A Study Guide on the Legal, Medical, and Ethical Questions of Third Party Reproduction
In the years following the release of our documentary film Eggsploitation, we've had numerous requests for study guide materials to accompany our documentaries and to expand on the issues presented in the films. The following study guide is our first effort to meet these demands. This guide is intended for a wide audience, as we aim to meet the needs of high school groups, university students, law groups, church groups, and any other group interested in the issues of third party reproduction.

**Purpose**

The study materials included here are divided into three issues: egg donation, sperm donation, and surrogacy. Each issue contains a general overview and then sections that provide key facts on the issue, questions for group discussion, questions related to the accompanying documentary, and further suggested readings or research materials. Throughout the guide we include stories of individuals and families affected by these issues that are aimed to enhance the discussion process.

For further information, questions, and/or other requests, please contact Christopher White at The Center for Bioethics and Culture Network christopher@cbc-network.org

**How to Use This Guide**

The study materials included here are divided into three issues: egg donation, sperm donation, and surrogacy. Each issue contains a general overview and then sections that provide key facts on the issue, questions for group discussion, questions related to the accompanying documentary, and further suggested readings or research materials. Throughout the guide we include stories of individuals and families affected by these issues that are aimed to enhance the discussion process.
EGG DONATION

Quick Facts

- Women are born with approximately one- to two-million oocytes (eggs). By the time a woman reaches puberty, average age being about 12 years, she has roughly 300,000 to 400,000 eggs remaining.

- On average, 1,000 eggs are lost each month during her reproductive years, from the onset of puberty to menopause. Through a process of atresia, eggs degenerate so that by the time a woman reaches menopause, she has no remaining eggs.

- Fertility drops dramatically by the time women reaches her mid-thirties due to decline in egg quality and egg quantity. By the time a woman is in her early forties, this decline is even more pronounced, making it nearly impossible to conceive using her own eggs.

- It is unknown how many women egg donors exist in the U.S. at any given time since there is no federal registry or national database that keeps track of egg donors. The most recent data we have is from 2010, from the Centers for Disease Control and Prevention. It shows that in the United States alone, almost 17,000 cycles were performed using donor eggs. The demand for reproductive eggs far exceeds the number of egg donors available, which is why egg donor compensation is so high, and why scientists have resorted to using animal eggs for research.
Reproductive technology in the 21st century operates with enormous reliance on “donated” human eggs, meaning dependence on young, fertile women for the eggs their bodies produce. The effect of this practice is to commodify women’s bodies. The 2010 Centers for Disease Control & Prevention (CDC) report on Assisted Reproductive Technology (ART) found that almost 17,000 cycles (the administration of drugs to induce egg production in the ovaries) were performed in the U.S. using “donor” eggs. In 2007, in the U.S. alone, the infertility industry was an estimated $6.5 billion for-profit business, and growing exponentially.

This summary addresses four issues that demonstrate that the rights of both women and children are being violated. These issues include:

1. Coercion of “donors”
2. Eugenic commodification of egg providers
3. Health risks to suppliers and recipients
4. Effects of third party reproduction on the children produced
Donor Coercion
Egg providers are enticed through ads in online classifieds, social media, and college newspapers, offering anywhere from $5,000 to $100,000 per extraction. Ads invoke language appealing to the altruism of potential providers, calling for sympathy toward infertile couples desperate to have a child, and suggesting that there is a duty to help such people have children. These ads are markedly coercive and manipulative of young college-aged women as they directly appeal to their financial need and so-called “maternal instincts.” Moreover, it is not required for these ads to make any mention of the health risks involved or reveal the lack of studies conducted—essential information to enable truly informed decision-making and consent. Setting a further dangerous precedent for exploitation of women and their health and human rights, in June 2009, New York became the first U.S. state to use taxpayer funds to financially compensate (up to $60,000) women for eggs harvested for research, meaning women’s eggs would be used for research rather than reproductive purposes. More recently, in August 2013, California Governor Jerry Brown vetoed a bill that would have allowed for the selling of eggs for research, noting that “Not everything in life is for sale, nor should it be… This bill would legalize the payment of money in exchange for a woman submitting to invasive procedures to stimulate, extract and harvest her eggs for scientific research.”

