

if
when
how

Lawyering for
Reproductive
Justice

Assisted Reproductive Technology

IF/WHEN/HOW ISSUE BRIEF

Contents

INTRODUCTION	3
ASSISTED REPRODUCTIVE TECHNOLOGY GENERALLY	3
SPERM DONATION	3
ALTERNATIVE INSEMINATION	4
OVA/OOCYTE OR “EGG” DONATION	4
IN VITRO FERTILIZATION	5
COST OF ASSISTED REPRODUCTIVE TECHNOLOGY	6
PRE-IMPLANTATION GENETIC DIAGNOSIS	6
SURROGACY OR GESTATIONAL AGREEMENTS	6
ACCESS TO ART FOR LGBTQ PERSONS	7

INTRODUCTION

If/When/How recognizes that most law school courses are not applying an intersectional, reproductive justice lens to complex issues. To address this gap, our issue briefs and primers are designed to illustrate how law and policies disparately impact individuals and communities. If/When/How is committed to transforming legal education by providing students, instructors, and practitioners with the tools and support they need to utilize an intersectional approach.

If/When/How, formerly Law Students for Reproductive Justice, trains, networks, and mobilizes law students and legal professionals to work within and beyond the legal system to champion reproductive justice. We work in partnership with local organizations and national movements to ensure all people have the ability to decide if, when, and how to create and sustain a family.

ASSISTED REPRODUCTIVE TECHNOLOGY GENERALLY

Assisted Reproductive Technology (“ART”) commonly refers to treatments used to facilitate reproduction, including medications to induce ovulation, in vitro fertilization (“IVF”), and other methods discussed below.¹

- A wide range of individuals turn to ART for numerous and varied reasons. Single people,² queer people,³ and heterosexual couples may seek out ART to overcome infertility in one or both people or to become pregnant. Additionally, people undergoing chemotherapy may also rely on ART.⁴
- One third of cissexual, heterosexual couples experience infertility due to female infertility, another third due to male infertility, and the last one third due to a mix of factors or to unknown factors.⁵ More than 12% of cis women aged fifteen to 44 in the U.S. have an impaired ability to have children.⁶
- People can spend tens of thousands of dollars using ART to become pregnant.⁷ In the U.S., less than half of incorporated for-profit firms and nonprofit firms offer health insurance to employees.⁸ Further, only one in five employers provide infertility treatment benefits to their employees, and each plan differs regarding reimbursement, comprehensiveness of coverage, and eligibility requirements.⁹ As a result, access to appropriate insurance coverage and financial status can limit a person’s access to ART.
- Infertility treatments are not specifically covered by the 2010 **Affordable Care Act (“ACA”)**.¹⁰ The ACA requires that “essential health benefits” be included,¹¹ but each state must define these essential health benefits based on a state-specific “benchmark plan,” for example, Health Maintenance Organization plans.¹² Coverage of infertility treatments are only required for plans sold in states with infertility treatment mandates where coverage is included in the state’s benchmark plan.¹³
 - Under the ACA, states may require coverage in excess of the essential health benefits, but the states must cover the costs of additional benefits.¹⁴ Beginning in 2016, the Department of Health and Human Services may release new rules requiring states to defray the entire costs of their infertility mandate.¹⁵ So far, there are state mandates covering the individual market in eleven states and state mandates covering or offering the small group market in fourteen states.¹⁶
 - Fifteen states require some coverage of infertility diagnosis and treatment by insurers.¹⁷
 - Courts have found that infertility constitutes a disability under the Americans with Disabilities Act (“ADA”).¹⁸ However, insurance plans can avoid violating the ADA by making coverage exclusions apply to fertile and infertile people.¹⁹
 - Moreover, coverage exclusion may not violate Title VII’s Pregnancy Discrimination Act since men and women are equally affected by infertility.²⁰

SPERM DONATION

Sperm donation provides an option for single cis women, cis women in same-sex relationships, and cis heterosexual couples unable to conceive because of male infertility or who wish to avoid genetic risks for inherited disease²¹ or contracted diseases such as HIV/AIDS.²² Those wishing to use donated sperm for alternative insemination (“AI”) or IVF may seek out a known donor or purchase sperm from an anonymous donor from a sperm bank.²³ A patient can expect to pay around \$400 to \$800 per insemination for the sperm, which is normally not covered by insurance.²⁴

- The contractual arrangement between donor and sperm bank may take various forms, but typically outlines the frequency of donation and the terms of compensation.²⁵ Donors may be required to test for sexually-transmitted infection prior to donation, and semen samples may be quarantined for six months pending follow-up testing.²⁶
- Sperm donors are sometimes unprepared for the consequences of donating their genetic material, such as developing a relationship with offspring from sperm donation, or sperm banks not keeping track of the health of offspring or donors.²⁷ Doctors and medical organizations are increasingly encouraging counseling to address sperm donor concerns.²⁸

In 2004, the Food and Drug Administration (“FDA”) approved new regulations for sperm donation, recommending that sperm banks not accept anonymous donations from people assigned male at birth who have had sex with other people assigned male at birth in the last five years to reduce the possibility of HIV and Hepatitis B transmission.²⁹ Advocates argue that the rules promote stereotypes about gay cis men (and often trans women), basing eligibility for donation on sexual orientation rather than scientifically determined risk factors.³⁰ In fact, there have only been “a few documented cases of HIV transmission through sperm donation,” which arose before the advent of current testing procedures and long before the FDA’s donation criteria were developed.³¹ In July 2015, the American Osteopathic Association House of Delegates approved a resolution calling for the end of the FDA’s ban on anonymous sperm donation by men who have sex with men.³²

A large number of patients seeking sperm donation are lesbian couples and single cis women,³³ two groups historically discriminated against by donation clinics, insurance plans, and laws.³⁴ For example:

