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COMMODIFICATION OF THE FEMALE EGG: STEM CELL TECHNOLOGY AND THE FUTURE

*Rachel Rose Ostrander**

Introduction

As the science of stem cell research progresses it is difficult to tell what implications it will have on our society and for women. I will begin this discussion by examining how science has viewed women in the past, and use this as a basis to conjecture about how they will be viewed and treated in the future. Prevalent gender bias in scientific writing should be a cause for concern as the science of stem cell research and commodification of the female egg becomes more of a reality.

The process of egg donation has stirred much debate in the feminist community because it is far more invasive and difficult for women to donate their gametes than the process of sperm donation.¹ I will contrast the debate with other highly controversial feminist debates that have emerged as technology has progressed including the commodification of women's bodies in pornography, surrogate gestation, and egg donation for the process of Invitro Fertilization (IVF). Because of the differences in the donation process, the compensation for donating sperm is much less than it is for donating eggs, raising concerns that women will not donate eggs out of altruism but for financial gain ignoring important risk factors and consequences.²

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1. Chan, Naomi and June Carbon, *Leveling the Field for Human Egg donors*, Los Angeles times (2013).

2. *Sperm donors Valued Less than Egg Donors*, Science Daily (2007), available at <http://www.sciencedaily.com/releases/2007/05/070525204143.htm>.

As the demand for gametes rises, stem cell therapies become more of a reality and the possibility of human cloning becomes available as a means of conception through Assisted Reproductive Technology (ART). We can reasonably expect that some women will engage more heavily than others in the selling of their eggs. Ethical concern and questions of the need for regulation will arise, and the competing interests will have to be carefully considered. While I believe that there is an overarching moral code which governs our human society, reflected broadly in the human rights charters, I also hold the position that the narrow issue of the female egg as a commodity to be bought and sold in markets all over the world might best be left to the autonomy of the female herself.

There are several options by which we can answer the call for legal guidelines regarding the role of the ova in science. The first option I will explore is to ban stem cell research completely. I suggest this will be highly ineffective at accomplishing the goal of protecting women. I will point to the inefficacy of banning prostitution, abortions, and the effect of prohibition in the 1920's as examples. The second option is to impose safeguards needed to protect the interest of women through regulation, which I will suggest is ill equipped to address the problems within private markets. I suggest a third option, to allow women to freely contract for the sale of their eggs. I believe this option could be the most effective as contracts to buy and sell are subject to the many mechanisms already prevalent in Contract law to protect parties who have unequal bargaining powers.

The law has traditionally been somewhat over protective of women, thus creating the potential for being counterproductive on this issue. I will argue that the law could act to hold women as second class citizens, incapable of making their own decisions, if they are too heavily regulated. The ultimate goal of the decision of how to address the issues inherent in commodification of ova should not be to suppress technology but to allow science and innovation to thrive in the United States, in keeping with our democratic and free market societal values, while also progressing the feminist goal of equalizing gender roles within the United States.

A BREIF HISTORY OF WOMEN IN SCIENCE

Science has been a profession dominated by men, and women have been largely left out of the scientific process. The evolution of science and scientific writing, being dominated by males, has pro-

duced such culturally impactful scientific theories as Biological Determinism and Craniotomy (which were popular as late as the 1930's).³ These popular scientific theories were used to justify social hierarchy, and held women to an inescapably inferior position to men.⁴

Our harsh historical reality has created lasting impressions in documented science. Though women now readily go to college and pursue scientific careers, most women remain in the social science and life science majors.⁵ I suggest that this has a significant impact in how women are viewed scientifically, even in our modern world. Today, donation of ova has already become widely accepted for the purposes of ARTs.⁶ Because of our scientific history, as we move forward, we need to carefully examine the sex specific implications for women in the advancement of scientific technologies like stem cell research.

The New Stem Cell Technology and the Female Egg

There are 2 basic types of stem cells, those that are derived from an embryo and those that are not.⁷ The process of creating an embry-

3. See Marcel Weber, *Determinism, Realism, and Probability in Evolutionary Theory*, 68 *PHILOSOPHY OF SCIENCE*, no.3 supplement; Herrick, C. Judson, *Biological Determinism and Human Freedom*, 37 *INTERNATIONAL J. OF ETHICS* 36-52 (Oct. 1926).

4. See RICHARD J. HERRNSTEIN AND CHARLES MURRAY, *THE BELL CURVE: INTELLIGENCE AND CLASS STRUCTURE IN AMERICAN LIFE* (Free Press 1994). Craniotomy, a popular scientific study which supports the Biological Determinist argument, suggests that women's brains are smaller than men's, and thus, they are less intelligent. Biological Determinism has been used to scientifically explain that the mere fact of being female makes a person inferior. These early 20th Century ideas, which we have seemingly moved far away from in our modern scientific world, stir the same concerns surrounding "genetic determinism" which arise when we begin talking about Stem Cell research and cloning. This suggests that these seemingly outdated scientific theories have a lasting impact and that these scientific ideas are not obscure at all.