In addition, those seeking eggs often target young women at elite universities with high SAT scores, good looks, athletic and artistic talents, and preferred ethnic/racial backgrounds. When eggs are sought for stem cell research, the floodgates open to exploitation of low income and poor women, largely from communities of color. Competition for human eggs is a reality while awareness of or concern for the young women supplying them is generally nonexistent.

Eugenic Commodification
As mentioned above, egg “donation” ads commonly specify racial, physical, and intellectual characteristics, seeking women of a particular ethnicity such as Jewish or Asian, with height requirements of 5’9” or taller, with an SAT score of 1500 or higher, physical attractiveness with “good genes” and a clean bill of health. The wider
cultural effect is to view women’s bodies as reproductive gold mines, commodities to be exploited. This degrades not just the women providing their eggs but all women as it selects out “undesirable” traits through artificial reproductive technologies.

In addition, there is a likely discrimination that will take place against poorer women as eggs are sought for research. Whereas couples looking for donor eggs carefully select their egg donor based on particular characteristics, researchers will likely prey on vulnerable poor women who are desperate for money in an effort to convince them to sell their eggs.

Health Risks
Egg “donation” has been practiced for more than 30 years and is now accepted as a normal part of ART procedures. The medical process required for egg retrieval, however, is lengthy and there are medical hazards associated with each step. In spite of known short term and unknown long-term risks, there is little to no peer-reviewed medical research on the effects of egg procurement on the health of the young women who provide these eggs. This makes it impossible for fertility clinics to provide adequate information for informed consent relative to the health risks involved. It also raises the ethical concern of who should be entrusted to provide the information to the women giving their consent. Conflicts of interest arise when those who want the eggs inform those who supply the eggs. In other words, would the fox inform the hens of the dangers they faced before entering the hen house?

The lack of statistical short- and long-term data on egg supplier health, post-extraction surgery, is caused primarily by the lack of regulation of fertility clinics and the industry as a whole. Regulation would require them to maintain and monitor egg supplier data registries. Currently, there is no requirement to follow-up the women who provide their eggs—once the extraction is over, the women are forgotten in medical history. Since the infertility industry makes billions in profits, they fight tooth-and-nail against any oversight or regulation. It is no accident that the U.S. is referred to as the “Wild West” of infertility treatment and a major destination of “fertility tourists.” Clearly, the absence of data does not imply absence of risk; when cigarettes were first marketed, no data existed about their health risks.

Stories of bad results suffered by former egg suppliers have surfaced over the past several years with increasing frequency. As awareness grows of egg “donation” and ART, more women are speaking up about harrowing
personal experiences and both the short and long-term health conditions they are now suffering. These conditions include ovarian hyperstimulation syndrome (OHSS), loss of fertility, ovarian torsion, blood clots, kidney disease, premature menopause, ovarian cysts, chronic pelvic pain, stroke, reproductive cancers, and in some cases, death. OHSS is caused by the process of superovulation and is well-documented in the medical literature as a risk associated with women who take fertility drugs to stimulate ovulation. It is also documented in the literature that young women are more at risk for OHSS because the ovaries of a younger woman are more responsive to hormones used called gonadotropins due to a higher density of gonadotropins receptors (or a larger number of follicles able to respond). A recent study has also indicated increased maternal morbidity in women using an egg from someone else, with considerable risk of pregnancy-induced hypertension.

Effects on Children Produced
Egg “donation” is largely anonymous. Recently, adult children conceived by gamete provision have begun to advocate for greater transparency about their biological roots. This indicates growing awareness of the importance of personal connections to our biological parents and the necessity of genetic information for one’s health and disease susceptibility. Personal dignity and human rights insist on the right of the child to information regarding her or his biological origins and genetic history.

The very nature of egg sale and procurement are biologically disconnected and commodifying. This indicates inherent moral and ethical problems with the practice. Finally, the specter of eugenics looms over the widespread use of egg procurement like an ominous cloud. One need only look at the genocide produced by eugenic attempts to create a “master race” during the Nazi regime in Germany of the 20th century to understand the implications of creating “designer” children from “designer” eggs.

The issues of coercion and health risks may be addressed and corrected through policy and legislation. Recommendations for policy and action are as follows:

1. Institute an independent regulatory body able to enforce policies enacted on reproductive technology and third party reproduction.

