁷ they are very afraid of litigation.²⁹⁸ They might gain guidance from a very small

²⁹³ See *supra* text accompanying note 60.

²⁹⁴ But see LA. REV. STAT. ANN. § 9:126 (West 2006).

²⁹⁵ See Fontini Antonia Skouvakis, *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) (The author spoke to twenty infertility clinics posing as a potential customer. All stated they utilized “informed consent” forms identifying how pre-embryos would be disposed of.) But see Mundy, *supra* note 39, at 7 (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 recipients disposition options as well. See *Id.* See also the hypothetical scenario discussed at Jonathan Penn, *A Different Kind of Life Estate: The Laws, Rights, and Liabilities Associated with Donated Embryos*, 21 Regent U.L. Rev. 207, 208 (2008-2009) (it 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.”)

²⁹⁶ See Mundy, *supra* note 39, at 7 (“The way it happens is this: 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.* at 4.

²⁹⁷ *Id.* at 7. “People do not want to inherit embryos.”

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.” *Id.* at 8.

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.*

pool of decisions holding that embryo disposition is usually dictated by contract.²⁹⁹ However, not all courts hold such agreements enforceable and almost all of the existing cases arose out of disputes that addressed some aspect of potentially unwanted familial relationships.³⁰⁰ 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*.³⁰¹

In *New York-Del Zio*, the Del Zios underwent in vitro fertilization using Mr. Del Zio’s sperm and Mrs. Del Zio’s egg.³⁰² The co-mingled materials were placed in an incubator.³⁰³ A supervisor learned of the embryo, felt it was his ethical duty to destroy it, consulted hospital officials, and did destroy it.³⁰⁴ The Del Zios brought suit for intentional infliction of emotional distress and wrongful conversion.³⁰⁵ 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.³⁰⁶ 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.³⁰⁷ This is extremely interesting because, if embryos are

²⁹⁸ See Mundy, *supra* n. 39, at 8 (“‘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.’”)

²⁹⁹ See, e.g., *Kass v. Kass*, 355 N.W.2d 335 (Minn. Ct. App. 1984); *Litowitz v. Litowitz*, 48 P.3d 216 (Wash. 2002); *York v. Jones*, 1989 U.S. Dist. LEXIS 7750.

³⁰⁰ See, e.g., *A.Z v. B.Z*, 725 N.E.2d 1051 (Mass. 2000); *J.B. v. M.B*, 751 A.2d 613 (N.J. Super. Ct. App. Div. 2000); *In re Marriage of Witten*, 672 N.W.2d 768 (Iowa 2004).

³⁰¹ 1978 U.S. Dist. LEXIS 11450.

³⁰² *Id.* at 3.

³⁰³ *Id.*

³⁰⁴ *Id.*

³⁰⁵ *Id.* at 1.

³⁰⁶ *Id.* at 11.

³⁰⁷ See Penn, *supra* n. 295, at 213:

not property, some disposal would open the door for wrongful death³⁰⁸ claims, but one court found that it unlikely a defendant could be held responsible for the wrongful death of a human embryo because the claim would be too speculative,³⁰⁹ while another found that the state Wrongful Death Act was not applicable to situations where the embryo was destroyed pre-implantation.³¹⁰ 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 conversion³¹¹ claims, and possibly other causes of action such as trespass to chattels³¹².

B. THE SURROGACY TRADE³¹³

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.

³⁰⁸ For purposes of this article "wrongful death" is defined as "The taking of the life of an individual resulting from the willful or negligent act of another person or persons.) See West's ENCYCLOPEDIA OF AMERICAN LAW, available at <http://www.answers.com/topic/wrongful-death-claim> (last visited Jan. 6, 2011).

³⁰⁹ See Jeter, *supra* note 250, 1256.

³¹⁰ See Miller v. American Infertility Group, 897 N.E.2d 837 (2008). The case, *in dicta*, left open the issue of applicability post-implantation.

