

No. 11-159

**In The
Supreme Court of the United States**

**MICHAEL J. ASTRUE, COMMISSIONER OF SOCIAL
SECURITY,**

Petitioner,

v.

KAREN K. CAPATO, ON BEHALF OF B.N.C., ET AL.,

Respondent.

On Writ of Certiorari to the
United States Court of Appeals
for the Third Circuit

**AMICUS BRIEF OF JENNIFER LAHL,
KATHLEEN SLOAN, KATHLEEN R.
LABOUNTY, STEPHANIE BLESSING,
AND ANTHONY J. CARUSO, M.D., IN
SUPPORT OF RESPONDENT**

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INTEREST OF AMICI¹

Jennifer Lahl is the founder and president of the Center for Bioethics and Culture Network. In her 25-year medical career, Lahl worked as a pediatric critical care nurse, a hospital administrator, and a senior-level nursing manager. Lahl now works to voice the interests of persons excluded from discussions, developments, and policy directions associated with reproductive technologies. Her areas of expertise include the public policy dimensions of stem cell technologies and in vitro fertilization (IVF) technologies and practices. 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, CBS, PBS, and NPR, and called upon to speak alongside lawmakers and persons with scientific and commercial interests in reproductive technologies. Lahl has consulted with the European Parliament in Brussels on human egg trafficking. She serves on the North American Editorial Board for *Ethics and Medicine* and the Board of Reference for Joni Eareckson Tada's Institute on Disability. Lahl has produced three documentaries: "Lines That

¹The parties in this case have consented to the filing of this amicus brief. Consent letters are being submitted with this brief. No counsel for any party authored this brief in whole or in part. No such counsel or party made a monetary contribution intended to fund the preparation or submission of this brief. No person or entity aside from the Life Legal Defense Foundation, its members, or counsel made a monetary contribution intended to fund the preparation of submission of this brief.

Divide: The Great Stem Cell Debate” (2009); “Eggsplotation” (2010); and “Anonymous Father’s Day” (2011). “Eggsplotation,” an exposé on the IVF industry’s exploitation of human egg donors, won the California Independent Film Festival’s Best Documentary of 2011 and is now being shown in over 20 countries.

Kathleen Sloan is a women’s rights advocate with expertise in issues related to third party reproduction. She was the Program Director at the Council for Responsible Genetics (CRG), where she created and led projects on women and biotechnology including egg donation, surrogacy, and global reproductive trafficking along with issues associated with genetics and race. Sloan has written articles and papers on third party reproduction published in scholarly journals. She initiated a collaborative project with CRG and the National Organization for Women (NOW) on surrogacy and is one of the principal authors of an international call for a UN Declaration on abuses of women’s human rights in third party reproduction, sponsored by a coalition of academic and advocate experts on the subject from 15 countries. As a feminist leader, Sloan has focused on subjects related to the commodification of women, both as sexual and reproductive commodities, and their relationship to human trafficking and human rights violations. In September 2010, she gave the lead presentation at the UN Human Rights Council in Geneva on the media’s sexual commodification of women and girls and its violation of their human rights. She convened a panel on the issue last year at the UN Commission on the Status of Women (CSW) and led Amnesty International’s delegation lobbying U.S. Senators on ratification of the UN Convention on the Elimination

of all forms of Discrimination Against Women (CEDAW). Sloan is a U.S. State Department Consultant as an expert on women's issues for its International Information Program at embassies and consulates around the world. She is the former Executive Director of Connecticut National Organization for Women (CT NOW), an organization that dealt with every issue affecting the lives of women and girls. She is the founder of a task force of indigenous women's rights leaders that is planning a parallel event at this year's UN CSW related to its theme of empowering rural women. Sloan is the author of the book *Race and the Genetic Revolution: Science, Myth and Culture*, is on the Board of Directors of NOW, is on NOW's Global Feminist Strategies & Issues Committee, and represents NOW as an NGO at the United Nations. Sloan has spoken at the U.S. Capitol and at Harvard, Columbia, Yale, and University of Virginia Law Schools on abuses of women's human rights in third party reproduction and on the need for regulation of the infertility industry and for long-term studies of health risks to women associated with these procedures. Sloan is a state-certified Domestic Violence Counselor & Advocate and was awarded a Cochran Fellowship by the U.S. Department of Agriculture (USDA), promoting Russian-American cooperation. Sloan holds a Master's Degree in International Relations. She has marched, given speeches, testified at public hearings, worked in innumerable international, national, and local coalitions, organized, written about, and run campaigns, and lobbied for women's rights for 15 years.