2. Regulate egg procurement ad placement and content, to include prominent disclaimers and health warnings just as on cigarette packages or alcohol labels directed at pregnant women.
3. Eliminate financial compensation (beyond immediately related medical expenses) from the practice of egg procurement.

4. Fill the information void for consent purposes through peer-reviewed medical research of short- and long-term consequences of egg harvesting and extraction on supplier health.

5. Require fertility clinics to collect, maintain and release for analysis specific “donor” files, including 6 month, 1 year, 3 year, 5 year, 10 year, 20 year and 30 year follow-ups with “donors.” Yearly results will be published and made available to the general public.

6. Initiate an imposed moratorium on all egg procurement and sale while retrospective data is collected, analyzed and published.

7. Remove anonymity and require birth certificates to reflect the biological father and mother.

If adopted, such policies would be a first step toward protecting women from the risky and potentially destructive practices of egg procurement. Unfortunately, they offer little compensation or justice to the women who have already been exploited and severely harmed by providing their eggs. The only way to ensure a measure of retroactive justice for these women is to remain vigilant in our efforts to prevent the further exploitation of women, commodification of their bodies, and serious risks to their short- and long-term health and well-being. Any society that values and protects human rights demands no less.
Questions for Discussion

- What are the risks—both health and societal—in paying women to sell their eggs for research?
- Can we really call this procedure egg donation when women are paid for their services?
- How does super-ovulation differ from normal ovulation periods? Are there risks to this?
- How might compensation influence informed consent?
- In what ways could conception via egg donation contribute to sex-selective abortion?
- What populations are most at risk for being exploited through the egg donation process?
- What do you think the rights of an egg donor conceived child should be?
- How does egg donation differ from organ donation?
Questions from the Film

- Why do you think college and university campuses are prime locations for targeting women to sell their eggs? Is this a discriminatory practice?
- What did Dr. Suzanne Parisian, former medical director of the FDA, warn are some of the potential medical problems faced by women who choose to sell their eggs?
- Some of the women interviewed mentioned being given the drug Lupron during their egg donation procedures. What are some of the medical risks of Lupron?
- Alexandra was diagnosed with breast cancer twice in her thirties. In the film she mentions that egg donation was the only thing questionable about her medical history. Do you think there has been adequate research done on the long-term effects on women who sell their eggs?
- Based on the interviews with the women in this film, do you think that egg donation agencies provide adequate healthcare and support to women who sale their eggs?
- In 2009 New York became the first state to allow women to be compensated for selling their eggs for research. In 2013, California Governor Jerry Brown vetoed similar legislation. What state do you think acted in the best interest of both women and science?
SPERM DONATION
Quick Facts

- As there is no regulation, it’s impossible to know just how many children are conceived through sperm donation each year.

- Sperm donors do not undergo extensive medical testing prior to donating. Furthermore, children conceived through their sperm will have no access to their sperm donor’s medical history.

- As sperm donation continues to become both more popular and lucrative, it has given rise to fertility tourism.

- Children conceived via anonymous sperm donation overwhelmingly agree that their sperm donor is half of who they are. Many of them also agree that the circumstances of their conception bother them.

- Research indicates that donor offspring are more likely to suffer with depression and substance abuse than children raised by their biological parents.
Advances in reproductive science and medicine have raised troubling questions over the past 40 years—What is the meaning and definition of parenthood? What is the significance of biological connection between a child and her parents? What is the definition of infertility, and to whom may it apply? And how far may we go to secure "children of our own"? Couples declared to be infertile now have a range of reproductive options and combinations. Techniques such as in vitro fertilization (IVF) and artificial insemination (AI) may be combined with the use of donor gametes and/or gestational surrogates in various ways. These high-tech reproductive manipulations force us to contemplate the extent and scope to which we may manipulate procreation and remain both "in control" and a moral society.

The fact that eggs and sperm can easily be frozen and shipped all over the world has led to reproductive tourism and the global expansion of the baby-making market. Alas, society and culture have failed to keep up with the steady stream of technological and scientific advances that have such powerful ramifications for future generations.