- One insurer’s plan typically covers fertility treatment, but denied coverage to a lesbian couple because the wives didn’t meet the insurer’s definition of infertility, because they did not have sex with men.³⁵
- A hospital in Florida denied one of its own nurses treatment for artificial insemination, stating that it only reserved donor sperm for married heterosexual couples.³⁶
- Advances in technology now allow doctors to use sperm that traditionally could not be used for a variety of reasons, thus making male infertility rarely an obstacle to reproduction.³⁷ A procedure called intracytoplasmic sperm injection allows embryologists to inject a single sperm into an oocyte (egg), rendering moot fertility problems related to sperm motility.³⁸
- For the most part, sperm donors automatically relinquish rights or obligations to parenting.³⁹ Most states that offer such protections clearly state that when the donor is not the husband of the mother, the donor has no obligation or interest with respect to the child, and the child has no obligation or interest with respect to the donor.⁴⁰
 - Many states only consider sperm donors “true sperm donors” if the insemination process is performed through a licensed physician.⁴¹ In such states, a so-called “informal” sperm donor, whose sperm is used for insemination outside of a doctor’s office, may be subject to child support obligations and may retain paternity and visitation rights.⁴²
 - Some states also consider contracts between mother and donor regarding parental rights as against public policy and render them voidable; however, they may look to the contract to determine the intent of the parties.⁴³

ALTERNATIVE INSEMINATION

Alternative insemination (“AI”), sometimes referred to as artificial insemination, involves the manual procedure of filling a syringe with sperm and inserting and injecting it into the vagina.⁴⁴ AI can be performed successfully at home or in a medical clinic.⁴⁵ Some women combine AI with fertility medications to stimulate increased egg production, increasing the likelihood that one or more of the eggs will be fertilized.⁴⁶ AI’s success rates range from 8% to 15%.⁴⁷

OVA/OOCYTE OR “EGG” DONATION

If a person with a uterus cannot or chooses not to provide their own eggs, they can use ova donated by a third party for IVF.⁴⁸ The practice of egg donation remains largely unregulated in the U.S.⁴⁹

- Egg donors undergo hormonal stimulation and oocyte (egg) extraction.⁵⁰ Far more invasive than sperm donation, the short-term health risks of egg donation include ovarian hyperstimulation syndrome, which can cause serious health complications.⁵¹ Limited follow-up research has left the long-term health implications essentially unknown,⁵² and links to reproductive cancers have not been ruled out.⁵³
- As a result of insufficient studies of long-term health risks, the information that egg donors receive is varied and may fail to provide them with information adequate to return informed consent.⁵⁴ The retrieval of more than fifteen eggs leads to increased risk of complications.⁵⁵ People who donate multiple times may be at an increased risk for ovarian hyper stimulation syndrome and longer term effects.⁵⁶
- Absence of regulation also allows clinics and private solicitors to offer sums of money ranging from \$5,000 to as much as \$100,000 for egg donation, creating a commercial market for reproductive tissue.⁵⁷ While compensation usually falls around the \$5,000 guideline set by the American Society for Reproductive Medicine (“ASRM”),⁵⁸ some individuals or couples may offer up to twenty times more for eggs from people with particular characteristics.⁵⁹ The ASRM recommends that payments for egg donation not exceed \$5,000 to \$10,000 per cycle, as higher payments may lead egg donors to discount risks.⁶⁰ High payments could also be used to promote the birth of children with traits that are so-called “socially desirable,” which is a form of positive eugenics.⁶¹ See the If/When/How Regulation of Pregnant Women Issue Brief for more information on eugenics.⁶²
- Egg donation organizations are often motivated to recruit young people because they are more fertile, and specifically target college campuses to gain access to uterus-bearing people with desirable characteristics, such as high SAT scores, athleticism, musical or mathematical abilities, and specific ethnic makeup.⁶³ Faced with mounting college debt, college-aged people with a uterus become prime targets for egg donation recruiters.⁶⁴

IN VITRO FERTILIZATION

In Vitro Fertilization (IVF) is a method of assisted reproduction in which sperm and the eggs are combined outside of the body, in a laboratory setting. One or more of the fertilized eggs (embryos) may be transferred to the uterus, where the eggs are intended to implant in the uterine lining and develop. Additional embryos may be cryopreserved, or frozen, for future use. The steps in an IVF treatment cycle include ovarian stimulation, egg retrieval, fertilization, embryo culture, and embryo transfer.⁶⁵ IVF accounts for less than 5% of all infertility treatment.⁶⁶

- Up to 20% of IVF treatment cycles may be cancelled during the ovarian stimulation process, or prior to egg retrieval. This process uses hormonal medication to stimulate multiple eggs to grow in the ovaries, as opposed to a single egg that might typically develop each month.⁶⁷
 - Multiple cycles can increase the risk of ovarian hyperstimulation syndrome and can also lead to an increased cost for the parents because they have to go through more cycles to conceive.⁶⁸
- Successful use of IVF depends on a number of factors such as patient characteristics and treatment approaches, which vary by clinic.⁶⁹
- The average IVF treatment cycle in the U.S. costs approximately \$12,400, though multiple cycles may be necessary to successfully conceive, and the cost may not be covered by a person’s health insurance.⁷⁰

Three-person IVF: Technological advancements have now made three-person IVF a reality. Three-person IVF consists of many techniques that create an embryo with genetic material from three different people and result in a germline modification (changes to cells that can be passed on to the future generations of a person’s family).

- The purpose of three-person IVF is to allow a small number of women with rare and severe mitochondrial diseases to have a healthy and mostly genetically related child.
- Although three-person IVF was developed as a means to assist parents with mitochondrial diseases, some countries now allow the technology’s use in non-disease related fertility treatments.⁷¹ Such use is a concern because it may have wide-scale implications of embryonic genetic engineering. However, it could also provide polyamorous couples with a child who shares the DNA of multiple parents.