Kathleen R. LaBounty was conceived through the use of donor sperm in 1981. Since her early teenage

years, LaBounty has been searching, thus far unsuccessfully, for her biological father. LaBounty blogs on donor conception at Child of a Stranger: Conception Through Anonymous Sperm Donation (<http://childofastranger.blogspot.com>). LaBounty has also been involved in legal and legislative efforts on behalf of donor-conceived children.

Stephanie Blessing found out in May 2009, at the age of 32 years old, that she was conceived in 1976 by an anonymous sperm donor via artificial insemination. Like many adults who discover that they were conceived using this method, she suddenly found herself in a crisis moment. She quickly went to the internet in order to find some kind of assistance in helping her to reason through this new situation in her life. After searching for several weeks, she found that, aside from some clinical articles, no one was talking about this issue from a God-centered perspective. She has begun writing about her own story in order to share the hope that she has with others at her blog, *M y F a t h e r ' s D a u g h t e r* (<http://donorchild.blogspot.com/>).

Dr Anthony J. Caruso is a board certified reproductive endocrinologist who has been one of Chicago's most respected practitioners. He has worked both in private and academic practices. Caruso, who graduated from Loyola University Stritch School of Medicine, started working in the IVF field in 1995 and oversaw more than 1,000 IVF procedures in his career before leaving the field in 2010. While initially seeing the process as a way to bring happiness to someone's marriage, he has come to recognize the abuses inherent in IVF and the resultant objectification of women and children. Caruso has also suffered through the ordeal of discussing "selective reduction" with

couples, recommending against it as a form of abortion. In his current practice, he has seen the result of IVF pregnancies, which have been more likely to have complications, and an accompanying parental detachment felt toward the developing child. Some have actually told him that they could “just go back and do it again” if something untoward should happen.

This brief is being filed in support of respondent on a question of statutory interpretation. Moreover, amici wish to emphasize that the posthumously conceived children at issue are entitled to full human love and respect. This brief should not be taken in any way, however, as an endorsement of the technological process by which the respondent’s twins were brought, fatherless, into the world. Amici wish instead to call this Court’s attention to the highly problematic side of IVF.

SUMMARY OF ARGUMENT

1. The “dependency” prerequisite for survivor benefits under the language of the Social Security Act is not an obstacle to the children’s claim in this case because a separate statutory provision of the same Act deems the children here dependent as of the time of decedent’s death.

2. Children conceived by in vitro fertilization (IVF) are as much children entitled to love, respect, and protection as any other child. In no way should any qualms about the parents’ resort to IVF technology justify penalizing the children for the nature of their origin.

3. The inherent worth and dignity of IVF children does not, however, derive from IVF’s processes; nor does that dignity remove IVF’s procedures and

practices from scrutiny. While often portrayed as a purely positive development in technology, IVF, with its numerous medical complications, invasive procedures, and commercialization of human reproduction, in fact poses a range of risks to children, parents, donors/sellers of genetic material, and society at large. This Court should keep in mind “the rest of the story” -- described herein -- to the extent considerations of public policy enter into this Court’s analysis.

ARGUMENT

I. THE DEPENDENCY ELEMENT OF § 402(d) IS NOT AN OBSTACLE TO ENTITLEMENT TO SURVIVOR BENEFITS IN THIS CASE.

The parties focus on whether such a child is a “child” for purposes of 42 U.S.C. § 402(d). The Third Circuit left for remand the question whether the posthumously conceived children here satisfied a different statutory precondition -- the “dependency” element of § 402. Pet. App. 12a. That element is not an obstacle here.

The “dependency” provision restricts eligibility to a child who was “dependent upon [the deceased parent], . . . if such [parent] has died, at the time of such death,” § 402(d)(1)(C)(ii) (Pet. App. 48a). Obviously, children who did not yet exist at the time of their father’s death could not possibly be *actually* dependent upon him “at the time of such death.” Nevertheless, § 402(d)(3) provides that a child “shall be *deemed* dependent upon his father . . . at the time specified in paragraph (1)(C)” (emphasis added), so long as the child “is” (not “was”) the “legitimate” or “adopted” child of the decedent. This seems to mean that one’s

biological offspring from a marriage are “deemed” dependent at the time of one’s death no matter how far in the future the children are actually conceived. Hence, the children at issue here, who concededly are the legitimate children of the decedent, satisfy the “dependency” element of the Social Security Act.