Why should we be surprised? Society still has not grappled adequately with one of the first and most easily accessible reproductive technologies: artificial insemination. Indeed, if the matter is considered at all, it is usually in the context of chuckling about the sperm donation process. But hundreds of years of experience with sperm paternities demonstrate that even this seemingly innocuous sector of the infertility industry raises serious and culturally important questions. For example, the anonymity of most sperm paternities creates serious genetic and biological questions for children sired by artificial insemination. There are also emotional consequences to the children born out of the process who are deprived of "roots" from their paternal lineage. Some studies indicate that children created via donor sperm are unhappy knowing their father was paid for his donation (see My Daddy's Name is Donor report).

Regulation
The first known case of artificial insemination occurred in 1884 in Philadelphia, Pennsylvania when a doctor impregnated a female
Think Again: Study Guide
Sperm Donation

Think Again: Study Guide
Sperm Donation

...no laws require fertility clinics to track which children were created with the sperm of which donor.

And yet, no laws require fertility clinics to track which children were created with the sperm of which donor. Neither are there legal requirements assuring that a donor’s complete medical history is either obtained or maintained if needed at a later date. With many children often born from sperm donated by the same donor, the potential exists for unintentional incest and resulting health consequences for the progeny.

Nor is much consideration given to the emotional and mental health impacts on children who have “anonymous fathers.” Rather, by focusing so intently on fulfilling the desires of the mother or a couple to have children, little, if any, thought is given to the future well-being of the children who are purposefully deprived of any connection with their biological fathers, many of whom later report that they desire contact with their biological father. When the issue is considered at all, it is usually dismissed with a wave of a hand and the rhetorical question, “Would they prefer that they had never been born?”

But the reality for children conceived via anonymous sperm donation is quite different. In the previously mentioned 2010 study My Daddy’s Name is Donor, researchers revealed that nearly two-thirds of children conceived through sperm donation agree that “My sperm donor is half of whom I am.” Forty-five percent state that “the circumstances of my conception bother
me.” In addition, these donor offspring are much more likely to have endured fractured family life through divorce and separation, and more likely to struggle with substance abuse and depression than children raised by their biological parents. While films like *The Kids are All Right* might portray children conceived through such arrangements as unharmed and happy, the data tells a different story.

**Legislative Reform Recommendations**
*The Center for Bioethics and Culture* suggests five significant legal reforms to regulate commercial reproduction using donated sperm:

1. Paying for sperm donations should be outlawed, because we reject commercial conception arrangements, which treat children as products for purchase.

2. The number of children sired by a donor should be strictly limited.

3. Records must be maintained identifying the names of donors/fathers and their children, and anonymous donation prohibited.

4. Complete health histories of sperm donors must be taken, maintained, and provided to the family upon request.

5. A database tracking the use of sperm must be established in order to begin collecting the data necessary for the interests of children to be placed at the forefront, including access to information regarding their medical history, as well as their interest in family connections with their biological fathers.
Questions for Discussion

- Since sperm donation is an easier process than egg donation, should we be as concerned about it?

- Are there any real medical risks involved with sperm donation?

- What are the potential emotional risks that people conceived via anonymous sperm donation might face?

- Do you believe people have a right to their medical histories?

- How does anonymous conception differ from adoption?
Questions from the Film

- When did Stephanie learn that she was conceived via anonymous sperm? Do you think the circumstances of her learning this information should influence the rights a person has to his or her medical history?

- Barry notes in the film that he was part of the first generation to be produced by science, not sex. Do you think this presents risks for the future of stable families? What about for children who wrestle with their identities?

- What do the aspects of Alana’s parents divorce indicate about the realities in which donor conceived children grow up?

- Why do you think the United States is one of the only countries in the world that has not signed on to the International Convention on the Rights of the Child?

- Should the United States create a national database for sperm donors? Why or Why not?
- Traditional surrogacy involves the use of the biological mother’s own egg, whereas gestational surrogacy uses both donor egg and donor sperm, and the child has no biological relation to the surrogate.

- Unlike many European countries, the United States has no national ban on surrogacy. States are left to decide for themselves their own policy on these issues.

- Surrogacy tourism has become an industry in itself with wealthy Westerners traveling to places such as India and Southeast Asia to hire surrogate mothers to carry their children for them.

- If the intended parents’ circumstances change during the surrogate pregnancy or if the child is born with health problems or disabilities, the infants may be left to the surrogate or abandoned. Intended parents may find that they face unplanned financial costs and inadequate legal protections.