COST OF ASSISTED REPRODUCTIVE TECHNOLOGY

The cost of a nation's healthcare system tends to be reflective of its overall cost of ART.⁷² The U.S. has the most costly healthcare system in the world, and accordingly, it has the most expensive ART treatments in the world.⁷³

- In addition to medical procedures such as IVF or oocyte retrieval, the direct costs of ART treatment may include medical consultations, ovulation stimulation drugs, laboratory services, ultrasound scanning, hospital charges, and other nursing and administrative overhead charges.⁷⁴
- Treatments receive very little public funding in the U.S., leaving American ART treatment patients to spend close to 50% of their annual disposable income on a single fresh treatment cycle, as opposed to 20% in Northern European countries and as low as 12% in Japan.⁷⁵
- The measure of economic burden placed on a patient to fund their own treatment with ART is a powerful factor in determining whether treatment will be sought.⁷⁶ In the U.S., treatment tends to be used by older, wealthier, more highly educated white women.⁷⁷ State insurance mandates have not reduced racial, ethnic, and educational disparities in access to fertility care.⁷⁸
- Unaffordable and unsubsidized ART treatment can additionally exacerbate a patient's financial burden because it creates a strong financial incentive to limit the number of treatment cycles by transferring a higher number of embryos in each cycle.⁷⁹ Thus, without affordable or subsidized ART treatment, low income women not only suffer from unequal access to care, but can also be predisposed to multiple birth pregnancies that can be costly.

⁸⁰

PRE-IMPLANTATION GENETIC DIAGNOSIS

Pre-implantation genetic diagnosis ("PGD"), also known as pre-implantation genetic screening, allows the testing of embryos created by IVF for a variety of single-gene traits, such as "sex," Down's Syndrome, Tay-Sachs disease, cystic fibrosis, sickle cell disease, Huntington's disease, thalassemia, and muscular dystrophy.⁸¹ Embryos can then be selectively implanted based on the presence or absence of certain characteristics.⁸² Some IVF providers also recommend PGD to patients struggling with infertility, such as multiple miscarriages or several failed IVF cycles, and to patients over the age of thirty-five.⁸³ This represents an extension of PGD's original use as a method to detect inherited genetic illnesses to current efforts to improve success rates in infertility treatment.⁸⁴

- Most insurance companies⁸⁵ as well as the Affordable Care Act⁸⁶ do not cover the cost of PGD. The testing adds between \$4,000 to \$7,500 to the cost of IVF.⁸⁷
- PGD provides a potential alternative to prenatal testing, which occurs once the pregnancy is confirmed.⁸⁸ Some prefer it to screening during pregnancy and performing selective abortion if certain traits are identified.⁸⁹
- PGD sparks controversy because couples use it to avoid passing along genes for certain identifiable conditions and traits to their children. Some argue that PGD resembles eugenics and that de-selecting embryos for disability devalues the lives of those who live with disabilities.⁹⁰ Many object to PGD being used to choose a child of a preferred sex or to select a future child's non-disease traits, such as cosmetic or behavioral qualities.⁹¹ Since wealthy parents are more likely to have the option of selecting their children's genetic characteristics, some fear that unregulated PGD will simply exacerbate current societal inequalities.⁹²
- The U.S. does not currently regulate PGD,⁹³ although some argue for its prohibition beyond screening for a specified set of genes related to disease.⁹⁴
- Other countries, including Australia, France, and Switzerland, prohibit sex selection of embryos for reasons of cultural or parental preference.⁹⁵
- Some scientists believe that there might be a "gay gene."⁹⁶ Although some believe identifying this gene will prove that being gay is not an "unnatural" or chosen lifestyle, others fear that if a "gay gene" is identified, parents may use PGD to deselect embryos that carry it.⁹⁷

SURROGACY OR GESTATIONAL AGREEMENTS

Surrogacy law is complex, varies by state, and is constantly evolving due to case law and statutes. In addition, surrogacy laws may apply differently to married heterosexual couples than to married same-sex couples.⁹⁸ In a

surrogacy agreement, a person with a uterus agrees to carry the fetus and give birth to a child for others to raise.⁹⁹ There are two primary types of surrogacy agreements; in both circumstances, the person who gives birth is typically paid an average of \$25,000 and the overall cost of hiring a surrogate in the U.S. can range anywhere from \$40,000 to \$100,000.¹⁰⁰

- In a **traditional surrogacy arrangement**, the surrogate mother uses her own egg and is artificially inseminated using sperm from an intended donor. The surrogate carries the pregnancy to term and gives birth. However, she must relinquish her parental rights so the child can be raised by the intended parents. In some states traditional surrogacy is illegal.¹⁰¹
 - In a custody dispute between the intended parents and a surrogate, a New Jersey court found equal parental rights in the genetic surrogate and the biological father,¹⁰² but no rights in the intended mother.¹⁰³ Custody then hinged upon the court's judgment of the child's best interests, which it found lay with the biological father and intended mother based on the specific facts of the case.¹⁰⁴
- A **gestational surrogacy arrangement** uses eggs from the intended mother or a donor, fertilized by IVF and implanted into the gestational mother's uterus.¹⁰⁵ The surrogate agrees to carry the resulting fetus to term and to give the baby, upon birth, to the intended parents.¹⁰⁶ In this situation, the gestational mother has no genetic relationship to the baby.¹⁰⁷
 - In 1993, the California Supreme Court held that the gestational surrogate and the genetic mother both have legitimate claims to maternity, so intent became determinative of the parental rights question in the case.¹⁰⁸
- Ethical controversy over surrogacy arises from concerns about exploitation and commodification of motherhood or children.¹⁰⁹
- Military wives are often targeted by surrogacy agencies because a large proportion of them are stay-at-home mothers who completed their families at an early age (surrogacy agencies usually require surrogates to have had healthy full term pregnancies previously¹¹⁰), and may be seeking to supplement their spouses' low overseas military pay.¹¹¹ Surrogacy agencies set up facilities near military bases and distribute flyers in military housing.¹¹²
- Many people now engage in "commercial surrogacy," hiring surrogates from the developing world.¹¹³ The practice is legal in India, where women earn far less than U.S. surrogates (typically \$3,000-\$6,000 versus \$25,000), but far more than India's average daily wage.¹¹⁴ Ethical concerns about such "reproductive tourism" include this wage disparity and lack of legal and health protections for the women acting as surrogates.¹¹⁵
- The laws governing surrogacy agreements vary widely by state:¹¹⁶
 - In CA, CT, DE, NH, NV, OR, RI, and most recently in ME, surrogacy is permitted, pre-birth orders are granted, and both parents are named on the birth certificate.¹¹⁷
 - In AK, AZ, IA, ID, IN, LA, MS, MT, NE, OK, TN, VA, and WY, surrogacy is practiced, but there are sometimes potential legal hurdles or inconsistent results.¹¹⁸
 - In AL, AR, CO, FL, GA, HI, IL, KS, KY, MA, MD, MN, MO, NC, ND, NM, OH, PA, SC, SD, TX, UT, VT, WI, and WV, surrogacy is permitted but results may be dependent on various factors; and in some cases, only a post-birth parentage order is available. In some birth states, additional post-birth legal procedures may be required.¹¹⁹
 - In MI, NJ, NY, and WA, there are statutes or case laws that prohibit compensated surrogacy contracts, or birth certificates naming both parents cannot be obtained.¹²⁰
 - In 2017, the District of Columbia replaced its 20-year old surrogacy law that prohibited and criminalized compensated surrogacy. The new law establishes requirements for surrogacy practices including a prior legal agreement, separate counsel for the agreement phase, medical and mental health evaluations, and approvals of the surrogate, and a joint mental health meeting for all participants. The law allows for traditional and gestational surrogacy. The law does not require an intended parent to be legally married or have a genetic connection to the resulting child.¹²¹