II. IVF CHILDREN ARE AS FULLY HUMAN AS ANY OTHER HUMAN OFFSPRING.

Any human being, no matter how conceived, possesses inestimable dignity. This notion reflects “our basic concept of the essential dignity and worth of every human being -- a concept at the root of any decent system of ordered liberty.” *Milkovich v. Lorain Journal Co.*, 497 U.S. 1, 22 (1990) (internal quotation marks and citation omitted).

An IVF child is most certainly a “child” entitled to basic human respect. In no way should the children here be legally penalized just because of the nature of their origin. “[V]isiting this condemnation on the head of an infant is illogical and unjust.” *Weber v. Aetna Casualty & Surety Co.*, 406 U.S. 164, 175 (1972). “[I]t is unjust and ineffective for society to express its condemnation of procreation [in certain circumstances] by punishing the . . . child who is in no way responsible for his situation and is unable to change it.” *Parham v. Hughes*, 441 U.S. 347, 352 (1979).

This does not mean, however, that IVF is an unalloyed good or that public policy should promote IVF. To the extent that public policy questions bear upon the construction of the relevant statutory

provisions,² this Court should approach the analysis with a more complete understanding of IVF, in particular bearing in mind the more disturbing sides of IVF.

III. IVF POSES PHYSICAL, EMOTIONAL, AND SOCIETAL RISKS THAT SHOULD NOT BE IGNORED.

To the casual consumer of media coverage of the subject, IVF may appear an unmitigated boon. Thanks to the wonders of science, an infertile couple can now conceive and bear a baby! Should not public policy favor this almost miraculous technology?

To be sure, every child possesses inherent worth; the pain of infertility is real and deep; and many families count themselves the infinitely grateful beneficiaries of “test tube baby” technology.

But that is not the whole story. There are numerous countervailing factors that need to be taken into account. What follows is an enumeration of some of those weights resting on the other side of the balance.

²Respondent has contended that extending benefits to posthumously conceived children comports with “the central purpose of the Act,” Opp. at 23. But to the extent that purpose consists of an intent to “*maintain* normal family life,” *id.* at 25, “*keep* the young children with their mother,” *id.* at 24, “*replace* the support *lost* by a child,” *id.* at 26, “soften[] the impact . . . on the *remaining* family unit,” *id.* at 27, and guard against the “*vicissitudes* of life,” *id.* at 24 (all emphases added; internal quotation marks omitted), the *deliberate* posthumous *expansion* of family size (and thus of the number of beneficiaries) does not correspond with that purpose any more than would a posthumous adoption. See U.S. Br. at 6, 22.

A. Risk to the IVF child's physical health

Studies have begun to document the increased likelihood that an IVF baby will suffer from a variety of adverse conditions. These include:

- **Beckwith-Wiedemann Syndrome**³ -- *see, e.g.,* Jane Halliday et al., "Beckwith-Wiedemann Syndrome and IVF: A Case-Control Study," 75 *Am. J. Hum. Genet.* 526 (2004)⁴ (concluding children conceived by IVF are significantly more likely to have BWS);
- **major structural defects** -- *see, e.g.,* J. Reefhuis et al., "Assisted reproductive technology and major structural birth defects in the United States," *Human Reproduction*

³According to an NIH website,

Beckwith-Wiedemann syndrome (BWS) is a growth disorder characterized by macrosomia, macroglossia, visceromegaly, embryonal tumors (e.g., Wilms tumor, hepatoblastoma, neuroblastoma, and rhabdomyosarcoma), omphalocele, neonatal hypoglycemia, ear creases/pits, adrenocortical cytomegaly, and renal abnormalities (e.g., medullary dysplasia, nephrocalcinosis, medullary sponge kidney, and nephromegaly). Early death may occur from complications of prematurity, hypoglycemia, cardiomyopathy, macroglossia, or tumors. . . . Growth rate slows around age seven to eight years. Hemihyperplasia may affect segmental regions of the body or selected organs and tissues.

Cheryl Shuman et al., "Beckwith-Wiedemann Syndrome," Bookshelf, www.ncbi.nlm.nih.gov/books/NBK1394/.

⁴www.ncbi.nlm.nih.gov/pmc/articles/PMC1182036/.

