

Consortium on Law and Values in Health, Environment & the Life Sciences 2014-15 Student Proposal Cover Page

Applicant Information

Applicant name: Katarina Lee **Email:** leex6668@umn.edu

Project title: The ethical, medical and legal concerns of uterine transplantation in the United States' artificial reproductive technology market.

Department: Law School **College:** Health Law & Bioethics Concentration

Degree program: JD (potential JD/MPH) **Faculty advisor name & email:** Professor June Carbone jcarbone@umn.edu

Dept. Head: Professor Susan Wolf **Dept. Head's email:** swolf@umn.edu

Dean: David Wippman **Dean's email:** dwippman@umn.edu

How did you hear about this funding opportunity?

Consortium e-mail

Funding

Total amount of funding requested: **\$6997.22**

Executive summary (maximum 200 words)

I am requesting \$6997.22 from the Consortium on Law and Values in Health, Environment and the Life Sciences in order to investigate the impact that uterine transplants will have on the United States' artificial reproductive technology (ART) market. The purpose of this project is to research and analyze the ethical, medical and legal ramifications of this procedure in the context of the United States. I will perform an extensive literature review on the ethical and legal ramifications in the United States. I then wish to travel to Sweden to interview Dr. Mats Brannstrom and his medical team at the University of Gothenburg in order to understand the medical procedure and concerns associated with uterine transplants. The conclusion of this project will involve a paper I wish to publish in a law, bioethics or public health journal. I will also conduct a presentation on my findings at an event sponsored by the Health Law and Bioethics Association at the University of Minnesota Law School in which I hope to invite individuals from the Law, Medical and Public Health Schools, along with individuals from the Bioethics department.

Approvals

Check all appropriate approvals required for your proposal. Approvals must be obtained prior to receipt of funding. If you have applied for approval but have not yet received it, indicate that below.

IRB NA

Other NA

Checklist

- The proposal is 1000 words or less excluding budget, biographies, references and citations.
- The proposal includes a work plan with a specific timeline using months or quarters to identify work to be done and completion dates.
- The proposal includes a 1-2 paragraph biography of the applicant and all co-investigators.
- The budget form is complete including the funds sought for this project, other pending applications for this project, and the amount/source of matching or other funds.
- The applicant's faculty advisor is copied on the application email. Professional students w/o advisors check NA.
- All necessary approvals are pending or received.

Proposal:

Background:

Uterine donation and transplantation is an emerging technology that has created a variety of different ethical, medical and legal concerns. This procedure is extremely new and has been surrounded by significant controversy.¹ Reports suggest that there have been approximately fifteen attempts worldwide, in Turkey, Saudi Arabia and more proficiently in Sweden.² Uterine transplantation occurs when a woman who has been born without a uterus, has a malformed uterus or has undergone the removal of her uterus in a procedure called a hysterectomy seeks a donated uterus. A condition called Mullerian Agenesis, also known as Mayer-Rokitansky-Kuster-Houser Syndrome is the condition of a woman being born without a uterus, vagina or both.³ This condition affects 1 out of every 4,000-10,000 female children born.⁴ Women undergo hysterectomies for a variety of reasons including cancer, endometriosis or abnormal bleeding.⁵

A uterus can then be donated to a woman lacking a uterus either from a cadaver, or a live person.⁶ In the current practice a few of the procedures have involved mothers' giving their daughters their uteri.⁷ After the uterus is placed into a woman she can then attempt to become pregnant. In the current attempts to create a pregnancy, embryos have been created through in-vitro fertilization (IVF) and then implanted into the woman's uterus. Looking to the future, doctors would like to attempt attaching the uterus to the woman's fallopian tubes in order to allow for natural ovulation and fertilization to occur. There have been a total of three successful live births from uterine

¹ ZUMBIA MUMTAZ ET. AL., *Ethics Criteria for Uterine Transplants: Relevance for Low-Income, Pronatalistic Societies?*, J. CLINICAL RES. BIOETHICS (2012), <http://omicsonline.org/ethics-criteria-for-uterine-transplants-relevance-for-low-income%20pronatalistic-societies-2155-9627.S1-004.pdf>.

² CBS NEWS, *Nine Swedish women undergo uterus transplants*, <http://www.cbsnews.com/news/nine-swedish-women-undergo-uterus-transplants/> (last visited Nov. 10th, 2014).