³¹¹ While the specific elements of torts vary by jurisdiction, a common definition of "conversion" is "The 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." See <http://www.lectlaw.com/def/c309.htm> (last visited Jan. 7, 2011).

³¹² See Luize E. Zubrow, *Rethinking Article 9 Remedies: Economic and Fiduciary Perspectives*, 42 UCLA L. Rev. 445, 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) (1964).

³¹³ 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 (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).

*“In the absence of statutory law positively governing our decision, we must innovate.”*³¹⁴

1. NEGLIGENCE

The well-established elements of negligence are duty, breach, proximate causation, and damage or injury.³¹⁵ 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 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.³¹⁶ *Stiver v. Parker*³¹⁷ addressed the situation where the surrogate (Stiver) was artificially inseminated with the untested sperm of the prospective father (Malahoff). The resulting child suffered from cytomegalic inclusion disease (“CID”), transmitted through his father’s sperm. The child’s CID symptoms included hearing loss, mental retardation, and severe neuromuscular disorders.³¹⁸ The surrogate, and her husband, brought suit under a negligence claim against the clinic.³¹⁹ The trial court granted summary judgment, finding that the

³¹⁴ *Stiver v. Parker*, 1992 U.S. App. LEXIS 21830, at 17.

³¹⁵ *See Grubbs, supra* note 253.

³¹⁶ The analogy is appropriate as sperm and embryos are both reproductive tissues. *See supra* note 114.

³¹⁷ 1992 U.S. App. LEXIS 21830.

³¹⁸ *Id.* at 2. Interestingly, it was later learned that the surrogate was already pregnant when inseminated. The father of the resulting child was, in fact, her husband and not the clinic’s client. *Id.*

³¹⁹ *Id.* at 7.

broker in a surrogacy arrangement had no legal duty.³²⁰ The court of appeals reversed³²¹ 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.³²² 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 negligence...[t]his strong state interest justifies regulation...in new areas of “baby transfer” made possible by technology.³²³

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*³²⁴ the child of a traditional surrogate died after suffering serious abuse by his father.³²⁵ The surrogate (Huddleston) brought a variety of claims, including negligence, against the infertility clinic contracting her services.³²⁶ 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?”³²⁷ 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

³²⁰ *Id.* at 1.

³²¹ *Id.* at 7 (“We conclude under 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.”)

³²² *Id.* at 20.

³²³ *Id.* at 22-23.

³²⁴ 1997 Pa. Super. LEXIS 2650.

³²⁵ *Id.* at 4.

³²⁶ *Id.* at 1.

³²⁷ *Id.* at 9.

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.³²⁸

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.³²⁹ 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.³³⁰ If embryos are “people”, there could be requisite physical injury.³³¹ If, on the other hand, embryos are property, liability assessment may be assessed under the traditional concept of “bailment.”

2. BAILMENT

A bailment is “the temporary placement of control over, or possession of personal property by one person, the bailor, into the hands of another, the bailee, for a designated purpose upon which the parties have agreed.”³³² 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.³³³ When embryos are property, surrogacy is legally a mutual bailment. In a mutual bailment the bailee must take reasonable care of the bailed property.³³⁴ A bailee who fails to do so may be held liable for any damages incurred from

³²⁸ *Id.* at 17.

³²⁹ While the court did not reach a conclusion on that issue, it noted that other jurisdictions required parties to prospective surrogacy agreements to undergo psychological testing. *Id.* at 19. *See also* Mercer, *supra* note 22 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.”)

³³⁰ *See supra* text accompanying note 260.

³³¹ Some jurisdictions also recognize prenatal torts without specifically finding that an unborn child is a “person in being”. *See, e.g.,* Smith v. Brennan, 31 N.J. 353, 364 (1960).

³³² *See* <http://legal-dictionary.thefreedictionary.com/bailment> (last visited Jan. 9, 2011).

³³³ *Id.*

³³⁴ *Id.*

his or her negligence.³³⁵ While the contention that surrogacy is a bailment will be unconscionable to those against commodification of human reproductive tissue,³³⁶ at least one court has applied bailment law when deciding ownership rights of an embryo.³³⁷ 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.