(accepted Oct. 2, 2008)⁵ (IVF and ICSI⁶ associated with septal heart defects, cleft lip, esophageal atresia, and anorectal atresia); Darine El-Chaar et al., “Risk of birth defects increased in pregnancies conceived by assisted human reproduction,” 92 *Fertility & Sterility* 1557 (2009)⁷ (risk of gastrointestinal, cardiovascular, and musculoskeletal defects increased with all three types of assisted human reproduction studied, with greatest increase associated with IVF);

- **gene expression maladies** -- *see, e.g.*, Sunita Katari et al., “DNA methylation and gene expression differences in children conceived *in vitro* or *in vivo*,” *Human Molecular Genetics* (accepted July 9, 2009)⁸ (IVF may affect gene expression); Tom Blackwell, “In-vitro fertilization linked to rare genetic disorders,”

⁵<http://humrep.oxfordjournals.org/content/24/2/360.long>.

⁶Intracytoplasmic sperm injection (ICSI), rather than letting the sperm penetrate the egg (oocyte) by itself, directly injects the sperm into the egg. Gina Kolata, “New Questions About Popular Fertilization Technique,” *New York Times* (Mar. 30, 1999), *available at* www.nytimes.com/1999/03/30/health/new-questions-about-poplar-fertilization-technique.html?pagewanted=all.

⁷[www.fertstert.org/article/S0015-0282\(08\)03574-7/abstract](http://www.fertstert.org/article/S0015-0282(08)03574-7/abstract).

⁸<http://hmg.oxfordjournals.org/content/18/20/3769.abstract?maxtoshow=&HITS=10&hits=10&RESULTFORMAT=&fulltext=Sapienza&searchid=1&FIRSTINDEX=0&resourcetype=HWCIT>.

National Post (Sept. 25, 2011)⁹ (presentation by Dr. Rosanna Weksberg, physician who supports IVF and works at Toronto’s Hospital for Sick Children, on genetic risks to IVF children at conference of the Canadian Fertility and Andrology Society, noting “she is already seeing many fertility-treatment offspring with one of the [rare genetic conditions] show up at her genetics clinic”);

- **retinoblastoma**¹⁰ – *see, e.g.*, Annette C. Moll et al., “Incidence of retinoblastoma in children born after in-vitro fertilization,” 361 *The Lancet* 309 (Jan. 25, 2003)¹¹ (“[r]elative risks for retinoblastoma were significantly raised”).

The risk of health problems for the baby may be a greater problem if the IVF is accomplished by injection of the sperm into the egg, i.e., the “ICSI” technique. *See supra* note 6. Gerald F. Cox et al., “Intracytoplasmic Sperm Injection May Increase the Risk of Imprinting Defects,” 71 *Am. J. Hum. Genet.*

⁹<http://news.nationalpost.com/2011/09/25/in-vitro-fertilization-linked-to-rare-genetic-disorders/>.

¹⁰According to an NIH website, “Retinoblastoma (RB) is a malignant tumor of the developing retina that occurs in children, usually before age five years.” Dietmar R. Lohmann & Brenda L. Gallie, “Retinoblastoma,” Bookshelf, www.ncbi.nlm.nih.gov/books/NBK1452/.

¹¹www.thelancet.com/journals/lancet/article/PIIS0140-6736%2803%2912332-X/abstract.

162 (2002)¹² (analyzing ICSI as possible cause of Angelman syndrome¹³).

Obviously, many IVF babies are born healthy, at least so far as we know at present. But the emerging scientific research strongly suggests that, in general, babies conceived by IVF are less likely to be unimpaired. Tampering with the process of human development at the earliest stages is not without cost. See generally Gina Kolata, "Picture Emerging on Genetic Risks of IVF," *New York Times* (Feb. 16, 2009).¹⁴

B. Risk to the genetic mother's physical health

IVF requires extracting -- "harvesting" -- eggs from a woman, be it the mother seeking her own biological

¹²www.ncbi.nlm.nih.gov/pmc/articles/PMC384973/.

¹³According to an NIH website,

Angelman syndrome (AS) is characterized by severe developmental delay or intellectual disability, severe speech impairment, gait ataxia and/or tremulousness of the limbs, and a unique behavior with an inappropriate happy demeanor that includes frequent laughing, smiling, and excitability. Microcephaly and seizures are also common.

Aditi I. Dagli & Charles A. Williams, "Angelman Syndrome," Bookshelf, www.ncbi.nlm.nih.gov/books/NBK1144/.

¹⁴www.nytimes.com/2009/02/17/health/17ivf.html?pagewanted=1&_r=2&emc=eta1.

offspring or a “donor”¹⁵ who supplies the gametes but not the ultimate home for the child. “Procedures Tutorial,” The New Jersey Center for Fertility and Reproductive Medicine, LLC, www.thenewjerseyinfertilitytreatmentcenter.com/egg_retrieval.php.