ACCESS TO ART FOR LGBTQ PERSONS

Although legal developments make it unlikely that constitutional restrictions on reproductive technologies would affect access by single people or queer couples,¹²² many queer people seeking ART still face discrimination from

physicians who refuse to treat them,¹²³ in addition to discriminatory regulations, statutes, and legal precedent. For example:

- In *Barros v. Riggall*, a man and his partner filed a complaint with the Orlando Human Rights Board after a Florida clinic refused to offer them fertility treatment.¹²⁴ The men planned to impregnate a consenting surrogate mother, but the clinic claimed that FDA guidelines on anonymous sperm donations prevented the treatment.¹²⁵ Barros has since taken his complaint to the Ninth Judicial Circuit Court of Florida, where it is still pending.¹²⁶
- In *Benitez v. North Coast Women's Medical Group*, Guadalupe Benitez sued a fertility clinic that denied her treatment because she is a lesbian.¹²⁷ The California Supreme Court held that compliance with the state's anti-discrimination law only incidentally affected free speech and the free exercise of religion, meaning religious convictions cannot exempt a business establishment from compliance.¹²⁸

¹ The definition given here is common but broader than most official uses. For example, the Centers for Disease Control and Prevention ("CDC") limits the definition of ART to those procedures that involve the handling of eggs and embryos, and, thus, does not include sperm donation or artificial insemination. *Assisted Reproductive Technology*, CTRES. FOR DISEASE CONTROL, <https://www.cdc.gov/art/whatis.html> (last updated February 2017).

² See Liza Mundy, *Everything Conceivable: How Assisted Reproduction is Changing our World* 154-76 (2008) (discussing both stereotypes and realities regarding single mothers, with statistics and true life stories).

³ *Id.* at 108-53 (describing true life stories of sperm bank use by lesbian women and gay fatherhood).

⁴ See, e.g., *Preserving Fertility in Women with Cancer*, AM. CANCER SOC'Y (Nov. 6, 2013), <https://www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/fertility-and-sexual-side-effects/fertility-and-women-with-cancer/preserving-fertility-in-women.html>.

⁵ U.S. Dep't of Health, *Infertility Fact Sheet*, OFF. ON WOMEN'S HEALTH, <http://womenshealth.gov/publications/our-publications/fact-sheet/infertility.html#> (last updated July 16, 2012).

⁶ *Infertility*, CTRES. FOR DISEASE CONTROL, <http://www.cdc.gov/nchs/fastats/infertility.htm> (last updated July 15, 2016).

⁷ See, e.g., Georgina M. Chambers et al., *Assisted Reproductive Technology Treatment Costs of a Live Birth: An Age-Stratified Cost-Outcome Study of Treatment in Australia*, 184 MED. J. AUSTL. 155, 155 (2006), http://www.mja.com.au/public/issues/184_04_200206/cha10890_fm.html (noting that the average cost of a non-donor ART/IVF live-birth event is \$32,900 Australian dollars or \$28,600 U.S. dollars); *In Vitro Fertilization: IVF*, AM. PREGNANCY ASS'N, <http://americanpregnancy.org/infertility/in-vitro-fertilization/> (last updated Sept. 2014).

⁸ *Percent of Private Sector Establishments That Offer Health Insurance to Employees*, KAISER FAM. FOUND., <http://www.kff.org/other/state-indicator/percent-of-firms-offering-coverage/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D> (last visited June 8, 2017).

⁹ *Health Insurance 101*, RESOLVE: THE NAT'L INFERTILITY ASS'N, http://www.resolve.org/family-building-options/insurance_coverage/health-insurance-101.html (last visited July 7, 2016).

¹⁰ *The Affordable Care Act and Infertility*, RESOLVE: THE NAT'L INFERTILITY ASS'N, <http://www.resolve.org/get-involved/the-center-for-infertility-justice/public-policy/the-affordable-care-act-and-infertility.html> (last updated Feb. 17, 2014).

¹¹ *Id.*; *Essential Health Benefits*, HEALTHCARE, <https://www.healthcare.gov/glossary/essential-health-benefits> (last visited July 2, 2015) (ten categories including maternity and newborn care).

¹² *The Affordable Care Act and Infertility*, *supra* note 9.

¹³ *Id.*

¹⁴ *Id.*

¹⁵ *Id.*

¹⁶ *Mandated Coverage of Infertility Treatment*, KAISER FAMILY FOUND. (Dec. 2015), (<http://kff.org/womens-health-policy/state-indicator/infertility-coverage/#note-2>) (individual market: AR, CT, HI, MD, MA, MT, NJ, NY, OH, RI, WV; small group market: AR, CT, HI, IL, MD, MA, MT, NJ, NY, OH, RI, WV, CA, TX).