5. Jenna Goudreau, *Most Popular College Majors for Women*, *FORBES*, at 2 (August 10, 2010), available at <http://www.forbes.com/2010/08/10/most-popular-college-degrees-for-woman-leadership-education-business.html>

6. See Ronald Chester, *Cloning Embryos from Adult Human Beings: The Relative Merits of Reproductive Research and Therapeutic Uses*, 39 *NEW ENGL. L. REV.* 583, 587, 599 (2004) (explaining that once the cloning of embryos for research and therapy becomes widely accepted, it will be difficult or even impossible to stop the use of clones for reproductive purposes).

7. See Discussion below regarding Embryonic Stem Cells and Adult Stem Cells.

onic stem cell requires both a male and female gamete. Because the demand for female eggs will increase as stem cell science becomes more widely used, we can expect it to impact women and the role that women play in science. Below I outline the distinctions and possible roles of these two kinds of stem cells, so that we can understand how the demand for eggs might be generated.

Embryonic Stem Cells

Embryonic stem cells require both a male and female gamete to be created. They are derived from the fertilized ova a few days after conception, where the blastocyst (the dividing cells form a hollow cavity within the egg) is isolated.⁸ These totipotent embryonic stem cells have the potential to develop into any type of human cells.⁹ Embryonic Stem cells are the most basic kind of stem cell. They have the potential to develop into a specialized pluripotent cell, capable of becoming almost any fetal cell.¹⁰ Embryonic cells, if not separated from the blastocyst, have the potential to develop into a fetus, but because the creation of embryonic stem cells necessitates destroying the potential for life, it has been criticized by ethicists. While the use of these stem cells raises many important ethical questions, here we are concerned only with the ethical questions surrounding female egg donation.

Adult Stem Cells

Adult Stem Cells, by contrast, are derived from an adult cell (likely a skin cell) and do not require the destruction of a possible life like embryonic stems cells do.¹¹ They are pluripotent only, which limits their capacity to develop. A pluripotent adult stem cell is able to develop into a specific type of heart, bone, muscle, or brain cell, but cannot become a full human being because it lacks a placenta.¹² This means that they have the capacity to become a variety of cells along a specific line of development. For example, a progenitor cell

8. Andrew J. French, et al., *Development of Human Cloned Blastocysts Following Somatic Cell Nuclear Transfer (SCNT) with Adult Fibroblasts*, 26 *STEM CELLS* 485, 485 (2008).

9. *Id.*

10. *Id.*

11. Tomohiro kono et al., *Birth of Parthenogenetic Mice that Can Develop to Adulthood*, 428 *NATURE* 860, (2004).

12. *Id.*

could become any type of blood cell, but it does not have the potential to become a heart valve. These adult stem cells are less stable than embryonic cells because scientists must currently use retroviruses (or chemicals) to induce potency within the cell to become a stem cell.¹³ The introduction of retroviruses and chemicals can cause disease, cancer, or tumor formation in the cells.¹⁴ Because of their instability and unpredictable nature, these cells are not ready to be used in humans. It has been suggested that these adult stem cells may not be as versatile as embryonic cells because of the age of the cell from which they are derived.¹⁵ Younger cells tend to be more elastic and stable, allowing for more diverse potential uses.¹⁶

Factors That Will Increase Demand for Ova

An estimated 2 to 3 million Americans suffer from infertility which is defined as the inability to conceive after twelve months of intercourse without contraception.¹⁷ While adoption and foster parenting are available for couples wishing to form families, the existence of and wide use of ARTs reflects the high demand to form families where the parent has a biological tie to his/her offspring.¹⁸ The process of supply and demand is what drives economic commodification. As demand increases for ova to produce and research embryonic stem cells which may provide future ARTs or help to better aid in a fundamental understanding of disease, the supply will have to increase as well.

Aside from the potential use of stem cells as an ART, stem cells also have proven to possess great potential for advancement in treat-

13. *Id.*

14. See Ronald Chester and Robert Sackstein, *Embryonic Stem Cell-Based Therapeutics: Balancing Scientific Progress and Bioethics*, 20 HEALTH MATRIX J OF LAND MED, at 2 (2010) (describes the current limitations and progression of science in the development of adult stem cell science, which currently make them unsafe for use in humans).

15. *Id.*

16. Alice Park, *The Quest Resumes*, TIME MAGAZINE (February 9, 2009); See Chester *supra* note 6, at 587, 599. Currently, only one adult stem cell line is currently stable enough for use in treatment of patients. Scientists would be further limited in the types of tissue that could be created from adult stem cells, while using embryonic stem cells they could potentially create any kind of human tissue.

17. Linda Starke, *Infertility: Medical and Social Choices*, U.S. Congress Office of Technology Assessment, at 3 (1988).

18. John A. Robertson, *Assisted Reproductive Technology and the Family*, 47 HASTINGS L. J. 911, 912 (1996).

ment of disease.¹⁹ For the unique technologies that use an individual's own adult stem cells to treat their unique conditions and ailments, this demand will have little effect on the global market, because demand would be individualized for each person's treatment of their own unique disease and the supply would be derived directly from their own cell. The use of embryonic stem cells to study and learn about disease evolution in a more general form will be beneficial to society as a whole and the implications of having such increased scientific understanding has proven valuable. This is particularly true for understanding the process which diseases like Parkinson's and diabetes take in a particular kind of cell.²⁰

The high demand for eggs and for sperm to fuel the necessary research using embryonic stem cells will be attractive to women who stand to make the most on the sale of their ova. This pressure is increased for women who are having difficulty providing for their children, particularly for single mothers, making them more vulnerable to be taken advantage of by the market.²¹ The significance of monetary compensation will likely play a role in determining the type of protection which men and women will need for donating their gametes in this new setting. Currently, while egg donors might receive \$3,500 to \$5,000 plus expenses for their donation, sperm donors typically receive less than \$100.²²

Women are compensated differently than men for their gametes because the process is far more invasive for women. The process is long, complicated, and can be painful. Men can donate sperm by sim-

19. See Park *supra* note 16.

20. *Id.* (describing the value of being able to observe these diseases in a Petri dish in order to gain a more fundamental understanding of the effect of Parkinson's and diabetes on the cells of the body).