The process of preparing the mother’s body for this extraction entails injection with hormones to stimulate egg production.¹⁶ “Ovarian stimulation uses hormonal medication to stimulate the ovaries to release a larger number of oocytes than normal, in order to provide enough good quality oocytes for fertilization in vitro.” “Could Ovarian Stimulation Cause an Increase in

¹⁵The term “donor,” used for both “egg donors” and “sperm donors,” is a misnomer, as the individuals supplying their gametes are typically paid. David Tuller, “Payment Offers to Egg Donors Prompt Scrutiny,” *New York Times* (May 10, 2010), *available at* www.nytimes.com/2010/05/11/health/11eggs.html (“A typical payment for sperm donation is under \$100,” while compensation for egg “donors” ranges upward from \$5,000). *E.g.*, “Become an Egg Donor,” Shady Grove Fertility, www.shadygrovefertility.com/become-egg-donor (\$6,000+ for egg donors, who are then issued an IRS 1099); “Becoming an Egg Donor,” Egg Donation, Inc., <https://www.eggdonor.com/donors/> (compensated \$5,000-\$10,000). *See also* Debra J. Saunders, “Embryos made to order,” *New York Times* (Aug. 8, 2006), *available at* http://townhall.com/columnists/debrajsaunders/2006/08/08/embryos_made_to_order/page/full/ (“[Bioethicist Arthur] Caplan can’t stand the language used in the embryo biz. Don’t call them egg donors and sperm donors, he says. Call them ‘egg sellers and sperm sellers’”).

Presumably the term “donor” is used to confer an air of humanitarian beneficence to the practice.

¹⁶*Id.* at www.thenewjerseyinfertilitytreatmentcenter.com/medication_protocols.php.

Oocyte Chromosome Abnormalities?" Science Daily (July 3, 2011).¹⁷

This artificial ovarian stimulation subjects the woman to health risks, most notably the risk of hyperstimulation syndrome, a condition that is fairly common and in rare cases can be life-threatening. Dr. Marcus, "Risks and complications of IVF treatment," IVF-Infertility.com;¹⁸ "Ovarian hyperstimulation syndrome," MedLinePlus (NIH website).¹⁹

Other risks include:

- **ovarian cancer** -- see F.E. van Leeuwen et al., "Risk of borderline and invasive ovarian tumours after ovarian stimulation for in vitro fertilization in a large Dutch cohort," Human Reproduction

¹⁷www.sciencedaily.com/releases/2011/07/110703222935.htm.

¹⁸www.ivf-infertility.com/ivf/standard/complications/ovarian_stimulation/ohss.php.

¹⁹www.nlm.nih.gov/medlineplus/ency/article/007294.htm.
Ovarian stimulation may also jeopardize the future IVF child.

Ovarian stimulation undertaken by women of advanced maternal age (over 35 years) receiving fertility treatment may be disrupting the normal pattern of meiosis -- a critical process of chromosome duplication followed by two specialized cell divisions in the production of oocytes and sperm -- and leading to abnormalities of chromosome copy numbers (aneuploidy) that result in IVF failure, pregnancy loss or, more rarely, the birth of affected children with conditions such as Down's syndrome, which is caused by the inheritance of three copies of chromosome 21 (trisomy 21).

"Could Ovarian Stimulation Cause an Increase in Oocyte Chromosome Abnormalities?" Science Daily, *supra*.

(accepted Sept. 2, 2011) (ovarian stimulation for IVF may increase the risk of ovarian malignancies);²⁰

- **adnexal torsion (ovarian twisting)** -- Dr. Marcus, “Risks and complications of IVF treatment,” IVF-Infertility.com;²¹
- **injury from the egg collection process** -- *id.*;²² and
- **death** -- D.D.M. Braat et al., “Maternal death related to IVF in the Netherlands 1984-2008,” *Human Reproduction* (accepted Mar. 9, 2010)²³ (finding “overall mortality related to IVF pregnancies was higher than the maternal mortality in the general population” and inferring, based upon Netherlands data, a “worldwide underreporting of IVF-related mortality”).

²⁰<http://humrep.oxfordjournals.org/content/early/2011/10/19/humrep.der322.full.pdf+html>.

²¹www.ivf-infertility.com/ivf/standard/complications/ovarian_stimulation/adnexal_torsion.php.

²²www.ivf-infertility.com/ivf/standard/complications/egg_collection.php.

²³<http://humrep.oxfordjournals.org/content/early/2010/05/18/humrep.deq080>.