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.³³⁸ Clarification of a surrogate’s duties may come from a surrogacy contract.³³⁹ 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,³⁴⁰ while surrogate providers should face liability when

³³⁵ *Id.*

³³⁶ *See supra* note 211. One author believes this discussion is much less heated than in the past. *See* Elizabeth Scott, *Surrogacy and the Politics of Commodification*, 72 J.L. & Con’t Problems 108, 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* <http://indiansurrogacylaw.com/surrogacy-agreement.html> (last visited Jan. 3, 2011). 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.

³³⁷ *See* *York v. Jones*, 717 F.Supp. 421 (E.D. Va. 1989).

³³⁸ *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.”)

³³⁹ “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.’” *See Stiver, supra* note 314, at 12, *citing* *Clark v. Dalman*, 379 Mich. 251 (1967).

³⁴⁰ Agreements may require the to-be surrogate promise to refrain from activities such as smoking tobacco, drinking alcohol, or taking other drugs. *See* Golmar Modjtahedi, *Nobody’s Child: Enforcing Surrogacy*

failing to meet contractual duties to surrogates or prospective parents.³⁴¹ This cause of action is viable, but determination of controlling law may be difficult³⁴² 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.

Recommendation – it is unlikely that such restriction would be adopted globally due to political volatility³⁴³ and economic necessity.³⁴⁴ Such a ban would really create fewer good and service providers, likely with even less regulation.³⁴⁵ We do not recommend this ban.

Contracts, 20 Whittier L. Rev. 243, 249 (1998). See also <http://www.information-on-surrogacy.com/best-surrogacy.html> (last visited Jan. 5, 2010).

³⁴¹ See *supra* text accompanying note 218.

³⁴² See *Baiman*, *supra* note 112, 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.

³⁴³ See *supra* n. 87, at 704-705 (discussing Italy’s extreme shift from one of the least ART regulated countries to one that now prohibits egg donorship for ART.) “This problem will only be inflamed as countries continue to change their laws, which are becoming increasingly divergent from one another.” *Id.* at 707.

³⁴⁴ 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, available at <http://www.uslaw.com/bulletin/buying-babies-bit-by-bit.php?p=118> (last visited Jan. 17, 2011).

³⁴⁵ “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.” See *Cortez*, *supra* note 72, at 104.

2. Prediction – there will be a call for the United States to ban embryo donation³⁴⁶ 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.³⁴⁷ While some authors favor “double decker” ART regulation, meaning directives at both the federal and state levels,³⁴⁸ we recommend any other embryo, and all surrogacy regulation, only at the state level,³⁴⁹ We do so for two reasons. First, state courts decide family law issues.³⁵⁰ Second, as detailed in the case law³⁵¹ and demonstrated statutorily,³⁵² the states may have very different public

³⁴⁶ See, e.g., Ann Bindu Thomas, *Avoiding EMBRYOS “R” US: Toward a Regulated Fertility Industry*, 27 Wash. U. L.J. & Pol’y 247271 (2008) (the author advocates 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].”)

³⁴⁷ But see Debra Spar, *Reproductive Tourism and the Regulatory Map*, 352 New Eng. J. Med. 531, 532 (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. and 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. § 274(e) (“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.”)

³⁴⁸ See 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* n. 29, at 188.

³⁴⁹ This would also be in accord with the most current version of the UPA. See *supra* note 102 at Comment following §802, “[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.”

³⁵⁰ 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 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 decisions. See *supra* note 114, at 135 (“Without a clear statutory scope, parties and courts will remain in the dark as to which state law applies in a dispute.”).