21. See Stason.org, *How Much do Porn Stars Make? Sex Movies FAQ*, available at <http://stason.org/TULARC/sex-relationships/sex-movies/19-4-How-much-do-porn-stars-make.html#UpJIYWQfaGk> (comparing that a female might make \$1500, while a male make \$300 per shoot). This is likely to be akin to the argument against the pornography industry which has become exploitive for women who turn to selling their bodies because they lack any other option to provide for their families, and who make more money from making porn than a male porn actor.

22. See Ethics Comm. of the Am. Soc'y for Reprod. Med., *Financial Incentives in Recruitment of Oocyte Donors*, 74 FERTILITY & STERILITY 216, 217 (2000) (suggests that compensation above \$5,000 need justification, and over \$10,000 should be prohibited).

ply ejaculating into a cup, while the process for women takes multiple weeks and is comprised of many steps.

During the initial screening process, women must undergo medical examinations, pelvic exams, a blood draw to check hormone levels and to test for infectious diseases, and an ultrasound to examine her reproductive organs. Sometimes women are referred for psychiatric evaluation as well.²³ After the initial screening process is completed, a legal contract is signed, and the donor will begin the donation cycle, which typically takes between three and six weeks. The donor female takes follicle-stimulating hormones in order to stimulate egg production and increase the number of mature eggs produced by her ovaries.²⁴ A typical drug that a woman might take is “Clomid” which is commonly used to stimulate egg production for IVF. This drug is regulated by the Federal Drug Administration (FDA), however little is known about its long term effects. Throughout the cycle, the donor is subject to blood tests and ultrasound exams to monitor the effect of the hormones and the progress of follicle growth.²⁵ The eggs will ultimately be retrieved surgically, through an outpatient procedure lasting roughly half an hour, performed with general anesthesia. A small ultrasound-guided needle is inserted through the vagina to aspirate the follicles in both ovaries, which extracts the eggs.²⁶

The national average a woman is paid for her egg donation in the US is \$4,200, however the amount of compensation may vary greatly as there is a heightened demand for eggs from women with certain characteristics, including high SAT scores.²⁷ Men are, by con-

23. Beverly Hills Egg Donation, *Become a Donor* https://bhed.com/pub_donor_info.php#donation.

24. See Helen Pearson, *Health Effects of Egg Donation May Take Decades to Emerge*, NATURE August 9, 2006, available at <http://www.nature.com/nature/journal/v442/n7103/full/442607a.html> (explaining that these hormones can have various side effects causing hot flashes, headaches, mood swings, vaginal dryness, sleep problems, fatigue and body aches).

25. Beverly Hills Egg Donation, *supra* note 23.

26. *Id.*

27. Stephanie Ebbert, *Yes, top students reap rich rewards, even as egg donors, would-be parents want high SAT scores*, BOSTON GLOBE, March 26, 2010, available at http://www.boston.com/news/health/articles/2010/03/26/yes_top_students_reap_rich_rewards_even_as_egg_donors/ (noting that women may be paid as much as \$35,000 for eggs if they have high SAT scores).

trast, compensated only \$40 or \$50, with not much variance.²⁸ Surveys show that only 30% of egg donors were motivated by altruism alone.²⁹

The Dualing Lenses of Feminism

Feminism has been largely characterized as being fundamentally divided between the desire for autonomy and equal treatment, and the need for constraint to protect females from the dangers of an inherently sexist world. The interests of each are important and conflicting, making the argument complex for how to promote feminist goals. We must compare the goals and interests of human dignity as empowerment and human dignity as a constraint, balance them, and come up with a model in order to both promote scientific growth and protect the unique interests of women.

Human Dignity as Empowerment

The human dignity as empowerment viewpoint values freedom of choice over everything else and is the most “*laissez faire*” of the lenses. This ‘leave it to the market’ more modern feminist view rejects the idea that women need special protection, and embraces the idea that women should be free to make choices and engage in markets as they choose, limited only by the requirement that their independent choices do not harm anyone else. This approach assumes a competency in all individual decisions and rejects the existence of an overarching moral code of humanity by which we are all governed. As Francis Fukuyama said in *Our Post Human Future*, “when we strip all of a person’s contingent and accidental characteristics away, there remains some essential human quality underneath that is worthy of a certain level of respect.”³⁰ Reflective of this sentiment about the uniqueness of the human experience warranting a level of deference

28. Sharon Covington & William Gibbons, *What is Happening to the Price of Eggs?*, 87 FERTILITY & STERILITY 1001, 1001 (2007).