C. Death or freezing of “extra” human embryos

The success rate for IVF -- measured by live births -- will vary according to a number of factors. “Fertility Experts Warn Some IVF Success Rates May Be Misleading,” *Medical News Today* (Apr. 3, 2009).²⁴ To enhance the prospects of a successful delivery, IVF clinics may “harvest” and fertilize multiple eggs, yielding multiple human embryos. “Number of eggs retrieved and IVF success rates according to female age,” *Advanced Fertility Center of Chicago*.²⁵

The “best” embryos -- or those embryos preferred for other reasons -- are selected for attempted implantation.²⁶ “IVF embryo quality and day 3 embryo grading after in vitro fertilization. Cleavage stage embryo grading,” *Advanced Fertility Center of*

²⁴www.medicalnewstoday.com/releases/144930.php.

²⁵www.advancedfertility.com/eggspregnancyrates.htm.

²⁶The selection process may itself entail procedures that risk harm to the baby. “Preimplantation genetic diagnosis (PGD) has been one of the main clinical components of assisted reproductive technologies (ARTs) since 1990.” Yang Yu et al., “Evaluation of Blastomere Biopsy Using a Mouse Model Indicates the Potential High Risk of Neurodegenerative Disorders in the Offspring,” 8 *Molecular & Cellular Proteomics* 1490 (2009) (citations omitted), *available at* www.mcponline.org/content/8/7/1490.full. Blastomere biopsy -- extracting for analysis some cells of the IVF embryo -- is “an indispensable manipulation during the PGD procedure.” *Id.* Such biopsies may be harmful. *Id.* (“This study suggested that the nervous system may be sensitive to blastomere biopsy procedures and indicated an increased relative risk of neurodegenerative disorders in the offspring generated following blastomere biopsy”).

Chicago;²⁷ “Embryo Grading,” Fertility Proregistry.com.²⁸

The remaining embryos are either discarded, donated, or frozen for possible future use. Gina Kolata, “The Job Nobody at the Fertility Clinic Wants,” *New York Times* (Aug. 26, 2001).²⁹ As of three years ago, the number of frozen embryos in the United States was already estimated to exceed 400,000. Denise Grady, “Parents Torn Over Fate of Frozen Embryos,” *New York Times* (Dec. 4, 2008).³⁰

Discarding is obviously lethal for the embryo. The freezing and thawing process can be lethal as well. As one fertility center explains:

We define embryo survival based on the number of viable cells in an embryo after thawing. An embryo has “survived” if >50% of the cells are viable. We consider an embryo to “partially survive” if <50% of its cells are viable, and to be “atretic” if all the cells are dead at thaw. Approximately, 65-70% of embryos survive thaw, 10% partially survive, and 20-25% are atretic.

²⁷www.advancedfertility.com/embryoquality.htm.

²⁸www.fertilityproregistry.com/content/embryo-grading.asp.

²⁹www.nytimes.com/2001/08/26/us/the-job-nobody-at-the-fertility-clinic-wants.html?src=pm.

³⁰www.nytimes.com/2008/12/04/us/04embryo.html?page-wanted=all.

“Embryo Freezing (Cryopreservation),” Genetics & IVF Institute (fertility center in Fairfax, Virginia and North Bethesda, Maryland).³¹

If “too many” embryos implant, the physicians may employ “selective reduction” -- taking the lives of the “excess” children in an intrauterine abortion -- to lower the number of babies to reach a more desirable total. See, e.g., Ruth Padawer, “The Two-Minus-One Pregnancy,” *New York Times* (Aug. 10, 2011),³² Dr. Marcus, “Risks and complications of IVF treatment,” IVF-Infertility.com.³³

In short, the adorable baby at the end of the process may follow a trail of cadavers and/or children left in icy limbo.³⁴

³¹www.givf.com/fertility/embryofreezing.shtml.

³²www.nytimes.com/2011/08/14/magazine/the-two-minus-one-pregnancy.html?_r=1&pagewanted=all.

³³www.ivf-infertility.com/ivf/standard/complications/multiple_pregnancy4.php.

This “selective reduction” can have adverse psychological consequences for the parents. Elizabeth Ring-Cassidy & Ian Gentles, “Multifetal Pregnancy Reduction,” in *Women’s Health After Abortion: The Medical and Psychological Evidence* (2003), available at www.deveber.org/text/chapters/Chap13.pdf. See also Meredith O’Brien, “Selective Reduction: A Painful Choice,” babyzone, www.babyzone.com/preconception/infertility/tests_and_treatments/article/selective-reduction.

