



## Commercialization and Stem Cell Research

By Lori P. Knowles

For decades scholars have been trying to characterize the relationship a person has to his or her body and tissues. The controversies over commercial surrogacy, embryo donation and sales of ova and sperm illustrate the difficult ethical terrain where commerce, the human body and human reproduction meet.

Public and policy debate about regulating commercial and market influences in medical research, including stem cell research, has been international in scope. Concerns about commercialization are not unique to the realm of stem cell research. These are multi-faceted issues, ranging from managing researchers' commercial conflicts of interest and avoiding undue financial inducement in tissue donation, to balancing fears of exploitation in ova and embryo markets with respect for women's ability to make decisions in their own best interest. Commerce involving reproductive tissue such as gametes, embryos and fetal tissue is particularly complicated. Although not discussed here feminist perspectives on markets in reproductive tissue and embryos are relevant.<sup>1</sup>

Where stem cell research is concerned, the following questions related to commercialization can be asked:

1. Does the introduction of commerce into transactions involving human gametes and embryos turn these

tissues into tradable goods or commodities, and is this acceptable?

2. Where researchers and fertility clinicians have commercial interests in medical research that uses tissues from patients, what can be done to manage conflicts of interest? (See Knowles L., "[Issues in Procurement of Stem Cells: Informed Consent and Conflicts of Interest](#)" Stem Cell Network).
3. Where intellectual property interests are held in stem cell technology through patents, is access to research tools or technology by researchers or the public negatively affected?

The problems with commercialization in human tissues are both ethical and social. At the heart of the ethical debate over whether sales of human tissue are acceptable (including reproductive tissue) is a fundamental disagreement over what constitutes appropriate and inappropriate uses of the human body. Some people believe the body is simply a tool to be used to further a person's needs and desires, while others believe it is sacred and must be treated as such. People who disagree on the uses to which one's body can be put are likely to feel differently about the relationship between a person and his or her body.

One school of thought holds that the body and a person's true self are distinct and separate.<sup>2</sup> The body therefore, may be used as a tool to further a person's wants and

1 This paper does not explore these issues but see Satz, Debra, 1992, "Markets in Women's Reproductive Labor," *Philosophy and Public Affairs*, 21:2, 107-131. For other feminist perspectives on bioethics see, Sherwin, S., *No Longer Patient: Feminist Ethics and Health Care*, (Philadelphia: Temple University Press, 1992); and Sherwin, S., "Normalizing Reproductive Technologies and the Implications for Autonomy" in Tong, Anderson and Santos, *Globalizing Feminist Bioethics: Crosscultural Perspectives* (Colorado: Westview Press, 2000) 96-113.

2 This "dualist" theory is expressed in the writings of Rene Descartes. Descartes, R. (1641: many modern editions): 'Meditation VI', in *Meditations on the First Philosophy*, see also Almog, J., *What am I? Descartes and the Mind-Body Problem*, (Oxford: Oxford University Press, 2001).

desires. Logically then, if the commercial exploitation of one's body leads to the fulfillment of the desires of the self it should be permissible. Such an argument can be used to justify the exchange of ova for stem cell research in return for discounted or free in vitro fertilization (IVF) cycles. This type of exchange is called rewarded gifting and although illegal in Canada, it is legal in the United Kingdom and United States. While there are people who find this unethical, the issue is not a simple one. For some women, the reduction of IVF costs may provide the only chance to try the expensive technique.

By contrast, other people believe that there can be no meaningful separation between the body and a person's true self.<sup>3</sup> Since the person is regarded as both body and spirit, it is morally wrong to use one's body merely as an instrument. Exploiting the human body for financial gain, as in commercial surrogacy and prostitution is unacceptable as it is an instrumental use of the body and is seen to degrade the self. Rewarded gifting for stem cell research, according to this viewpoint would also be ethically unacceptable.

Society draws lines that respect both views in different instances. For example, many countries have adopted some concept of "brain death" which can result in a person being declared legally dead although the body continues to live. This reflects a commonly held belief that the true essence of a person is connected more with a soul, spirit or rational being than with a body. Nonetheless, we live our lives as embodied creatures. And so, society enforces certain respect for our bodies and limits purely instrumental uses in many instances. For example, many societies impose criminal sanctions for the mistreatment of dead bodies, the sale of organs and prostitution.

## Property or Progeny?

The nature of a person's rights in reproductive material is confused at best, particularly when the material is outside the human body. In law, property rights give the rights holder the ability to control the disposition of the property. A person has the right to sell, give away, abandon and destroy his or her property, within the limits of the law. Whether a person has property rights in his or her

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<sup>3</sup> This theory is expressed, albeit in a much more complicated fashion, in the writings of Immanuel Kant. Kant, I. (1781/1787) *Critique of Pure Reason* (trans. P. Guyer and A. Wood) (Cambridge and New York: Cambridge University Press, 1997).

tissue when it is separated from the body is not a settled question. There seems to be a particular reluctance to extend legal property rights to include reproductive tissue, such as gametes and embryos.