29. Kara N. Maxwell, Ina N. Cholst, & Zev Rosenwaks, *The incidence of both serious and minor complications in young women undergoing oocyte donation*, 90 FERTILITY & STERILITY 90: 2165-2171 (2008).

30. See FRANCIS FUKUYAMA, *OUR POST HUMAN FUTURE: CONSEQUENCES OF THE BIOTECHNOLOGY REVOLUTION*, 149 (Picador, 2002) (explaining that what is intrinsically and universally distinctive about humans requires respect from all who share in our common human experience and requiring deference to our autonomistic choices).

to autonomy, the Universal Declaration of Human Rights reads, that “all human beings are born free and equal in dignity and rights.”³¹ By nature, all humans have dignity inherent to us as a species, and this is often cited as the basis for holding that we inherently possess an inalienable human right to freedom of decision making. Inherent in this right, according to the empowerment perspective, would be the woman’s assumed competency in her ability to contract for the sale of her genetic material, subject only to existing contract law requirements.³²

Human Dignity as a Constraint

Conversely, the more traditional feminist view is one of human dignity as a constraint. This viewpoint acknowledges the need for certain types of protection for woman because of their vulnerability as a class of people.³³ Women have historically been limited in their participation in society; they did not even have the right to vote in the United States until 1920 with the passage of the nineteenth amendment.³⁴ Because our world was largely developed without the participation of women, they are in an inherently vulnerable position.

The human dignity as constraint perspective acknowledges an overarching human and moral basis for restricting the complete autonomy of a person’s individual decisions. Immanuel Kant’s *Metaphysics of Morals* is often cited for his philosophical writings on the importance of respect for our fellow human beings’ choices, given that they comply with a specific moral framework.³⁵ Human dignity as a constraint, by nature, holds overarching human values to be a more significant consideration than the right to freedom of individual

31. Universal Declaration of Human Rights, G.A. Res.217 (III) A, U.N. GAOR, 3d Sess., preamble, U.N. Doc. A/810 (1948).

32. See generally RUTH R. FADEN & TOM BEAUCHAMP, *A HISTORY AND THEORY OF INFORMED CONSENT* (1986) (emphasizing that existing contract law could be applied to safeguard individual autonomous choice).

33. See *Women, Property and Letters of the Law in Early Modern England*, 54 AM J. LEGAL HISTORY 480 (2007) The evolution of law regarding Trusts and Estates has been protectionist of the unique position of women, and has been formulated for the specific purpose of providing for the female spouse (historically more vulnerable than the husband because of her historical status as homemaker and mother of the family).

34. WOMEN’S SUFFRAGE 1900-1920, available at http://womenshistory.about.com/od/suffrage1900/a/august_26_wed.html.

35. IMMANUEL KANT, *THE METAPHYSICS OF MORALS* (Mary Gregor ed., trans., Cambridge Univ. Press 1996).

choice. This is an argument often used for banning practices that some view as bad for society, including prohibition and prostitution.³⁶ Any commodification of the human body is in direct contrast to this viewpoint, as it is regularly cited for instances of human dignity being compromised.³⁷

This perspective does not reject the importance of an individual's autonomistic determinations, but makes them subject to an overarching code of human values. The Preamble to the United Nations Security Council's Universal Declaration on the Human Genome and Human Rights states that even though research on the human genome has opened up wide possibilities for improving the health of humanity as a whole, it is of the utmost importance that such research fully respect human dignity and human rights, suggesting that a moral code should take precedence over even the possibility of improving the health of humanity as a whole.³⁸ An example of this doctrine in action is the popular dwarf throwing case, where the dwarves themselves argued that they were freely engaging in the throwing and thus should be allowed to continue to do so, but the Conseil d'Etat found that the dwarfs compromised their own inherent human dignity by allowing themselves to be thrown.³⁹

When we balance the interests of the empowerment and constraint views, it is important to think about the unique values that our society has. Though the overarching moral code of humanity can be observed broadly in the Human Rights Charters, the issue of commodification of ova is narrow. Because of their unique values, coun-

36. Roger Brownsword, *Bioethics Today, Bioethics Tomorrow: Stem Cell Research and the "Dignitarian Alliance,"* 17 NOTRE DAME J.L. ETHICS & PUB. POL'Y 15, 20 (2003). During prohibition, the market simply moved underground and overseas which didn't achieve any of the objectives of safeguarding society against the evils of drinking alcohol.

37. *Id.*

38. Preamble, Universal Declaration on the Human Genome and Human Rights, available at www1.umn.edu/humarts/instreet/udhrhg.htm. See, also Universal Declaration of Human Rights, *supra* note 31, art.1. A broad framework of these values can be viewed in the Human Rights Charters, which codify our collective values as humans, however it is note worthy that many of the charters contained in the declarations are not adopted by a majority of countries or by a diverse variety of countries. One of major importance to note here is the Convention on the Elimination of all Forms of Discrimination against Women (CEDAW) (which not even the United States has signed onto).

39. Ville d'Aix-en-Provence, 1996 Dalloz 177 (Conseil d'Etat); Cne de Morsang-sur-Orge, 1995 Dalloz 257 (Conseil d'Etat).

tries will likely take varying views on the issue, and this is important to keep in mind. Our American society values democracy and free market economic policy. It has been our foundation and should govern the process of determining our most important interests.