- It is estimated that nearly half of surrogates in the U.S. are military wives who represent an ideal supply source for agencies and brokers. They often survive on low incomes and tend to marry and have their own children at young ages, so the prospect of doubling their family income by serving as a surrogate is a powerful incentive.
The growing surrogacy phenomenon in which women agree to have their bodies used to undergo a pregnancy and give birth to the resulting baby is becoming a major issue of the 21st century. Surrogacy is often referred to as “womb renting” wherein a bodily service is provided for a fee. The practice is fraught with complexity and controversy surrounding the implications for women’s health and human rights generally. Society is only beginning to grapple with the issues that it raises. The practice of surrogacy traditionally has taken place by inserting fresh or freshly thawed sperm into the mother. This is the standard procedure for fertile women who are able to serve as the child’s gestational and genetic mother. The second method, used increasingly often, is known as gestational surrogacy, in which a previously created embryo is transferred into the surrogate mother, who carries and delivers a child who is not genetically related to her. While some surrogate mothers agree to carry another couple’s child for what they consider to be altruistic reasons, the more common motivation is the financial incentive that couples desperate to conceive a child can offer.

Like anonymous sperm donation and the buying and selling of women’s eggs, the practice of surrogacy in the United States is barely regulated. There also are few records to determine how many children are born through surrogacy each year. According to the most recent data from the American Society for Reproductive Medicine, nearly 1,400 children were born through surrogacy in 2008. That number indicates an almost 100 percent increase from the 738 babies reported born through surrogacy in 2004. Regrettably, few studies have explored the health risks posed by surrogacy or its effect on children.

Since a gestational surrogate usually has no biological relationship to the child, she has no legal claim and her name does not appear on the birth certificate. In many countries and jurisdictions, most notably in Europe, commercial surrogacy is not legal. But in the United States there is no national regulation of surrogacy and its fifty states constitute a patchwork quilt of policies and laws, ranging from outright bans to no regulation.
A few of the many issues raised by surrogacy include: the rights of the children produced; the ethical and practical ramifications of the further commodification of women’s bodies; without regulation, fraud committed by surrogacy companies cannot be prevented or prosecuted; the exploitation of poor and low income women desperate for money; the moral and ethical consequences of transforming a normal biological function of a woman’s body into a commercial transaction.

A fertility-industrial complex has been created to cater to the 8 million infertile women in the United States alone, who are spending billions each year to try to help themselves conceive. Even though the cost to the intended parent(s), including medical and legal bills, runs from $40,000 to $120,000, the demand for qualified surrogates is well ahead of supply. The surrogate herself typically is paid $20,000 to $25,000 in the U.S., which averages approximately $3.00 per hour for each hour she is pregnant, based on a pregnancy of 266 days or 6,384 hours. In surrogacy, the rights and best interests of the child are given very little consideration. Transferring the duties of parenthood from the birthing mother to a contracting couple (or individual) denies the child any claim to its “gestational carrier” and to its biological parents if the egg and/or sperm is/are not that of the contracting parents. In addition, the child has no right to information about any siblings he or she may have in the latter instance.

In the previously mentioned 2010 study, *My Daddy’s Name is Donor*, 45 percent of children conceived from an anonymous sperm donation reported that they were bothered by the fact that money was exchanged in order to conceive them. The same is likely to be said by children conceived through surrogacy, and the psychological effects of being separated from their birth mother pose numerous consequences that likely will remain with them for the rest of their lives. There is a natural, hormonal bonding that takes place between a mother and a child that she carries in her womb. The hormone oxytocin, for example, is released in large amounts both during and after childbirth, which establishes and increases the trust between mother and child. Surrogacy intentionally severs this natural and beneficial relationship, a relationship we should seek to encourage and protect, not prevent.

Surrogacy is another form of commodification of women’s bodies. Surrogate services are advertised, surrogates are recruited, and operating agencies make large profits. The commercialism of surrogacy raises fears of a black market and baby selling, of breeding farms, turning impoverished women into baby producers and the possibility of selective breeding at a price. Surrogacy degrades a pregnancy to a service and a baby to a product.
“Permitting adults to contract with others regarding a child in such a manner unquestionably raises serious and significant issues . . .

“In contrast to traditional surrogacy, a gestational surrogate birth does not use the egg of the carrier . . . In this scenario, the gestational carrier lacks any genetic connection to the baby, and in some cases, it is feasible that neither parent is genetically related to the child. Instead, children born to gestational surrogates are linked to their parents by contract . . .