¹⁷ *State Laws Related to Insurance Coverage for Infertility Treatment*, NAT'L CONF. OF ST. LEGS., <http://www.ncsl.org/issues-research/health/insurance-coverage-for-infertility-laws.aspx> (last updated June 1, 2014) (AR, CA, CT, HI, IL, LA, MD, MA, MT, NJ, NY, OH, RI, TX, and WV).

¹⁸ See, e.g., *LaPorta v. Wal-Mart Stores, Inc.*, 163 F. Supp. 2d 758, 763 (W.D. Mich. 2001); *Pacourek v. Inland Steel Co.*, 916 F. Supp. 797, 801-04 (N.D. Ill. 1996).

¹⁹ See, e.g., *Krauel v. Iowa Methodist Med. Ctr.*, 95 F.3d 674, 678 (8th Cir. 1996) (finding insurance plan exclusion "not [to be] a disability-based distinction in violation of the ADA" because "the Plan's infertility exclusion applies equally to all individuals, in that no one participating in the Plan receives coverage for treatment of infertility problems.").

²⁰ See, e.g., *Saks v. Franklin Covey Co.*, 316 F.3d 337, 345-46 (2d Cir. 2003) (finding "discrimination based on 'childbearing capacity'" is a violation but "discrimination based on 'fertility alone'" is not because "the PDA requires that pregnancy, and related conditions, be properly recognized as sex-based characteristics of women").

- ²¹ *Sperm Donation – Finding a Sperm Donor*, FERTILITY AUTH., <http://www.fertilityauthority.com/treatment/sperm-donation-finding-donor> (last visited July 7, 2016).
- ²² AM. SOC'Y FOR REPROD. MED. ETHICS COMM., *Human Immunodeficiency Virus (HIV) and Infertility Treatment: a committee opinion*, 94 FERTILITY AND STERILITY 11, 11, (last revised Apr. 2, 2015), http://www.reproductivefacts.org/uploadedFiles/ASRM_Content/News_and_Publications/Ethics_Committee_Reports_and_Statements/hiv_ethics.pdf.
- ²³ *Sperm Donation*, *supra* note 20.
- ²⁴ *Cost of Clinical Insemination*, IT'S CONCEIVABLE (June 2, 2011), <http://itsconceivablenow.com/2011/06/02/cost-of-clinical-insemination/>.
- ²⁵ See Rene Almeling, *Selling Genes, Selling Gender: Egg Agencies, Sperm Banks, and the Medical Market in Genetic Material*, 72 AM. SOC. REV. 319, 320 (2007); See Lauren Gill, *Who's Your Daddy? Defining Paternity Rights in the Context of Free, Private Sperm Donation*, 54 WM. & MARY L. REV. 1715, 1730 (2013).
- ²⁶ AM. SOC'Y FOR REPROD. MED., *THIRD PARTY REPRODUCTION (SPERM, EGG, AND EMBRYO DONATION AND SURROGACY): A GUIDE FOR PATIENTS REVISED 2012*, 10-11 (2012), http://www.asrm.org/uploadedFiles/ASRM_Content/Resources/Patient_Resources/Fact_Sheets_and_Info_Booklets/thirdparty.pdf [hereinafter ASRM Third Party Reprod.].
- ²⁷ See Rachel Lehmann-Haupt, *Mapping the God of Sperm*, NEWSWEEK (Dec. 15, 2009), <http://www.newsweek.com/2009/12/15/mapping-the-god-of-sperm.html> (exploring a frequent sperm donor's qualms about early sperm bank screening processes. *But see* Dr. Marcus, *Sperm Donation*, IVF-INFERTILITY.COM (last updated Apr. 8, 2012) <http://www.ivf-infertility.com/donation/sperm/sperm4.php> (explaining how donor counseling creates awareness of sperm donation consequences).
- ²⁸ See, e.g., *Sperm Donation*, FERTILITYFACTOR.COM, http://www.fertilityfactor.com/infertility_medical_options_sperm_donor.html (last visited July 7, 2016) (recommending “all people involved in the sperm donation process undergo psychological counseling”). *But see* Kay Miller, *Needs of Sperm Donors, Offspring at Odds*, STAR TRIB. (FEB. 19, 2007), <http://www.azcentral.com/families/articles/0219spermdonors0220.html?&wired> (noting that the needs of donors and resulting offspring differ).
- ²⁹ U.S. DEP'T OF HEALTH, FDA, *GUIDANCE FOR INDUSTRY: ELIGIBILITY DETERMINATION FOR DONORS OF HUMAN CELLS, TISSUES, AND CELLULAR AND TISSUE-BASED PRODUCTS (HCT-PS) 14* (Aug. 2007), <http://www.fda.gov/downloads/BiologicsBloodVaccines/GuidanceComplianceRegulatoryInformation/Guidances/Tissue/ucm091345.pdf>.
- ³⁰ See *New FDA Tissue Transplant Rules Require STD Testing for Sperm, Egg Donation, Bar MSM, Injection Drug Users from Donating*, KAISER FAMILY FOUND. (May 21, 2004), <http://www.kaiserhealthnews.org/Daily-Reports/2004/May/21/dr00023827.aspx>.
- ³¹ *FDA's Ban On Gay Men's Anonymous Sperm Donation*, HUFFINGTON POST (Aug. 28, 2012), http://www.huffingtonpost.com/2012/08/28/fda-gay-men-sperm-donation-ban-n_1836238.html.
- ³² Rose Raymond, *House supports ending ban on sperm donation by gay men*, THE DO (July 20, 2015), <http://thedo.osteopathic.org/2015/07/house-supports-ending-ban-on-sperm-donation-by-gay-men/>.
- ³³ Mundy, *supra* note 2 at 83; Almeling, *supra* note 24 at 325.
- ³⁴ Judith F. Daar, *Accessing Reproductive Technologies: Invisible Barriers, Indelible Harms*, BEPRESS LEGAL SERIES 27-31 (2007), <http://law.bepress.com/cgi/viewcontent.cgi?article=9475&context=expresso>. For an example of a discriminatory opinion, see Kathleen Parker, *Deleting Dad*, REAL CLEAR POLITICS (Mar. 22, 2006), http://www.realclearpolitics.com/articles/2006/03/deleting_dad.html (calling single women “narcissistic” for giving birth to “fatherless” children who are treated as “accessories”). For an example of IVF-related issues facing lesbian couples, see AMY AGIGIAN, *BABY STEPS: HOW LESBIAN ALTERNATIVE INSEMINATION IS CHANGING THE WORLD* 75 (2004) (explaining that lesbian couples face those same criticisms, as well as paternity claim concerns and exclusion by insurance companies).
- ³⁵ Stephanie Fairington, *Should Same-Sex Couples Receive Fertility Benefits?*, N.Y. TIMES (Nov. 2, 2015, 2:55 PM), <http://well.blogs.nytimes.com/2015/11/02/should-same-sex-couples-receive-fertility-benefits/>.
- ³⁶ Molly M. Ginty, *Single Mothers-to-Be Face Bias, Race Ticking Clock*, WOMENS E NEWS (June 18, 2004), <http://womensenews.org/2004/06/single-mothers-be-face-bias-race-ticking-clock/>.
- ³⁷ Mundy, *supra* note 2 at 77; ASRM Third Party Reprod., *supra* note 25 at 9.
- ³⁸ *Intracytoplasmic Sperm Injection (ICSI)*, UCSF MED. CTR., CTR. FOR REPROD. HEALTH, http://coe.ucsf.edu/ivf/intracytoplasmic_sperm_injection.html (last visited June 14, 2017).
- ³⁹ Jason Cheung, *Sperm Donor Parental Rights/Obligations*, LEGAL MATCH (May 14, 2015), <http://www.legalmatch.com/law-library/article/sperm-donor-parental-rightsobligations.html>.
- ⁴⁰ *Id.*
- ⁴¹ *Id.*
- ⁴² *Id.*
- ⁴³ *Id.*
- ⁴⁴ ASRM Third Party Reprod., *supra* note 25 at 11.
- ⁴⁵ Emily Galpern, *Assisted Reproductive Technologies: Overview and Perspective Using a Reproductive Justice Framework*, CTR. FOR GENETICS AND SOC'Y 9 (2007), <http://geneticsandsociety.org/downloads/ART.pdf>.
- ⁴⁶ *Id.*
- ⁴⁷ ASRM Third Party Reprod., *supra* note 25 at 12 (noting the success rates “depend on many factors,” including age and fertility complications).
- ⁴⁸ *Id.* at 4.