Do Women Require Special Protections?

There are several reasons why it has been argued that women need special protection as egg donors, consistent with the constraint argument above. The egg donor may suffer complications such as bleeding from the oocyte recovery procedure, as well as reactions to the hormones used to induce hyperovulation including ovarian hyperstimulation syndrome (OHSS) and liver failure.⁴⁰ The long-term impact on donors has not been well studied but some evidence suggests that an increased risk of ovarian cancer exists and that egg donation can have various effects on the future fertility of the woman.⁴¹ Many women have additionally reported having psychological effects from donating their eggs.⁴² Studies have shown as many as one in five women were unaware of any physical risks of egg donation, suggesting that they were not fully or adequately informed before contracting for the sale of their eggs.⁴³

On the other side of the argument, cases like *Moore v. Regents of University of California* have affirmed that biological materials which a scientist manipulates to create another commodity can be taken without consent or even knowledge of the patient.⁴⁴ This raises the question of what would then be wrong with allowing a person to

40. Long Island Fertility, PLLC (“Long Island IVF”), *Assisted Reproductive Technology Consent Booklet*, Risk to Women, p21 www.longislandivf.com; and MARTIN DUNITZ, *TEXTBOOK OF ASSISTED REPRODUCTIVE TECHNIQUES, LABORATORY AND CLINICAL PERSPECTIVES*, (David K. Gardner 2001). OHSS is a rare side effect, and can require the donor to have both ovaries removed.

41. *Id.*

42. Pamela Foohey, *Paying Women For Their Eggs For Use In Stem Cell Research*, 30 PACE L. REV. 900 (2010).

43. Maxwell, *supra* note 29, at 2165-71.

44. *Moore v. Regents of University of California*, 271 Cal.Rptr. 146, 148 (1990). The concurring opinion by Justice Arabian summarizes the moral argument against allowing parts of the human body to be treated as property. Justice Arabian expressed concern for the treatment of “the human vessel—the single most venerated and protected subject in any civilized society—as equal with the basest commercial commodity.” *Id.* at 479. Arabian expressed a grave concern for existence of a market in human body parts because of its potential impact on human dignity. *Id.*

profit from the sale of their own genetic material, particularly gametes, for scientific use if the market exists.⁴⁵ There should be no question that women and men should both have equal rights to engage in such a market if sufficient legal protections are in place to protect the heightened risks which accompany the choice to donate eggs.

Possible Legal Remedies

How much protection should be afforded to women who wish to donate their eggs to science? Assuming that women are as competent as men in their ability to contract, any protection imposed should address what constitutes full and informed consent, and protect the individual from coercion. Those women who are in need of money may make decisions that are outside of their best interest out of desperation, which increases the inequity between the bargaining parties.⁴⁶ The concern here is that unequal bargaining power may lead those who are financially attracted to the idea of donating their eggs to a vulnerable position whereby they are exploited. Similarly, there have been concerns about unequal bargaining power in the surrogacy process. Buyers in the surrogacy market are in a unique position to exert undue influence on the potential surrogate because they are the party who holds the resources.⁴⁷ The buyer will have the greater ability to manipulate the situation at the expense of the surrogate because of her need for the resources that the buyer has.⁴⁸ Because of concerns like this one, there is a need for legal framework to protect the seller.

45. Bridget M. Fuselier, *The Trouble with Putting All of your Eggs in One Basket: Using a Property Rights Model to Resolve Disputes Over Cryopreserved Pre-Embryos*, 14 TEX. J. ON C.L. & C.R. 143, 162 (2009). Justice Arabian's concern, as expressed in the *Moore* case, for the implications of a market for human body parts is already a reality. Eggs and Sperm are already treated as property, being freely exchanged in the global market at their own market rate. In 2002, the infertility market was \$3 billion. *Id.*

46. Sonia M. Suter, *Giving Into Baby Markets: Regulation Without Prohibition*, 16 MICH. J. GENDER & L. 217, 235 (2009).

47. Molly J. Walker Wilson, *Precommitment in Free-Market Procreation: Surrogacy, Commissioned Abortion, and Limits on Decision Making Capacity*, 31 J. LEGIS 329, 341 (2005).

48. *Id.*

The donation of gametes for IVF is governed by practice guidelines and federal regulations.⁴⁹ A third party donor is defined in UPC § 2-102 as “an individual who produces eggs or sperm used for assisted reproduction, whether or not for consideration.”⁵⁰ This definition could include the use of gametes for stem cell research. Generally these practice guidelines require genetic testing of, as well as screening and evaluation of, potential donors.⁵¹ The National Conference of Commissioners on Uniform State Laws (NCCUSL) Uniform Act on the Status of Children has treated egg and sperm donation essentially equally under the law, adopting a clearly empowerment prospective.⁵² In the face of heightened demand for eggs to fuel stem cell research some have suggested that these existing safeguards are not enough.⁵³ Under the more traditional feminist lens of human dignity as a constraint, regulating the industry or even all out banning the practice has been suggested. Let us now turn to our competing options in the form of legal remedies.