³⁵¹ See, e.g., note 186

³⁵² See *supra* text accompanying notes 132-154.

policies regarding embryos and surrogacy.³⁵³ We understand this recommendation will create a lack of uniformity,³⁵⁴ and that some will attempt to exploit lax or nonexistent state laws,³⁵⁵ 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.³⁵⁶ 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

³⁵³ It seems a safe assumption that this is one of the reasons so few states adopted UPA 2002 and none without changes. *See supra* note 100. There was another uniform law proposed as well, *see* Uniform Status of Children of Assisted Conception Act, *available at* <http://www.law.upenn.edu/bll/archives/ulc/fnact99/uscaca88.htm> (last visited Jan. 18, 2011). We find no record of any state adopting this Act.

³⁵⁴ *See* Hugh McLachlan and J. Kim Swales, *Commercial Surrogate Motherhood and the Alleged Commodification of Children: A Defense of Legally Enforceable Contracts*, *available at* <http://law.duke.edu/journals/lcp> (last visited Jan. 3, 2010) (“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 (Cal. Ct. App. 1998) (“...even 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.

³⁵⁵ 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 supra* n. 147, at 98. Keane would become known as the “father of surrogate motherhood”. *Id.*

³⁵⁶ 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 39, 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.* at 5.

increasing liability under causes of action for strict product liability and breach of warranty of fitness for a particular purpose. While 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*,³⁵⁷ with the understanding that a) *Davis* was decided on different grounds;³⁵⁸ b) at a point in time before dramatic ART use growth commenced;³⁵⁹ and c) these are potentially highly volatile issues.³⁶⁰ 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.

³⁵⁷ 842 S.W.2d 604

³⁵⁸ *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.”

³⁵⁹ 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.

³⁶⁰ *See supra* note 213. On a related note, these are exactly the type 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, in light of recent events. *See, e.g., Adam Cohen, Iowa Vote Shows the Injustice of Electing Judges, available at* <http://www.time.com/time/nation/article/0,8599,2030526,00.html> (last visited Jan. 17, 2011). (All three Iowa Supreme Court Justices failed to withstand retention vote after the Court unanimously upheld a pr-gay marriage ruling in the prior term. It was the first time any Justice had been removed since 1962.) This type of movement may just be getting started. *See Removal of Iowa Judges May Inspire Similar Efforts, available at* <http://thegazette.com/2010/11/05/removal-of-iowa-judges-may-inspire-similar-efforts/> (last visited Jan. 17, 2011).

Recommendation – would-be parties must be aware of the laws and public policies of the jurisdictions that may interpret their agreements.³⁶¹ If 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.³⁶² 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.

³⁶¹ See, e.g., *P.G.M. v. J.M.A.*, 2007 Min. App. Unpub. LEXIS 1189. A New York male contracted with a Minnesota female for surrogacy services. The couple executed a written gestational surrogacy agreement “(GSA)” that specified the agreement was governed by Illinois law. The IVF and implantation procedures took place at an Illinois clinic. The Minnesota court applied Illinois law. While this holding is straightforward, this case should not be read too broadly. The court reasoned that “Minnesota courts ‘traditionally enforce parties’ contractual law provisions.’” *Id.* at 7 of 12. However, the court also noted that “Minnesota courts will not enforce an otherwise validly executed contract that contravenes public policy (citation omitted). Contracts violate public policy when they injure some established societal interest (citation omitted).” *Id.* at 9 of 12. The decision came down to the fact that there was no established public policy in Minnesota prohibiting GSAs or the enforcement of GSAs. It 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; Massachusetts’ courts have both upheld choice of law provisions (see *Hodas v. Morin*, 814 N.E.2d 320 (Mass. 2004) and refused to uphold them (see *R.R. v. M.H.*, 689 N.E.2d 790 (Mass. 1998) in surrogacy agreements.

³⁶² See *Gilles Cuniberti, Flying to California to Bypass the French Ban on Surrogacy*, available at <http://conflictoflaws.net/2007/flying-to-california-to-bypass-the-french-ban-on-surrogacy/> (last visited Jan. 17, 2011) (discussing a French couple who flew to California to use the services of an American commercial surrogate as such services are illegal in France. They 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.).