- ⁴⁸ See Emily Galpern and Edith Sargon, *Young Women, Egg “Donation” and Reproductive Justice*, THE PRO-CHOICE PUB. EDUC. PROJECT, <http://protectchoice.org/article.php?id=126> (last visited June 14, 2017) [hereinafter *Young Women Egg Donation*].
- ⁴⁹ American Society for reproductive Medicine, *Assisted Reproductive Technologies: A Guide for Patients* 14, AM. SOC’Y FOR REPROD. MED., (2011), http://www.asrm.org/uploadedFiles/ASRM_Content/Resources/Patient_Resources/Fact_Sheets_and_Info_Booklets/ART.pdf. [hereinafter ASRM Assisted Reprod. Tech.].
- ⁵⁰ Practice Committee of the ASRM, *Repetitive Oocyte Donation*, 90 FERTILITY AND STERILITY SUPP. 3 S194 (2009), [http://www.reproductivefacts.org/uploadedFiles/ASRM_Content/News_and_Publications/Practice_Guidelines/Committee_Opinions/Repetitive_oocyte\(1\).pdf](http://www.reproductivefacts.org/uploadedFiles/ASRM_Content/News_and_Publications/Practice_Guidelines/Committee_Opinions/Repetitive_oocyte(1).pdf). [hereinafter *Repetitive Oocyte Donation*].
- ⁵¹ Jessica Arons, *Future Choices: Assisted Reproductive Technologies and the Law*, CTR. FOR AM. PROGRESS, 6 (2007), http://cdn.americanprogress.org/wp-content/uploads/issues/2007/12/pdf/arons_art.pdf; See Naomi Cahn, *The New Kinship*, 100 GEO. L.J. 367, 376 (2012).
- ⁵² *Repetitive Oocyte Donation*, *supra* note 51.
- ⁵³ Justine Durrell, *Women’s Eggs: Exceptional Endings*, 22 HASTINGS WOMEN’S L.J. 187, 188 (2011).
- ⁵⁴ Robert Preidt, *Births From Fertility Treatment Hit 5 Million Mark: Report*, HEALTHDAY NEWS (Oct. 14, 2013), <http://consumer.healthday.com/infertility-information-22/infertility-news-412/births-from-fertility-treatments-hit-5-million-mark-report-680978.html>.
- ⁵⁵ *Id.*
- ⁵⁶ Arons, *supra* note 52 at 6.
- ⁵⁷ *Id.*; David Tuller, *Payment Offers to Egg Donors Prompt Scrutiny*, N.Y. TIMES, May 10, 2010, at D5, <http://query.nytimes.com/gst/fullpage.html?res=940CE4DB1238F932A25756C0A9669D8B63&scp=1&sq=&st=nyt>; Almeling, *supra* note 24 at 325-26 (noting that whereas sperm donor solicitation emphasizes monetary compensation, egg donor solicitation emphasizes altruism).
- ⁵⁸ Arons, *supra* note 52 at 6.
- ⁵⁹ Am. Soc’y for Reprod. Med. Ethics Comm., *Financial Compensation of Oocyte Donors*, 88 FERTILITY AND STERILITY 305, 306&308 (2007), http://www.asrm.org/uploadedFiles/ASRM_Content/News_and_Publications/Ethics_Committee_Reports_and_Statements/financial_incentives.pdf.
- ⁶⁰ *Id.* at 306
- ⁶¹ If/When/How, *Regulation of Pregnant Women*, IF/WHEN/HOW (2016), <http://www.ifwhenhow.org/resources/regulation-of-pregnant-women/>.
- ⁶² *Young Women Egg Donation*, *supra* note 49.
- ⁶³ *Id.*
- ⁶⁴ *Assisted Reproductive Technology: A Guide for Patients*, AM. SOC’Y FOR REPROD. MED., <http://www.reproductivefacts.org/globalassets/rf/news-and-publications/bookletsfact-sheets/english-fact-sheets-and-info-booklets/art.pdf>, (last visited June 14, 2017).
- ⁶⁵ *Frequently Asked Questions About Infertility*, AM. SOC’Y FOR REPROD. MED., <http://www.reproductivefacts.org/faqs/frequently-asked-questions-about-infertility/> (last visited June 14, 2017).
- ⁶⁶ *Assisted Reproductive Technology: A Guide for Patients*, AM. SOC’Y FOR REPROD. MED., <http://www.reproductivefacts.org/globalassets/rf/news-and-publications/bookletsfact-sheets/english-fact-sheets-and-info-booklets/art.pdf>, (last visited June 14, 2017).
- ⁶⁷ *Id.*
- ⁶⁸ *Id.*
- ⁶⁹ Adrienne Asch and Rebecca Marmor, *Assisted Reproduction*, HASTINGS CTR. (2008), <http://www.thehastingscenter.org/Publications/BriefingBook/Detail.aspx?id=2210>; Elizabeth O’Brien, *10 Things Fertility Clinics Won’t Tell You*, N.Y. POST (June 8, 2014), <http://nypost.com/2014/06/08/10-things-fertility-clinics-wont-tell-you/>.
- ⁷⁰ Andy Coghlan, *‘3-Parent’ Baby Method Already Used for Infertility*, NEW SCIENTIST (Oct. 10, 2016), <https://www.newscientist.com/article/2108549-exclusive-3-parent-baby-method-already-used-for-infertility/>.
- ⁷¹ Mark P. Connelly et al., *The Costs and Consequences of Assisted Reproductive Technology: An Economic Perspective*, 16 HUM. REPROD. UPDATE 603, 605 (2010), <http://humupd.oxfordjournals.org/content/16/6/603.full.pdf+html>.
- ⁷² *Id.*
- ⁷³ *Id.*
- ⁷⁴ *Id.* at 607.
- ⁷⁵ *Id.*
- ⁷⁶ *Id.*
- ⁷⁷ Mark P. Connelly et al., *supra* note 70 at 607.
- ⁷⁸ *Id.* at 608.
- ⁷⁹ *Id.* at 609.
- ⁸⁰ *Preimplantation Genetic Diagnosis*, FERTILITY INST., <http://fertilityinstitute.com/treatments/other-treatments/preimplantation-genetic-diagnosis/> (last visited June 13,).
- ⁸¹ *Id.*