49. American Society for Reproductive Medicine (ASRM), *2002 Guidelines for Gamete and Embryo Donation*, 77 FERTILITY & STERILITY Vol. 77, No. 6, Supplement 5 (2002).

50. UPC § 2-102(8) (2002).

51. *Id.*

52. Prefatory Note, Uniform Status of Children of Assisted Conception, National Conference of Commissioners on Uniform State Laws (1988), available at <http://claradoc.gpa.free.fr/doc/269.pdf>.

53. See The Ethics Committee of the American Society for Reproductive Medicine, *Financial Compensation of Oocyte Donors*, 88 FERTILITY & STERILITY 305, 305-309 (2007). The ASRM has suggested the specific guidelines for female gamete donation, specifically allowing for the following: (1) financial compensation up to the amount of \$5,000; (2) payment between \$5,000 to \$10,000 with justification; (3) a limit of \$10,000 on compensation; (4) adoption of effective disclosure and counseling procedures to discourage inappropriate reasons for donation; (5) the same physician-patient relationship for oocyte donors as any other patient; (6) adoption of disclosure policies regarding coverage of a donor's medical costs should complications arise from the procedure; (7) provisions for a donor's withdrawal from the program at any point in time for medical or other reasons and allowing payment of a portion of the fee appropriate to the time and effort contributed; (8) no conditioning of payment on successful retrieval or the number of oocytes retrieved; and (9) compensation that does not vary according to the planned use (whether for research or implantation), the number and quality of the oocytes retrieved, or “the outcome of prior donation cycles or the donor's ethnic or personal characteristics.”

Banning

A proponent of human dignity as a constraint might argue that banning the sale of gametes all together is the best way to preserve the dignity inherent in humanity. There has been some moral support for banning where the human body has been implicated in the commodification process.⁵⁴ One example of widely accepted banning is that of prostitution because of its egregious commodification of the body.⁵⁵ Prostitution does not promote the health and progression of human society, however, the way that stem cell research potentially could. Prostitution involves the selling of the human body in a way that is intrinsically personal to the concept of self, where the sale of ova is likely less personal to the human, despite it being part of the human body.⁵⁶ In such instances where the commodity is something not intrinsic to a person's concept of self, banning the activity has been ineffective. For example, during prohibition banning alcohol was an ineffective solution to the problems it sought to address.⁵⁷ The market for alcohol moved to an underground, unregulated market where the alternative to allowing the prohibited behavior proved to be a substantial risk to public safety, because it led to an explosive rise in organized crime.⁵⁸ Similarly, all out banning of abortions was not successful because it did not accomplish the goal of protecting women's health interests.⁵⁹ Furthermore, banning the sale of gametes

54. See Suter *supra* note 46, at 241 (asserting that the sale of a gamete for money is less likely to be damaging to one's sense of self because an ova is not something tangible in the mind of a woman).

55. *Id.* Prostitution, by contrast involves the selling of herself, and not the selling of a cell to which she feels little or no attachment.

56. *Id.*

57. RAYMOND GOLDBERG, *DRUGS ACROSS THE SPECTRUM*, 121-24 (Cengage Learning, 7th ed. 2009). Similarly here, the goal of safeguarding society from the degradation of human dignity would not likely be achieved as egg and sperm markets would likely move offshore and undercover because of the high and increasing demand for gametes for research in the pursuit of furthering medical science and technology.

58. *Id.*

59. Maya Manian, *Lessons from Personhood's Defeat: Abortion Restrictions and Side Effects on Women's Health* (January 1, 2013), 74 OHIO ST. L.J. 75 (2013); Univ. of San Francisco Law Research Paper No. 2013-13. Analogous to the example of prohibition, the market for abortions moved underground to unregulated markets where the alternative to allowing abortions proved to be a substantial public safety risk. Women were forced to seek abortions from unlicensed doctors, in environments that were unhygienic, out of desperation. Young women were particularly disproportionately affected because of their

entirely is an unrealistic option as it has already become widely used and accepted in the scientific community in ARTs.

The United States government has taken the banning approach with regards to funding stem cell research. Under the Bush administration, all future embryonic stem cell research was banned.⁶⁰ In his book, *Decision Points*, the former president explains his reasoning for this decision by pointing to his own personal religious beliefs as a basis.⁶¹ This trend has continued because of public fears about the unknown future of stem cells.⁶² Technology that implicates the destruction of human life is likely to be viewed with criticism, particularly from religious groups. If we choose to ban stem cell research, it will not solve the problems and concerns surrounding the issue. The high demand for ova will still exist and technology will likely move to underground markets and overseas, leaving the United States behind other countries technological and medical advancements, and leaving the decisions of whether to and how to address problems and concerns surrounding the technology unanswered. Banning will, in effect, simply scapegoat the problems into other global markets and push the United States into protectionism, much like during the period of prohibition of the 1920's.

desperate state. Many women suffered severe medical complications ranging from infection, to sterility, to death.

60. The Bush administration took a drastic step in 2001 when they issued an executive order to halt funding that did not meet their "eligibility criteria." Even though the Obama administration repealed this act in 2009, a law suit was brought by Dr. Sherley in *Sherley v. Sibeliou*, 610 F.3d 69 (D.C. Cir. 2010) (where the court upheld an injunction to stop federal funding for many research facilities). Because of this, the state of the funding issue is currently in flux.