³ THE AMERICAN COLLEGE OF OBSTETRICIANS AND GYNECOLOGISTS, *Mullerian Agenesis: Diagnosis, Management and Treatment*, <http://www.acog.org/Resources-And-Publications/Committee-Opinions/Committee-on-Adolescent-Health-Care/Mullerian-Agenesis-Diagnosis-Management-and-Treatment> (last visited Dec. 12, 2014).

⁴ *Id.*

⁵ THE AMERICAN COLLEGE OF OBSTETRICIANS AND GYNECOLOGISTS, *Hysterectomy*, <http://www.acog.org/Patients/FAQs/Hysterectomy#having> (last visited Nov. 21, 2014).

⁶ Martha Kempner, *Nine Women Receive Uterus Transplants in Sweden, Raising Ethical Questions*, RH REALITY CHECK (Jan. 23, 2014, 9:51 AM), <http://rhrealitycheck.org/article/2014/01/23/nine-women-receive-uterus-transplants-sweden-raising-ethical-questions/>.

⁷ Ashley Hayes, *First mother-daughter womb transplants performed in Sweden*, CNN (Sept. 20, 2012, 7:57 AM), <http://www.cnn.com/2012/09/19/health/uterine-transplant/>.

transplantation. The first occurred in September 2014 when Vincent X was born.⁸ There have been two more reported births in November 2014 resulting in two more baby boys.⁹

Scope:

The purpose of my research project is to analyze the ethical, medical and legal concerns of uterine transplantation in the United States market. Ethical concerns stem from the worry that if this procedure becomes more proficient that women from lesser socio-economic means will be exploited for their uteri through financial incentives. There is also the concern that young fertile women may donate their wombs for altruistic purposes not fully realizing they may wish to conceive later in life. Furthermore, there are concerns about informed consent and whether individuals (both donor and recipient) should be placing themselves at medical risks for the opportunity to experience pregnancy. Uterine transplantation is distinct from other organ transplantation because of its non-essentiality to the health of a woman.

A relevant medical concern is the need for recipient women to continue to take anti-rejection drugs during a pregnancy. This exposes a fetus to extremely harmful chemicals that could impact the development and health of a future child. The drugs also greatly affect the recipient woman as they are known to cause “high blood pressure, swelling and diabetes and may also raise the risk of some types of cancer” and therefore fertility specialists suggest that the donated uterus be removed after a maximum of two pregnancies have been achieved.¹⁰ In the birth of Vincent X, his mother experienced rejection episodes three times, including one during her pregnancy. She also developed preeclampsia and delivered prematurely via a caesarean section.¹¹

The legality of uterine transplants especially for financial compensation in the United States poses a new problem. In the United States the National Organ Transplantation Act (NOTA) prohibits the sale of human organs under which uteri would seem to be included as NOTA defines “‘human organ’... as ‘kidney, liver, heart, lung, pancreas, bone marrow, cornea, eye, bone and skin or any subpart thereof and any other human organ (or any subpart thereof, including that derived from a fetus).’”¹² However, many states permit the sale of

⁸ Mark Duell, MAILONLINE, (Oct. 7, 2014, 1:25 PM), <http://www.dailymail.co.uk/news/article-2783995/Woman-gave-birth-world-s-womb-transplant-baby-speaks-joy-son-Vincent.html>.

⁹ Keith Perry, *Two women give birth with wombs donated by their mothers*, THE TELEGRAPH (Dec. 2, 2014, 11:23 PM), <http://www.telegraph.co.uk/news/newstoppers/howaboutthat/11269613/Two-women-give-birth-with-wombs-donated-by-their-mothers.html>.

¹⁰ CBS NEWS, *supra* note 2.

¹¹ UNIVERSITY OF GOTHENBURG: THE SAHLGRENSKA ACADEMY, *World's first child born after uterus transplantation*, http://sahlgrenska.gu.se/english/news_and_events/news/News_Detail/world-s-first-child-born-after-uterus-transplantation.cid1239052 (last visited Dec. 17, 2014).