International policies differ, although there is relatively wide-spread consensus that a principle of non-commercialization of both the human body and especially of human reproduction respects human dignity. Academic and policy debates have tackled this issue in the context of organ donation and organ sales. Clear policy lines are drawn in most countries that organs may not be sold but must be donated. In most countries in the world even renewable bodily substances such as blood, plasma, and milk cannot be sold but must be donated. Most countries in continental Europe, Canada and Australia have a long tradition of non-commercialization of reproductive tissue. Non-commercialization of human tissue is not, however, the policy in much of the United States where commercial transactions are permitted in human tissue, ranging from blood and plasma to semen and ova. The United States is an international outlier in this respect.

Even in countries in which human gametes are not sold, the donor's rights of control over their donation, storage and destruction are arguably a type of property right. A person's right to make decisions about what happens to their gametes or even their embryos underlies consensus on the need for informed consent to their use in stem cell research. Consent agreements in which sperm and ova are stored for future use by donors often consider the gametes to be the property of the donor. Even in the absence of commercial markets in gametes, it would be difficult to argue that a person has no property rights in such tissue.

The reluctance to characterize reproductive tissue as property is particularly apparent with respect to rights in frozen embryos. Granting property rights in either fetuses or embryos raises the shadow of slavery, especially in the eyes of those who consider such entities to be human persons. There is a limited number of cases in Canadian, American and British jurisdictions that have addressed the classification of rights in embryos. This is a fascinating and complex area of ethics and law, for the embryo has a potential for life which is not present in other tissues. While the right to decide what happens to one's embryos is akin to a property right, frozen embryos may enjoy a special legal status that mirrors their uncertain or special moral status. They are less than full legal persons in most

countries of the world and yet are subject to special rules about their use and care that evidence their intermediate status between persons and property.

## Commodification and Exploitation

One problem that is posed by markets in human tissue is a result of the nature of markets themselves. When something is priced for market exchange its value is quantified. Once the value of a good is known, it is no longer priceless, and it is capable of comparison with like commodities or goods. Markets, therefore, are said in some instances to demean the thing that is being sold, for example, making ova comparable to widgets. In addition, it has been argued that markets can also demean the seller. Socially, the introduction of commercial markets in body tissues may simply be exploiting those who are less financially well-off by providing them with “coercive proposals.”<sup>4</sup> So, if a market in organs existed, it would be difficult for a person to forgo that market if his or her need were extreme enough. The idea is that the possibility of financial gain may exploit a person’s desperation or dire circumstances, for example to buy medicine for a sick child. Arguably, in such instances there is an ethical duty to correct the circumstances that drive someone to sell his or her organs. In defense of markets however, there are people who would sell their organs, ova, blood or other tissue not out of desperation but because they want the money to satisfy their desires, for example to buy new DVDs.

Currently human embryonic stem cell (hES) research requires a large supply of human ova in the study of techniques such as somatic cell nuclear transfer (SCNT), although this may change with scientific discoveries of alternative sources of reprogrammed cells. Markets in ova run the risk of making women a simple source of raw material for hES and SCNT research. It has been argued that this commodifies women in an unacceptable way. Such a market is not legal in Canada: under the *Assisted*

*Human Reproduction Act* sales in human gametes, embryos and commercial surrogacy are all subject to criminal sanction. Similar restrictions on sales of ova, sperm and embryos exist in Australia and Europe.

In contrast, in some jurisdictions in the United States it is possible to sell ova for stem cell research. It is also possible for women to sell their ova to couples looking to get pregnant. Prices that the market will bear are going to be higher for women selling ova to infertile couples than they are if sold to research laboratories. This is because in the first transaction the ovum is the key to a couples’ infertility, while in the second transaction the ovum is raw material for research. This has led to speculation that a two-tiered market in human ova might result, driven by infertility demographics. The results could be inequitable depending on supply and demand; where white, college-educated young women are recruited to sell their ova to infertile couples for thousands of dollars and women of colour or less education sell their ova for less money to researchers. This would offend our commitment to the equality of people, and constitute a type of unethical discrimination: while we discriminate between people on the basis of merit, we do not tolerate discrimination of people based on phenotypic characteristics – those characteristics that determine what you look like.

Issues of commercialization of human reproductive tissue also include the researchers and companies who profit from the use of the tissue to develop a valuable cell line. Rewarding and encouraging valuable research without stifling further innovation may require modifying the patent process and licensing practices so that others have access to the cells for future research. A final point of concern is to ensure that products are priced so as not to necessarily exclude those – within or beyond our national borders – who cannot afford expensive treatments.

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StemGen, World Stem Cell Map, and Database of Laws and Policies, <http://www.stemgen.org/>