61. GEORGE W. BUSH, *DECISION POINTS* 111, 116-17 (2010) (citing his strong Christian morals for why his administration chose to ban funding for the controversial new technology of stem cell research). Because our country was founded on the principal of separation of church and state, I would suggest that this kind of reasoning is entirely inappropriate in deciding how to treat stem cell research.

62. June Mary Zekan Makdisi, *The slide from Human Embryonic Stem Cell Research to Reproductive Cloning: Ethical Decision-Making and the Ban on Federal Funding*, 34 RUTGERS L.J. 463, 496 (2003). The California legislature has made some attempt to distinguish between cloning for reproductive purposes and for research purposes. Legislation was passed in 1997 banning cloning for reproductive purposes.

Regulation

Regulating private markets is always a controversial decision. Baby markets are largely private, even in the case of stem cell research, where the government has taken their hands off of the funding process. A lack of oversight has led for some to call for heavier regulation on egg donation. The argument for such regulation is that of the human dignity of constraint, that human dignity is compromised through the donation process. The Federal Drug Administration (FDA) has asserted its jurisdiction over the process of cloning, but the FDA has failed to legitimize itself in this position.⁶³ Administrative agencies, like the FDA, are subject to the Administrative Procedure Act (APA) which is in place to ensure agency accountability to the public.⁶⁴ However, since agency officials are not elected, holding them to accountability is difficult in reality.⁶⁵

While the United States has not imposed regulation on the gamete donation process, the United Kingdom has taken an opposite approach, imposing strict regulation on both the private and public markets.⁶⁶ The Human Fertilization and Embryology Authority (HFEA) oversees the entire market for gamete donation, barring financial compensation for donations.⁶⁷ As a result there are long waiting lists and the country has fallen behind in effective IVF treatment.⁶⁸

Justification for the position that regulation is needed has largely stemmed from concern about the female egg donor's unequal bargaining power when compared to the buyer.⁶⁹ However, when regulations are passed which only apply to a certain class of people, it implies a judgment about their inadequacy to participate in the market. In essence, more regulation on women who chose to donate their eggs results in holding them as a second class of citizens and unequal to the rest of society.

63. Gail H. Javitt & Kathy Hudson, *Regulating (for the Benefit of) Future Persons: A Different Perspective on the FDA's Jurisdiction to Regulate Human Reproductive Cloning*, 2003 UTAH L. REV. 1201, 1209 (2003).

64. *Id.*

65. *Id.*

66. Michelle Sargent, *Regulating Egg Donation: A Comparative Analysis of Reproductive Technologies in the United States and United Kingdom*, 4 MICHIGAN JOURNAL OF PUBLIC AFFAIRS 9 (2007).

67. *Id.*

68. *Id.*

69. See 8 WILLISTON ON CONTRACTS §71:43 (4th ed.) (discussing the ways which contracts can be held invalid because of duress or unconscionability).

Contract Law Solutions

Williston on Contracts suggests that, to uphold broad social policies, contract law has established ways to protect individuals from the dangers inherent in the contracting process.⁷⁰ Our modern contract law has evolved within the framework of our unique American values, stemming from common law, and has a long and rich history of addressing problems arising out of subtle pressures being exerted on one of the parties during the bargaining process. Contract law has proven to be an effective solution to the difficulty of the law to keep up with rapidly changing technologies, as it addresses the effects on the bargaining parties and seeks to maintain equality between the parties.⁷¹ Contract law mechanisms for policing the bargain process fall generally into three categories: those mechanism that provide protection on the basis that the contracting party has a diminished status, those which address the behavior of the parties during the bargaining process, and those which address the underlying fairness of the substantive agreement.⁷²

This approach is best because, unlike regulation or banning, it addresses the concern about coercion by empowering women to be informed in their choices rather than making a judgment about their incapacity to engage in the market. In California, with regards to surrogacy contracts, the courts grant a significant amount of deference to contracting parties where the contract is not violative of public policy.⁷³ California has also treated sperm as an individual's property, upholding the right to transfer in cases where sperm has been cryopreserved.⁷⁴ I suggest that a similar standard should be followed in the case of gamete donation.

Contract law allows recovery for fraud, misrepresentation, and duress.⁷⁵ It places limits on unequal bargaining power, and safeguards against unconscionable contracts.⁷⁶ Contract law protects vul-

70. *Id.*

71. *See* Chester, *supra* note 14 at 603 (suggesting that the legislature often falls behind in their attempts to keep up with issues raised by new and quickly evolving technologies).

72. *Id.*

73. Johnson v. Calvert, 851 P.2d 776, 796 (1993).

74. In re Estate of Kievernagel, 83 Cal. Rptr. 3d 311, 314 (2008); Hecht v. Superior Court, 20 Cal. Rptr. 2d 275, 279 (1993).

75. *See* WILLISTON ON CONTRACTS, *supra* note 64.