- ⁸³ EMORY UNIV. SCH. OF MED., DEP'T OF HUMAN GENETICS, *Preimplantation Genetic Screening* 1 (2006), <http://genetics.emory.edu/documents/resources/factsheet41.pdf>; Nicole C. Schuppner, *Preimplantation Genetic Diagnosis: A Call for Public Sector Implementation of Private Advocacy Regulation*, 14 MICH. ST. U. J. MED. & L. 443, 444 (2010).
- ⁸⁴ Susannah Baruch, *Preimplantation Genetic Diagnosis and Parental Preferences: Beyond Deadly Disease*, 8 HOUS. J. HEALTH L. & POL'Y 245, 248, 252 (2008), <http://www.councilforresponsiblegenetics.org/pagedocuments/dexe8awpj8.pdf>.
- ⁸⁵ PGD – *Preimplantation Genetic Diagnosis*, IVF1.COM, <http://www.ivf1.com/pgd/> (last visited July 7, 2016).
- ⁸⁶ *The Affordable Care Act and Infertility*, *supra* note 9.
- ⁸⁷ *Pre-Implantation Genetic Diagnosis (PGD)*, REPROD. HEALTH TECHS. PROJECT, <http://www.rhnp.org/fertility/pgd/default.asp> (last visited July 7, 2016).
- ⁸⁸ *About Genetic Selection*, CTR. FOR GENETICS AND SOC'Y, <http://www.geneticsandsociety.org/article.php?list=type&type=82> (last visited July 7, 2016).
- ⁸⁹ *Values and Religious Beliefs*, HEALTH TALK ONLINE, <http://www.healthtalk.org/peoples-experiences/pregnancy-children/screening-sickle-cell-and-beta-thalassaemia/values-and-religious-beliefs> (last reviewed Aug. 2012).
- ⁹⁰ *PGD Frequently Asked Questions*, CTR. FOR GENETICS AND SOC'Y, <http://www.geneticsandsociety.org/article.php?id=452> (last updated Mar. 1, 2010).
- ⁹¹ See Brandon Keim, *Designer Babies: A Right to Choose?*, WIRED (Mar. 9, 2009), <http://www.wired.com/wiredscience/2009/03/designerdebate>.
- ⁹² Marcy Darnovsky, Presentation at “Gender and Justice in the Gene Age, *Challenges of Emerging Technologies: Reproductive Cloning and Inheritable Genetic Modification* (May 7, 2004), <http://www.geneticsandsociety.org/article.php?id=3129>; JOAN C. CHRISLER, REPROD. JUSTICE: A GLOBAL CONCERN, ABC-CLIO, LLC 187 (2012).
- ⁹³ Gautam Naik, *A Baby, Please. Blond, Freckles – Hold the Colic*, WALL ST. J. (Feb. 12, 2009), <http://online.wsj.com/article/SB123439771603075099.html>.
- ⁹⁴ Michael J. Sandel, *The Case Against Perfection*, THE ATLANTIC (Apr. 2004), <http://www.theatlantic.com/magazine/archive/2004/04/the-case-against-perfection/302927/>.
- ⁹⁵ Rosario M. Isahi & Bartha M. Knoppers, REGULATORY APPROACHES TO REPRODUCTIVE GENETIC TESTING, 19 HUM. REPROD. 2695, 2697 (Sept. 23, 2004), <https://jscholarship.library.jhu.edu/bitstream/handle/1774.2/994/RegulatingReproGenetics.pdf>.
- ⁹⁶ Jenny Graves, *How Our Genes Could Make Us Gay or Straight*, WASH. POST (June 4, 2014), <http://www.washingtonpost.com/posteverything/wp/2014/06/04/the-science-of-sexuality-how-our-genes-make-us-gay-or-straight/>.
- ⁹⁷ John A. Robertson, *Reproductive Rights and Reproductive Policy in 2030*, BROOKINGS (Jan. 21, 2011), http://www.brookings.edu/~media/research/files/papers/2011/1/21-reproductive-technology-robertson/0121_reproductive_technology_robertson.pdf; Edgar Dahl, *Ethical Issues in New Uses of Preimplantation Genetic Diagnosis*, 18 HUM. REPROD. 1368, 1368 (2003), <http://humrep.oxfordjournals.org/content/18/7/1368.full.pdf+html> (arguing that the fear is misplaced because if parents are allowed to deselect the “gay gene,” they should also be entitled to select it).
- ⁹⁸ *U.S. Surrogacy Map*, CREATIVE FAM. CONNECTIONS, <http://www.creativefamilyconnections.com/us-surrogacy-law-map>, (last visited June 14, 2017).
- ⁹⁹ Galpern, *supra* note 45 at 11.
- ¹⁰⁰ *Id.*
- ¹⁰¹ *Surrogacy*, AM. ACAD. OF ASSISTED REPROD. TECHN. ATT'YS, <http://www.adoptionattorneys.org/aaarta/surrogacy/surrogacy> (last visited June 12, 2017).
- ¹⁰² *In re Baby M.*, 537 A.2d 1227, 1247 (N.J. 1988).
- ¹⁰³ *Id.* at 1244.
- ¹⁰⁴ *Id.* at 1258-59.
- ¹⁰⁵ ASRM Third Party Reprod., *supra* note 25 at 3.
- ¹⁰⁶ *Id.*
- ¹⁰⁷ *Id.*
- ¹⁰⁸ *Johnson v. Calvert*, 851 P.2d 776, 782 (Cal. 1993).
- ¹⁰⁹ *E.g.*, *In re Baby M.*, 537 A.2d at 1249-51; See also Almeling, *supra* note 24; *Surrogacy Issues—Exploitation of the Poor*, INFO. ON SURROGACY, <http://www.information-on-surrogacy.com/surrogacy-issues.html> (last visited July 7, 2016).
- ¹¹⁰ See, e.g., *Surrogate Mother Requirements*, FERTILITY SOURCE COS., <http://www.fertilitysourcecompanies.com/surrogacy/surrogate-mother-requirements/>, (last visited July 7, 2016).
- ¹¹¹ Lorraine Ali, *The Curious Lives of Surrogates*, NEWSWEEK MAG. (Mar 29, 2008), <http://www.newsweek.com/curious-lives-surrogates-84469>.
- ¹¹² *Id.*
- ¹¹³ See Amelia Gentleman, *India Nurtures Business of Surrogate Motherhood*, N.Y. TIMES (Mar. 10, 2008), http://www.nytimes.com/2008/03/10/world/asia/10surrogate.html?pagewanted=1&_r=1.
- ¹¹⁴ *Id.*; Galpern, *supra* note 45 at 11-12.
- ¹¹⁵ Galpern, *supra* note 45 at 17; Gentleman, *supra* note 111.