³⁴In the United Kingdom, the ratio is roughly 23 or 24 embryos created for each live baby born. Specifically, there were 3,144,386 embryos created through all forms of IVF from 1991 through June of 2010, “Embryology, Questions Asked by Lord Alton of Liverpool,” <http://services.parliament.uk/hansard/Lords/bydate/20110720/writtenanswers/part025.html>. However, there were only some 138,000 live IVF babies born from 1991 through

D. Dismantling the family

The storybook version of IVF involves a mother, a father, and their IVF child. But often the reality departs from that vision. Depending upon the source of the infertility, third parties may be called upon to supply one or more missing elements of the procreative process. The sperm may come from a serial sperm seller. *E.g.*, Jacqueline Mroz, “One Sperm Donor, 150 Offspring,” *New York Times* (Sept. 5, 2011).³⁵ *See* Dr. Marcus, “Gamete and embryo donation,” IVF-Infertility.com.³⁶ The egg may come from a college student eager to defray tuition costs. Roni Caryn Rabin, “As Demand for Donor Eggs Soars, High Prices Stir Ethical Concerns,” *New York Times* (May 15, 2007) (woman “concedes that she would never have done it if not for the money, \$7,000 that she used to

June of 2010. *See* www.hfea.gov.uk/docs/Latest_long_term_data_analysis_report_91-06.pdf (p.15: totals for 1991-2006); www.hfea.gov.uk/docs/2010-12-08_Fertility_Facts_and_Figures_2008_Publication_PDF.PDF (p. 4: totals for, *inter alia*, 2007 & 2008); www.hfea.gov.uk/ivf-figures-2006.html#1279 (total for 2009). (These figures add up to 130,822. The total for the first half of 2010 can be roughly estimated, based upon prior years, to range from 6,400 to 7,500.) The remaining embryos were either “stored,” “discarded” “given for research,” or died somewhere after the implantation attempt but before birth. “Embryology, Questions Asked,” *supra*.

³⁵www.nytimes.com/2011/09/06/health/06donor.html?_r=1&pagewanted=all.

³⁶www.ivf-infertility.com/donation/index.php.

pay off some student loans”).³⁷ The womb may be rented from a “surrogate” mother. Alex Kuczynski, “Her Body, My Baby,” *New York Times* (Nov. 28, 2008).³⁸ Indeed, all three parental substitutions can be in play at the same time. Saunders, *supra* note 15. *See also* Pet. App. 11a.³⁹ The biological link between the original couple and “their” child can thus diminish to the vanishing point.

In this respect -- lack of a biological link between parents and child -- an IVF birth need not differ from a standard adoption, i.e., the primary link to the child is not biology but rather the love and desire of the new parents. There is, however, a key difference: adoption provides for an existing child in need of parents; IVF calls such a child into being. That difference may matter to the parent:

“If I had conceived these twins naturally, I wouldn’t have reduced this pregnancy, because you feel like if there’s a natural order, then you don’t want to disturb it. But we created this child in such an artificial manner -- in a test tube, choosing an egg donor, having the embryo placed in me -- and somehow, making a decision about how many to carry seemed to be just another choice. *The*

³⁷www.nytimes.com/2007/05/15/health/15cons.html.

³⁸www.nytimes.com/2008/11/30/magazine/30Surrogate-t.html?pagewanted=all.

³⁹Another option is “embryo donation,” i.e., the intended mother gestates an already-conceived, biologically unrelated child. *E.g.*, Dr. Marcus, “Gamete and embryo donation,” IVF-Infertility.com, www.ivf-infertility.com/donation/index.php.

pregnancy was all so consumerish to begin with, and this became yet another thing we could control.”

Padawer, *supra* p. 18 (emphasis added) (quoting mother who aborted one of her healthy IVF twins). This attitudinal difference may also matter to the child, as noted in the next section.

E. Effect on the child’s psyche

The first “test tube” baby was born in 1978. Kolata, “Picture Emerging,” *supra* p. 12. “We’re still in the first two generations of people born with assisted-reproduction technology ... and there is lots we don’t know about them.” Blackwell, *supra* p. 10 (quoting Dr. Roger Pierson, a University of Saskatchewan fertility scientist). The anecdotes and other data regarding these children are just beginning to be compiled. Early indications are that there may be several emotional or psychological consequences to watch for among this population.