“While some all applaud the freedom to explore these new, and sometimes necessary, arranged births, others will note the profound change in the traditional beginnings of the family that this bill will enact. I am not satisfied that these questions have been sufficiently studied by the Legislature at this time.”

- New Jersey Governor, Chris Christie (August, 2012)
Questions for Discussion

- Do you consider surrogacy a form of exploitation of women?
- What type of women will be targeted to serve as surrogates?
- Based on the data from the children conceived via anonymous sperm donation, what might we predict about the children born through surrogacy?
- How might laws permitting or banning same-sex marriage in a state affect the use of surrogacy?
- Are mothers and fathers interchangeable?
- What do you think of laws that have removed the commercialization element of surrogacy and only allow for altruistic surrogacy arrangements?
Questions from the Film

- What do you think of the way that Jessica found out she was born via surrogacy?

- What do you think of Jessica's comment that she was “purchased”? Are we buying and selling babies through surrogacy?

- Is the comparison of surrogacy to slavery accurate?

- What is the role of contracts and the law when a surrogate mother refuses to surrender the child?

- What do you think should happen when intended parents want the surrogate to terminate the pregnancy? (For any reason? For medical reasons? For personal reasons?)

- How has modern entertainment affected our cultural views on family life and parenting?
Recommended Resources

**Egg Donation**
- Testimony of Sindy: http://eggsploitation.com/testimony-sindy.htm

**Sperm Donation**
- *My Daddy’s Name is Donor: A New Study of Young Adults Conceived Through Sperm Donation.* Produced by the Institute for American Values, 2010
- *Anonymous Us: A Story Collective of Children Conceived through Anonymous Sperm Donation.*
- Donor Sibling Registry
- “Using Donated Sperm: What Does The Law Say?” *NPR*
- “Offspring Inherits Heart Defect from Sperm Donor,” *MedPage Today*

**Surrogacy**
Glossary of Terms

**Assisted Reproductive Technology**: originally, a range of techniques for manipulating oocytes and sperm to overcome infertility; encompasses drug treatments to stimulate ovulation, surgical methods for removing oocytes (laparoscopy and ultrasound-guided transvaginal aspiration) and for implanting embryos (zygote intrafallopian transfer or ZIFT), in vitro and in vivo fertilization (artificial insemination and gamete intrafallopian transfer or GIFT), ex utero and in utero fetal surgery, and laboratory regimes for freezing and screening sperm and embryos as well as micromanipulating and cloning embryos.

**Blastocyst**: the modified blastula (an early metazoan embryo typically having the form of a hollow fluid-filled rounded cavity bounded by a single layer of cells) of a placental mammal.

**Embryo**: in humans, the developing organism from conception until the end of the eighth month; developmental stages from this time to birth are commonly designated as fetal.

**Gamete**: a mature male or female germ cell usually possessing a haploid chromosome set and capable of initiating formation of a new diploid individual by fusion with a gamete of the opposite sex—called also sex cell.

**Intracytoplasmic Sperm Injection (ICSI)**: injection by a microneedle of a single sperm into an egg that has been obtained from an ovary followed by transfer of the egg to an incubator where fertilization takes place and then by introduction of the fertilized egg into a female's uterus.

**In vitro fertilization (IVF)**: fertilization of an egg in a laboratory dish or test tube; specifically: mixture usually in a laboratory dish of sperm with eggs which have been obtained from an ovary that is followed by introduction of one or more of the resulting embryos into a female's uterus.
Oocyte*: Female gamete or sex cell.

Ovarian cyst*: a cystic tumor of the ovary, either nonneoplastic (follicle, lutein, germinal inclusion, or endometrial) or neoplastic; usually restricted to benign cysts, mucinous serous cystadenoma, or dermoid cysts.

Ovarian hyperstimulation syndrome (OHSS)*: iatrogenic development of ovarian hyperstimulation that occurs when the luteotropic effects of human chorionic gonadotropin are exaggerated in a cycle in which ovarian stimulation has been done as a component of infertility treatment. The human chorionic gonadotropin is administered exogeneously to trigger ovulation after gonadotropin stimulation. It is present endogenously after implantation. Syndrome includes, to varying degrees, abdominal distention, potentially massive ovarian enlargement, and third spacing of vascular volume. It can range from moderate discomfort to life-threatening ovarian enlargement and fluid shifts.

