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## **Learning Activity 1: Creating a Market for Eggs to Support Stem Cell Research**

### **Eggs & Blood: Gifts & Commodities Module**

*by Katayoun Chamany Updated July 2017*

With new advances in both reproductive technology and stem cell research an interesting confluence of ethical controversies has emerged including compensation for human egg procurement to support human embryonic stem cell research (hESCR). Although hESCR may lead to the development of drugs and technologies to treat or prevent the onset of disease and/or disability, the work has also created a market where eggs (oocytes) are viewed as a commodity. Professional societies such as the International Society for Stem Cell Research (ISSCR), the National Academy of Sciences (NAS), the American Society for Reproductive Medicine (ASRM), and the Preimplantation Genetic Diagnosis International Society (PGDIS) have issued statements regarding compensation for oocyte procurement. Advocates for women's health and disability rights, such as Hands Off Our Ovaries, the Center for Genetics and Society, and Womenlink Korea, and those that support pro-life politics, such as Feminists Choosing Life have responded with lobbying and awareness campaigns. The following articles and video clips offer a glimpse of political engagement regarding payment/compensation schemes for oocyte procurement in the US, the conflict between federal and state policies, and the possibility of a larger supply of eggs created from embryonic stem cells.

At the completion of this activity you will be able to:

- Recognize the intersection of reproductive technologies, stem cell research, and cloning
- Consider the social impact of compensation for bodily goods
- Explain why states are deliberating on compensation for oocyte procurement for stem cell research
- Provide two lines of evidence, or reasoning, to support bans on compensation for oocyte procurement for hESCR
- Provide two lines of evidence, or reasoning, to support the development of policies and structures to regulate compensation for oocyte procurement for hESCR
- Generate questions about the unique biological role that eggs play in human development and subsequently stem cell research

To ground the activity you will read the following pieces which illustrate why a market for human eggs for embryonic stem cell research (ESCR) has emerged.

1. The Embryo Project. The Dickey-Wicker Amendment. [Link](#)
2. Anonymous. 2003. Eggs shared, given, and sold. *The Lancet*. 362(9382):413. (1pg) [Link](#)
3. Schatten, G. & Schatten, H. 1983. The energetic egg. *The Sciences*. 23(5):28-34. [Link](#)
4. Yamada, M. et al. 2014. Human oocytes reprogram adult somatic nuclei of a type 1 diabetic to diploid pluripotent stem cells. *Nature*. 501(7506): 533-536. [Link](#) (read the editors summary in the right corner and abstract, for STEM students the research article may be assigned)

Additionally, you may be asked to review all the resources below, or your class may be split in half and those with a last name beginning with A-M will read the even-numbered resources while those with last names beginning with N- Z will read the odd-numbered resources. Read the resources assigned and generate a list of comments and questions for discussion.

Some questions to consider as you review the resources:

1. What kind of document, product, or publication is this?
2. When was this published or showcased and where? Who is the author/creator? What is their bias?
3. Who is the audience? What is the resource's purpose? Who has access to the reference?
4. What do you know? What is the take away message?
5. What do you need to know? What questions does it prompt you to ask?
6. What was the most surprising, interesting, or shocking aspect of your piece?

### Readings:

1. O'Reilly, K. July 27, 2009. New York OKs Paying Women Who Donate Eggs for Research. *Genetics and Society*. (2 pgs) [Link](#)
2. Roxland, B. 2010. 2010 Report: Egg donation for stem cell research: How New York State developed its oversight and compensation policies. *World Stem Cell Report*: 60-67. [Link](#)
3. Crowley, C. Oct 15 2009. Abortion foes challenge pay for egg donors. *Timesunion.com*. (1pg) [Link](#)
4. Egli, D. et al. 2011. Impracticality of egg donor recruitment in the absence of compensation. *Cell Stem Cell*. 9(4):293-294. [Link](#)
5. Powell, K. Feb 27, 2012. Egg-making stem cells found in adult ovaries. *Nature News*. (1pg) [Link](#)
6. Lovell-Badge, R. March 12, 2012. Hype, hope and heresy – or why it is bad to eggsaggerate. *BioNews.org*. (2pgs) [Link](#)
7. Gutierrez, M. March 10, 2013. Donate eggs for research? California bill seeks to compensate women. *HuffingtonPost*. (1pg) [Link](#)
8. Benjamin, R. April 17, 2013. Which comes first: the woman or her eggs? *HuffingtonPost*. (1pg) [Link](#)
9. Miles, K. Aug 15, 2013. California Bill to Allow Women To Sell Eggs for Research Vetoed by Governor Gerry Brown. *HuffingtonPost*. (1pg) [Link](#)
10. Darnovsky, M. & Fogel, B. Sept 3, 2013. California Controversy: Let's Not Expand the Women's Market in Women's Eggs. *Huffington Post*. (1 pg) [Link](#)
11. Couzin-Frankel, J. No 6, 2015. Eggs unlimited. *Science*. 350(6261): 620-624. [Link](#)
12. **Optional for UK reference:** Roberts, C., & Throsby, K. 2008. Paid to share: IVF patients, eggs and stem cell research. *Social Science & Medicine*. 66(1):159-169. [Link](#)

### Videos:

1. Hafer, J. & Lahl, J. (Producers). Godawa, B. (Director). 2009. Lines that Divide: The Great Stem Cell Debate. Boulevard Pictures. Each clip is only 1-2 minutes in length. [Link](#).  
Clip 1: Stemgen Sam Wood & William Hurlbut: Cloning  
Clip 2: How many Embryos?  
Clip 3: Spinal Cord Injury/ Christopher Reeve Testimony and Implantation  
Clip 4: What is Life Rhetoric/Extranumerary/Who Decides?  
Clip 5: Ovarian Hyperstimulation Syndrome/Health Risks  
Clip 6: Calla Papademos/Oocyte Provider  
Clip 7: Prop 71 in California for SCR
2. **Video:** Rosary Films 2009. (Nightlife Adoptions). Stem Cell Research Policy of President Bush/ Adult Versus Embryonic Stem Cells. Youtube. [Link](#). President Bush's speech in 2005 Veto of the Castle-Degette Stem Cell Research Enhancement Act. (3:00- 7:00 min)
3. **Video:** Hannah's Story: The First Snowflake Baby. Youtube. (3:36 min). [Link](#)

4. **Video:** MSNBC. March 9, 2009. Rep DeGette on MSNBC's Hardball with Chris Matthews (11:34 min) [Link](#)
5. **Video:** Democracy Now. March 12, 2010. Study: Median Wealth for Single Black Women: \$100, Single Hispanic Women: \$120, Single White Women: \$41,000. (33 min) (Prompt 2:16 min) [Link](#)
6. **Video:** Benjamin, R. Feb 5, 2015. From park bench to lab bench. What kind of future are we designing? TEDxBaltimore. Youtube.(21:25 min) [Link](#)
7. **Video & Video Animation:** Dolgin, E. Feb 26, 2012. Stem cell discovery puts women's reproduction on fertile ground. NatureVideo. Spoonful of Medicine. Produced by Erin Olsen, narrated by Rebecca Hersher, and animation and artwork by Katherine Vacari. MacMillan Publishers. (4:53 min). [Link](#)