For example, such children, upon learning about their origins, may consider themselves as somehow a “product” of science and human manipulation. See Frances Hardy & Diana Appleyard, “Caroline was fathered by a sperm donor -- so why does she bitterly resent the stranger who gave her life?” Daily Mail (June 25, 2010)⁴⁰ (IVF child: “In my view, it is a horrible, clinical way to be conceived. All my life I’ve felt as if I’m only half a person”); Wesley Smith, “I Have a Right to a Baby Girl! Using IVF for Sex

⁴⁰www.dailymail.co.uk/femail/article-1289042/Caroline-fathered-sperm-donor--does-bitterly-resent-stranger-gave-life.html.

Selection,” *Secondhand Smoke*⁴¹ (“Increasingly, IVF is not about treating infertility, but about reducing reproduction to a crass consumer activity akin to choosing a breed of dog or model of flat screen television. This is objectification pure and simple”).

If “donor” gametes were involved, the children may feel a profound longing to know the identity of their biological progenitors. Amy Harmon, “Hello, I’m Your Sister. Our Father Is Donor 150,” *New York Times* (Nov. 20, 2005);⁴² Barry Stevens, “The Pratten ruling: An anonymous sperm provider’s son explains why it matters,” *Center for Genetics and Society* (June 2, 2011).⁴³ *See generally* www.anonymousfathersday.com (documentary); *The Donor Sibling Registry*⁴⁴ (history and mission of website facilitating contact between members of “families which have been developed via donor conception”); *Anonymous Us Project*⁴⁵ (personal accounts of “voluntary and involuntary participants” in “reproductive technologies and family fragmentation”).

Those children who discover that one or more simultaneously conceived siblings were discarded or “selectively reduced,” meanwhile, may suffer from

⁴¹www.firstthings.com/blogs/secondhandsmoke/2010/07/09/i-have-a-right-to-a-baby-girl-using-ivf-for-sex-selection/.

⁴²www.nytimes.com/2005/11/20/national/20siblings.html?adxnnl=1&pagewanted=all&adxnnlx=325177795-OKmZ8fMF1M1cDSTIM+ywSA.

⁴³www.geneticsandsociety.org/article.php?id=5739.

⁴⁴<https://www.donorsiblingregistry.com/about-dsr/history-and-mission/>.

⁴⁵<http://anonymousus.org>.

some form of Post Abortion Survivor Syndrome. *See* Phillip F. Ney et al., “Post Abortion Survivor Syndrome: Signs and Symptoms,” 25 *Birth Psychology* 107 (Dec. 2010)⁴⁶ (abstract: “Correlations and stepwise regression analyses demonstrated a cluster of existential symptoms for those surviving when their siblings were aborted”).

F. Creation of exploitative markets

IVF has become a business.⁴⁷ Any business operating at the core of powerful human instincts -- like the instinct to reproduce -- is bound to give rise to exploitation of human needs and emotions. When the business deals with human bodies and tissues, the danger of exploitation becomes that much more grave. These dangers are already materializing with the IVF industry. *See, e.g.*, www.eggsploitation.com (documentary); “San Diego attorney pleads guilty in ‘baby-selling

⁴⁶<http://birthpsychology.com/journal-article/post-abortion-survivor-syndrome-signs-and-symptoms>.

⁴⁷*E.g.*, “Concerned About the Cost of IVF? Our Shared Risk IVF Program Offers Success or 100% Refund,” Shady Grove Fertility, www.shadygrovefertility.com/shared_risk/?gclid=CJuKkevToq0CFQ3DtgodDDH8mA (“lock in a fixed cost for up to six IVF treatment cycles and receive a 100% refund if a baby is not delivered”); “Clear & Affordable Fees,” Washington Fertility Center, www.washingtonfertility.com/fees.htm (listing price options, including “IVF Three for Two” deal and “IVF Baby Guarantee . . . (or Your Money Back)”); www.medicaldiscounts.com/fertility.htm (“Affordable Discount Low Cost Cheap State-of-the-Art International IVF”).

ring,” L.A. Now (Los Angeles Times blog) (Aug. 9, 2001)⁴⁸ (IVF profiteering scheme).

* * *

It is too early to know with confidence the extent of -- much less exhaustively to identify -- the unintended adverse consequences of IVF technology. What evidence has emerged thus far suggests IVF poses an array of serious dangers to women, children, medicine, and society at large.

CONCLUSION

This Court should decide this case in a way that recognizes the dangers inherent in modern reproductive technologies like IVF.

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⁴⁸<http://latimesblogs.latimes.com/lanow/2011/08/san-diego-attorney-pleads-guilty-in-baby-selling-ring.html>.