Premature Menopause*: failure of cyclic ovarian function before age 40.

Sperm Donation*: Sperm donation is a procedure in which a man donates semen—the fluid released during ejaculation—to help an individual or a couple conceive a baby. Donated sperm can be injected into a woman's reproductive organs (intrauterine insemination) or used to fertilize mature eggs in a lab (in vitro fertilization). The use of donated sperm is known as third party reproduction. A man who makes a sperm donation can be known or anonymous to the recipient. Sperm donations made to a known recipient are called directed donations.

Superovulation: ovulation marked by the production of more than the normal number of mature eggs at one time (infertility treatment including the use of gonadotropins to induce superovulation).

Surrogacy*: The practice of serving as a surrogate mother. Traditional surrogacy involves inserting freshly thawed or new sperm into the mother. This is the standard procedure for fertile women who are able to serve as the child's gestational and genetic mother. Increasingly, what is more common is Gestational surrogacy in which a previously created embryo is implanted inside the surrogate mother, who delivers a child that is not genetically related to her.
**Torsion***: A twisting or rotation of a part on its long axis or on its mesentery; often associated with compromise of the blood supply.

**Zygote**: a cell formed by the union of two gametes; broadly: the developing individual produced from such a cell.

Sources:
mediLexicon International: http://www.medilexicon.com/medicaldictionary.php (marked with an *).
Jennifer Lahl is founder and president of The Center for Bioethics and Culture Network. Lahl couples her 25 years of experience as a pediatric critical care nurse, a hospital administrator, and a senior-level nursing manager with a deep passion to speak for those who have no voice. Lahl’s writings have appeared in various publications including the San Francisco Chronicle, the Dallas Morning News, and the American Journal of Bioethics. As a field expert, she is routinely interviewed on radio and television including ABC, CBC, PBS, and NPR. She is also called upon to speak alongside lawmakers and members of the scientific community, even being invited to speak to members of the European Parliament in Brussels to address egg trafficking.

She serves on the North American Editorial Board for Ethics and Medicine and on the Board of Reference for Joni Eareckson Tada’s Institute on Disability. In 2009, Lahl was associate producer of the documentary film Lines That Divide: The Great Stem Cell Debate, which was an official selection in the 2010 California Independent Film Festival. She made her writing and directing debut producing the documentary film Eggsploration, which has been awarded Best Documentary by the California Independent Film Festival and has sold in more than 20 countries. An updated and expanded version of Eggsploration was released in October 2013. She is also Director, Executive Producer, and Co-Writer of Anonymous Father’s Day, a documentary film exploring the stories of women and men who were created by anonymous sperm donation, and Breeders: A Subclass of Women? a documentary film on the issue of surrogacy.
Matthew Eppinette, Executive Director

Matthew’s educational background includes business, information technology, and bioethics. He has worked in both the non-profit and for profit sectors in communications, new media, information technology, and bioethics research. A chapter he wrote, “Human 2.0: Transhumanism as a Cultural Trend,” appears in *Everyday Theology: How to Read Texts and Interpret Trends*. He is also a contributing author to *The New Media Frontier*. He co-wrote and served as associate producer for the documentary film *Anonymous Father’s Day*, which explores the stories of women and men who are the children of sperm donors. With Jennifer Lahl he wrote, directed and produced *Breeders: A Subclass of Women?* He is currently studying Christian Ethics at Fuller Theological Seminary and is a Fellow of the Paul Ramsey Institute. He and his wife Ginger live in the Los Angeles area.

Christopher White, Director of Education and Programs

Christopher White holds an M.A. in Ethics and Society from Fordham University and a B.A. in Politics, Philosophy, and Economics from The King’s College. His writings have appeared in the *Wall Street Journal*, *USA Today*, *National Review Online*, *First Things*, *Public Discourse*, *Human Life Review*, and *Touchstone* among many other print and online publications. He is the co-author of *Renewal: How a New Generation of Faithful Priests and Bishops are Revitalizing the Catholic Church* (Encounter Books) and a 2013-2014 Robert Novak Fellowship Award Winner. He lives in New York City.