

## **Colloquy: Scientific, Ethical and Policy Challenges for Public Universities Engaging in Stem Cell Research\***

### **A University of Minnesota Perspective on SCNT Research: Past Challenges and Strategy for the Future**

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At the University of Minnesota, we are presently engaging in important and enlightening dialogue surrounding issues of stem cell research and specifically somatic cell nuclear transfer (“SCNT”), also called therapeutic or research cloning. There is no better place for this dialogue than in the halls of a public research institution; it is here that we must embrace and respect all views around science and the pursuit of knowledge. We have a long tradition of doing so, and we continue to do so in our discussions of SCNT research.

At the University of Minnesota, and in public institutions of higher learning around the world, it is the faculty who decide what research they pursue. The University as an institution is responsible for the creation and fostering of an environment that maximally encourages and supports research productivity. As such, we work from the following platform with regard to

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research: if the research is in an area of interest of one or more faculty, if it is within existing legal and regulatory parameters, if the faculty has resources to conduct the research, if the University has the facilities and services to support the research, and if the research has been approved by the appropriate oversight agencies it can be performed at the University. However, the research journey is not a wide open road; not for administration nor for the researchers. It comes with responsibility.

In 2003, the University of Minnesota made a strategic, and somewhat political, decision to limit our research portfolio in the area of SCNT research. After careful internal and external debate, university policy was adopted that would only allow the use of public funding for stem cell research if it was also eligible for federal funding.<sup>1</sup> Further, we would specifically not allow for the creation of embryos for research regardless of funding.<sup>2</sup> We limited the source of human embryonic stem cells to embryos being discarded after *in vitro* fertilization.<sup>3</sup> Since that time, faculty have come forward interested in the pursuing the potential promise of therapeutic cloning as a tool for disease therapies. We are obligated to re-evaluate university policy and determine whether in the scientific community and in our community at large we believe the creation of embryos for the purposes of this research is worth the pursuit.

University researchers also play an important role in their field and must adhere to norms of scientific integrity and accuracy in reporting of research results. This point has recently hit close to home for us here at the University of Minnesota. In early 2007, accusations were made against a well-known faculty member and then Director of the Stem Cell Institute that publications regarding adult stem cell findings

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1. OFFICE OF REGULATORY AFFAIRS, UNIV. OF MINN., CONDUCTING RESEARCH WITH HUMAN EMBRYOS OR EMBRYONIC STEM CELLS (2003) (on file with the University of Minnesota Policy Librarian), available at [http://process.umn.edu/groups/ppd/documents/Policy/stemcell\\_pol.cfm](http://process.umn.edu/groups/ppd/documents/Policy/stemcell_pol.cfm).

2. OFFICE OF REGULATORY AFFAIRS, UNIV. OF MINN., PROJECT ADMINISTRATION FOR RESEARCH INVOLVING HUMAN EMBRYOS OR EMBRYONIC STEM CELL LINES INELIGIBLE FOR FEDERAL/STATE FUNDING (2003) (on file with the University of Minnesota Policy Librarian), available at [http://process.umn.edu/groups/ppd/documents/procedure/stemcell\\_proc2.cfm](http://process.umn.edu/groups/ppd/documents/procedure/stemcell_proc2.cfm).

3. *Id.*

contained duplicated data.<sup>4</sup> A *New Scientist* reporter alerted Dr. Catherine Verfaillie to errors in her landmark *Nature* study regarding the plasticity of a rare type of adult stem cell.<sup>5</sup> A university inquiry found that there were duplicated graphs and data inconsistencies in describing proteins present on the cell's surface; however the University panel found no evidence of scientific misconduct on the part of the research team.<sup>6</sup> As researchers develop the tools to investigate the science and report results back to the public, society must be patient about the progression of the scientific process in new areas of research and inquiry. The scientific process has served the research community well for many years and will continue to evolve as necessary for these developing areas. In science the truth will be told; it is just time that stands between us and the understanding of the science.

Society also plays a hand in the pursuit of new knowledge. As a community of ideas we are called to ensure this healthy, thorough and fruitful dialogue to advance our understanding of the science, the value of its potential, and to weigh the ethical and legal arguments of those scientific and research premises.

The field of medicine will be transformed by the field of stem cell science. Indeed, here in our institution, stem cell science serves as one of the primary platforms that enable our faculty to advance the cures and therapies in areas of research, such as heart disease, diabetes, brain sciences, and so forth. In our lifetime, each of us will be touched by the promise and, if all goes well, the real hope of stem cell biology.

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4. Peter Aldhous & Eugenie Samuel Reich, *Fresh Questions on Stem Cell Findings*, NEW SCIENTIST, Mar. 24, 2007, at 12.

5. Yuehua Jiang et al., *Pluripotency of Mesenchymal Stem Cells Derived from Adult Marrow*, 418 NATURE 41 (2002).

6. Nicholas Wade, *Panel Finds Flawed Data In a Major Stem Cell Report*, N.Y. TIMES, Feb. 28, 2007, at A15. Dr. Verfaillie remains a part-time faculty member at the University of Minnesota. She is now with the Catholic University of Leuven in Belgium. *Id.*

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