76. *Id.*

nerable agents whose capacity to engage in contracting is insufficient. In a case where the individual's capacity to contract was diminished by possible mental illness, *Ortelere v. Teachers Retirement Board*, the contract was held invalid because of the parties diminished status at the time of contracting.⁷⁷ Similarly, in instances where a woman contracts for the sale of her gametes under a state of psychological instability, the contract would likely be found to be invalid because of her diminished capacity. The concern regarding disclosure of psychological risks of egg donation is relevant here. Although not mandated through regulation, physicians would have to assess the psychological competency of the particular woman to contract away her eggs, or be held liable by the court.

In the case where contracts are coerced, the doctrine of duress in Contract law may afford relief. Contracts obtained under coercion or undue influence are invalid.⁷⁸ The behavior of the contracting parties during the formation of the contract is significant. Substantial unconscionability applies to contracts that have substantial inequity in bargaining power⁷⁹. This protection mechanism asks if the contract is unfair on its face, in essence taking away the contracting parties meaningful choice.⁸⁰ This could apply to women who are in a dire economic situation and choose egg donation as the only means to an end. In these cases, the contract could be held unconscionable and thus, not valid. In *Austin Instruments, inc. v. Loral Corporation*, a party engaged in an agreement because of economic dependency and lack of an alternative.⁸¹ The court held that the contract was a product of undue influence, and thus, not valid.⁸²

The court has allowed recovery in the form of damages. For violations of contract law, courts have generally awarded expectancy

77. *Ortelere v. Teachers Retirement Board*, 25 N.Y.2d 196, 199 (1969).

78. *See generally* *McCubbin v. Buss*, 144 N.W.2d 175, 179 (Neb. 1966) (discussing that even if a cause of action doesn't exist a contract can be held invalid for overreaching).

79. *Id.*

80. *See generally* *Pacelli v. Pacelli*, 725 A.2d 56, 60 (N.J. Super. Ct. App. Div. 1999) (where the wife was unfairly pressured to sign a post nuptial agreement under the threat of divorce, her ability to make a meaningful choice was taken away).

81. *See generally* *Austin Instruments, Inc. v. Loral Corporation*, 29 N.Y.2d 124, 129, 130 (N.Y. 1971) (where lack of a reasonable alternative and economic dependency were determined by the court to take away the free will of the party to contract).

82. *Id.*

or restoration damages.⁸³ The goal is to place the parties in the position they would be in had there been no contract at all.⁸⁴ However, where there is gross abuse of persuasion by one party over another, the court has awarded punitive damages.⁸⁵ These mechanisms should provide adequate safeguards for women who seek to contract for the sale of gametes, without making assumptions about their ability to engage in market participation because of their sex. Although contract law is ad hoc in nature, it has been shown to be effective as a deterrent for misconduct. Clinics would suffer reputational damage, which would be devastating to a clinic where women have other options of where to donate their ova. Because of the wide availability of alternatives in an open market, there would be a high incentive for clinics to avoid any law suits which would hurt their reputation. Because of this, the most reputable clinics would likely also be the most safe and successful clinics.

There is also a need for uniformity in what constitutes informed consent, as well as the standardization of forms for showing full and complete disclosure. It is true that consent forms vary by state, and what is required to be disclosed also varies on a state by state basis.⁸⁶ Depending on the jurisdiction, typically informed consent ranges from “what would be material to the reasonable patient to be informed of,” to “what a reasonable physician would disclose.”⁸⁷ Physicians should also encourage all gamete donors to be informed about the process and seek information beyond that which is required.

If a person fails to make a smart and positive choice regarding gamete donation in light of all the protections afforded to them, given full and complete disclosure, then that is their choice that they must live with. People will undoubtedly make bad or even dangerous decisions regardless of how much protection is in place to protect them. Any regulation on the market for gamete exchange should not be based on sex. If the state or government wishes to regulate the market, applying regulation only to women would be harmful for the progression not only of feminism but for humanity as a whole.

83. *Hawkins v. McGee*, 84 N.H. 114, 117 (N.H. 1929).

84. *Id.*

85. See RESTATEMENT, SECOND, OF TORTS §908 (1979); RESTATEMENT §355; 3 FRANSWORTH ON CONTRACTS §12.8 (2nd ed. 1998).

86. Suter, *supra* note 46, at 245.

87. *Id.*

The Future for how Women are Treated in Science

While some women will be empowered by their ability to participate in the biological market, others will be degraded. Because it is up to the individual woman to make the choice of how she will engage in such a market, this is an unavoidable reality. Women should be encouraged to be adequately informed and involved in the scientific process. If a woman allows her eggs to be treated like a commodity, they inevitably will be. While the danger exists that women will be viewed and treated as nothing more than a factory for egg production, in order to continue moving away from the old days of degrading women through scientific writing women need to be encouraged to be involved with science and informed in their decision making process.

Conclusion

The commodification of the female egg is already a reality. The best way to achieve the free-market, democratic goals of the United States, as well as the goal of both feminists and women in equalizing gender roles is by using existing contract law to govern the use of female eggs in scientific exploration. We have seen how gender based regulations and implementing an all out ban has proven ineffective in reaching these goals in the past. While some will face greater risk than others, particularly those who will choose to use their bodies as a factory for egg production to supply the high demand for stem cells, we must avoid diminishing the status of women as a whole through over protection by the law. Proper education about health effects and utilizing existing contract law mechanisms will encourage informed decision-making and discourage the biases prevalent in our history where women have been held to be incapable of meaningful scientific participation.