¹¹⁶ *Surrogacy Laws and Legal Consideration*, HUM. RTS. CAMPAIGN, <http://www.hrc.org/resources/entry/surrogacy-laws-and-legal-considerations> (last visited July 7, 2016). See *U.S. Surrogacy Laws by State*, SURROGACY EXPERIENCE, <http://www.thesurrogacyexperience.com/surrogates.cfm?sc=23&p=99> (last visited July 7, 2016).

¹¹⁷ *Gestational Surrogacy Law across the United States*, CREATE FAMILY CONNECTIONS, <http://www.creativefamilyconnections.com/us-surrogacy-law-map> (last visited July 7, 2016).

¹¹⁸ *Id.*

¹¹⁹ *Id.*

¹²⁰ *Id.*

¹²¹ Michael Alison Chandler, *With New Surrogacy Law, D.C. Joins Jurisdictions that are Making It Easier for Gay and Infertile Couples to Start Families*, THE WASH. POST (June 3, 2017), https://www.washingtonpost.com/local/social-issues/with-new-surrogacy-law-dc-joins-jurisdictions-that-are-making-it-easier-for-gay-and-infertile-couples-to-start-families/2017/06/03/845c90d4-3c99-11e7-8854-21f359183e8c_story.html?utm_term=.291724579994.

¹²² *Access to Fertility Treatment by gays, lesbians, and unmarried persons: a committee opinion*, 100 AM. SOC'Y FOR REPROD. MED. ETHICS COMM. REP. 1524, 1525 (2009), http://www.asrm.org/uploadedFiles/ASRM_Content/News_and_Publications/Ethics_Committee_Reports_and_Statements/fertility_gayles_unmarried.pdf.

¹²³ *Id.* at 1526.

¹²⁴ *Barros v. Riggall*, LAMBDA LEGAL, <http://www.lambdalegal.org/in-court/cases/barros-v-riggall> (last visited July 7, 2016).

¹²⁵ *Id.*

¹²⁶ *Health Care Fairness for LGBT People and People Living with HIV: Lambda Legal's Health Care Docket*, LAMBDA LEGAL, https://www.lambdalegal.org/sites/default/files/publications/downloads/fs_health-care-fairness-for-lgbt-people-and-people-living-with-hiv_1.pdf (last visited July 7, 2016); Petition for a Writ of Certiorari, for a Writ of Mandamus and for Declaratory Relief, *Barros v. Office of Human Relations et al.*, No. 2009-CA-12387-O, <http://www.ninthcircuit.org/sites/default/files/09-61.pdf>.

¹²⁷ *N. Coast Women's Care Med. Grp., Inc. v. San Diego Cty. Super. Ct.*, 189 P.3d 959, 964 (2008).

¹²⁸ *Id.* at 966.