¹² Glen Cohen, *Can the Government Ban Organ Sale? Recent Court Challenges and the Future of US Law on Selling Human Organs and Other Tissue*, 12 AM. J. OF TRANSPLANTATION, <http://onlinelibrary.wiley.com/store/10.1111/j.1600-6143.2012.04092.x/asset/j.1600-6143.2012.04092.x.pdf;jsessionid=3D48A31C7577D692185699F0AD4AD497.f04t04?v=1&t=i5wz81t5&s=d788bba2281ec93572bf560b4c8956702abbe06d> (last visited Feb. 4, 2015).

sperm, ova and allow for financially compensated surrogacy contracts. Uterine donation is different than gamete sales because of the ability of gametes to be self-replenishing, but some of the concerns between the practices are similar.¹³ Uterine donation is most similarly aligned with surrogacy. Most states do not prohibit financially compensated surrogacy contracts, therefore allowing for individuals or couples to “rent” a womb (uterus) from a woman. The legality of financially compensated uterine donation seems to fall between prohibited organ sales under NOTA and permitted assisted reproduction sales and contracts. Uterine donation is important to a variety of different fields and therefore research should be conducted prior to this practice commencing in the United States.

Work Timeline:

May 15th – August 10th, 2015: Total 150 hours

Conduct extensive literature review on NOTA, relevant state laws regarding organ sales, gamete sales, surrogacy contracts, ethical concerns of uterine transplants, and current medical practices.

August 10th - August 30th, 2015: Total 40 hours

Prepare interview materials, travel to Gothenburg to interview Dr. Mats Brannstrom and his medical team.

August 30th – November 30th, 2015: Total 75 hours

Prepare paper for publication reporting my work and findings. Submit paper to publications.

November 30th, 2015 – January 30th, 2016: Total 10 hours

Prepare for presentation and advertise for event.

February 2016: Total 2 hours

Conduct presentation on findings and research.

Biography:

Katarina Lee is a second year law student at the University of Minnesota Law School. She was recently accepted into the joint JD/MPH program in Child and Maternal Health. Prior to attending law school she received her BA in Philosophy from the University of Dallas and her MA in Bioethics from New York University. She currently works at the Public Health Law Center in the National Tobacco Control Legal

¹³ Christine Dell’Amore, *Women Can Make New Eggs After All, Stem-Cell Study Hints*, NATIONAL GEOGRAPHIC (Feb. 29, 2012), <http://news.nationalgeographic.com/news/2012/02/120229-women-health-ovaries-eggs-reproduction-science/>.

Consortium and at the Minnesota Catholic Conference focusing on surrogacy law and policy. This past fall she received the Book Award at the University of Minnesota Law School in both Assisted Reproduction and the Family with Professor June Carbone and Public Health Law and Ethics with Professor Susan Wolf. She has completed extensive research in bioethics and reproductive ethics under the guidance of Professor William Ruddick at New York University and Professor John Loike at Columbia University.

Budget:

Project Title: The ethical, medical and legal concerns of uterine transplantation in the United States’ artificial reproductive technology market.

Instructions: Provide justification along with costs.			Requested funding	Matching/other funding	
	Category	Description & justification	Amount	Amount	Source
1	Your stipend	\$17.86 x 277 = \$4,947.22 (graduate student hourly rate)	\$4,947.22	n/a	n/a
2	Speaker honoraria	n/a	n/a	n/a	n/a
3	Supplies & Services	Refreshments and advertising costs for presentation on findings	\$50.00	n/a	n/a
4	Equipment	n/a		n/a	n/a
5	Travel	Flight to Gothenburg Sweden and accommodations during interview period	Max. \$2000.00	n/a	n/a
Subtotal research expenses (2-6)			\$ 2050.00	\$0	
TOTAL BUDGET			\$ 6997.22	\$0	

Budget Guidelines

1. Stipend justification. You must justify the amount of stipend you are requesting by identifying the number of hours you plan to work on the project and the hourly wage used for research assistants in your department. Include fringe benefits.
2. For colloquia, identify the number of speakers and the amount of honoraria you will provide.
3. Supplies and services. List out all supplies and their estimated costs. Explain in line 7 or in the body of your proposal what the supplies will be used for.✕
4. Equipment costs are allowable only if the justification clearly shows that the equipment is necessary for the project. Include explanation of what will happen to equipment at completion of project.
5. Travel costs must include a description of the purpose of the travel, start and stop dates of travel, transportation costs, housing costs, and allowable per diem (use University rates found at [http:// travel/umn.edu](http://travel/umn.edu)).