

STEM CELLS ACROSS THE CURRICULUM www.stemcellcurriculum.org 2015

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Discussion Questions Eggs & Blood: Gifts & Commodities Module

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Biology & Investments in Biomedicine

- 1. In terms of their biological potential, how do embryonic stem cells (ESCs) and adult stem cells compare and why are both important to stem cell research and regenerative medicine?
- 2. How do sperm and egg differ in their development, their release, and cell differentiation potentiality?
- 3. What are the unique biological properties contained in the oocyte? Why are eggs needed to create embryos to derive stem cells? Can ESCs generate gametes (eggs and sperm)?
- 4. With the discovery of the induced pluripotent stem cell technique some argue that we can focus efforts on adult stem cell research and avoid the need for a large number of human oocytes for embryonic stem cell research (ESCR), yet some researchers claim that there is a still a need for human oocytes and hESCR, why? What is lost if human ESCR (hESCR) is not funded?
- 5. Does the identification of stem cells in ovarian tissue, menstrual blood, and adipose eliminate the need for embryonic stem cells? An important aspect of constructing scientific knowledge involves reproducing results. This is especially true of paradigm shifting work such as the identification of a new stem cell source. Why do some scientists question the identification of ovarian stem cells, adipose derived stem cells, and menstrual blood cells? Have these results been reproduced by others?
- 6. How does basic biology play a role in vitro fertilization and preimplantation genetic diagnosis technologies?
- 7. Why do we need a diverse supply of human oocytes for stem cell research? How can preimplantation genetic diagnosis of embryos before uterine transfer generate surplus embryos for stem cell researchers and "savior siblings" whose bone marrow/cord blood match siblings living with disease or disability?
- 8. How have advances in assisted reproductive technology led to ovarian hyperstimulation protocols and what are advantages and disadvantages of this process?

Bioeconomy & Social Justice

- 1. Who decides how biospecimens (ovarian stem cells, oocytes, menstrual blood, bone marrow) are obtained, regulated, stored, disseminated, and marketed?
- 2. What are the ethical concerns regarding equity, diversity, access, and exploitation as they relate to biospecimen collection and stem cell research? Consider both procedural and distributive justice.
- 3. Are there any policies regarding compensation for bodily goods (gametes, blood, tissues), incentives for public biobanking, and cost coverage for stem cell transplant therapies?
- 4. What role does the Human Fertilisation and Embryology Authority of the UK play with respect to publicly funded stem cell research involving egg procurement and embryo manipulation?
- 5. How might "egg sharing" policies influence existing economic and health inequities?
- 6. How do economic inequities play a role in the transnational egg market, and how might health risks be outsourced? Do we outsource health risks in agriculture, mining, and other global economies?

Compensation

- 1. Why are gametes (sperm and egg) considered commodities in stem cell research? Why is compensation for egg provision for hESCR banned in some states or countries and supported in others? What are the position statements of various professional societies and activist groups in regard to this patchwork of policies?
- 2. Do oocyte providers for stem cell research have a right to compensation, payment, or some other form of acknowledgement for their services and time? If so, should there be a ceiling or cap on payment and who provides the compensation, and who determines the level of compensation?
- 3. What is the Wage Payment Model? What other models exist for payment for participation in research?
- 4. Can non-cash incentives address the concerns of those who feel bodily goods should be "gifted?"

Choice (Nation, State, or Individual Agency and Autonomy)

- 1. What are the consequences of the New York State Resolution on oocyte compensation for embryonic stem cell research? Why did Governor Brown of California veto the Bonilla Bill, which sought to compensate oocyte providers for SCR?
- 2. Under states' rights should public funding or taxes be used to support oocyte provision for hESCR as opposed to social services or investment in social capital?
- 3. How does the field of assisted reproductive technology intersect with disability justice?
- 4. Some parents of children living with disease/disability utilize ARTs to produce "savior siblings," or siblings where cord blood or bone marrow stem cells are an immunological match. Should parents have the right to choose this course of action?
- 5. What are the consequences of the 9th circuit court decision to permit compensation for bone marrow donations from those with rare HLA types (Flynn v. Holder)?
- 6. Should people have a choice in how their individual bodies may serve stem cell research (SCR)? What kinds of information or data need to be made available for individuals to consider participating in SCR? Does this information exist, or is it being gathered; should it be?

Risk

- 1. What are the health risks associated with egg provision and who decides appropriate levels of risk?
- 2. Why is human cloning for research contentious? Who carries the burden and who benefits?
- 3. Are oocyte providers adequately informed about benefits and risks and does this differ for the reproductive sector versus the SCR sector?
- 4. Is oocyte provision different from other kinds of labor that present risks (environmental toxins, physical injury, cancer etc.)?
- 5. Does Ovarian Hyperstimulation Syndrome (OHSS) vary with age or repeated hormone exposure?
- 6. What risks need to be considered when those who seek IVF for reproductive purposes "share" a portion of their eggs or embryos with stem cell researchers?

Feminist Activism

- 1. How does the IVF industry reify eugenic ideology through donor selection with respect to race, class, sexuality, ability and reproductive policies in the US? What might this mean for the diversity of stem cell lines that utilize embryos generated through IVF technology?
- 2. Question the dignity v. money construction: think about past and current debates in feminism that used "dignity" to justify a particular policy position i.e. porn wars and sex worker's rights. Apply a critique to the language as it is used in this context.

- 3. React to Hands Off Our Ovaries. What is their mission statement? Do you support or reject their mission statement? How is a moratorium different than a ban? How do activist groups' proposals from countries in the global South compare?
- 4. How do feminist critiques of cell biology resurface around discussions about power and authority?
- 5. How do feminist, disability, social justice, and race scholars challenge compensation for oocyte provision for SCR? Be mindful of pluralism within groups. For instance, different feminist perspectives can be applied to compensation, which ones resonate with you and why? Consider the right to choice, distributive justice, autonomy, and protection of people's rights and health.

Ethics & Informed Consent: Risk-Benefit

- **1.** What policies should be implemented to clarify or change the way people are recruited, monitored, and acknowledged for oocyte provision for stem cell research?
- 2. Should practices surrounding oocyte provision differ based on purpose; reproductive versus research?
- 3. How does human research subjects regulation come into play if people who are providing oocytes are treated as research subjects?
- 4. What kinds of information or data need to be made available for individuals to consider oocyte donation or provision? Does this information exist, or is it being gathered; should it be? Would having this information support a research ethics approach to oocyte provision?
- 5. Consider laws, guidelines, and structures that are in place for human subjects research, gamete research, blood/organ research, and stem cell research; consider these at the state, national, and international level. Are these enforceable and if so how?
- 6. Should there be some regulation of oocyte provision? If so, who provides oversight, regulation, and punishment for violations?

Bodily Goods

- 1. Can you trace the evolution of the perception of eggs and menstrual blood using feminist critiques? Discuss pros and cons of placing the egg on a pedestal.
- 2. The term commodification has been used to build arguments against payment for bodily goods. What is the origin of this word and how is it used both to support and refute compensation policies?
- 3. How might the recent decision in Flynn v. Holder regarding compensation for bone marrow stem cells influence policies regarding cord blood banking and compensation for oocytes for research and therapy?
- 4. How are the public and private sectors in conflict regarding compensation for oocytes for SCR?