

Need for DISCUSS(ion)

Because of their unique characteristics, the induced pluripotent stem cell (iPSC) field has raised important issues for the biobanking industry. One important distinction is, like immortalized cell lines, iPSC are spontaneously immortal and can be propagated indefinitely. This raises important practical issues as to tracking the cells, avoiding cross-contamination, and maintaining the genetic integrity of the cells. Although these problems have been dealt with, iPSCs complicate the issue because of their sheer scale. It is not ten lines or hundreds or even thousands of lines but rather hundreds of thousands of lines that are in the process of being created, and unlike previous efforts with Epstein-Barr virus-transformed lymphoblastoid lines, these will be created by individual laboratories worldwide. A second important distinction between iPSC and transformed lines is that these lines can make gametes and can be used potentially for cell-based therapy, which raises additional challenges in terms of ownership, storage, and distribution.

In the article "The DISCUSS Project: Revised Points to Consider for the Derivation of Induced Pluripotent Stem Cell Lines from Previously Collected Research Specimens" [1], which appears in this issue, Lomax and colleagues have compiled points to consider for establishing and maintaining banks of pluripotent cells. The points were developed through a series of forums and invited comments from a previous publication [2] and represent an important effort to assist in the development of organizational policy, give researchers defined boundaries for using banked tissue, maintain the public trust and encourage respect for donors, and provide a framework for using previously collected specimens.

The authors have tackled the particularly vexing issue of what kind of consent is sufficient for use of previously collected specimens. Is a general consent for research purposes adequate for the purpose of deriving iPSC and for somatic cell nuclear transfer, or should potentially useful stored specimens not be used because formal specific consent was not obtained? The authors suggest that the consensus is that somatic cell nuclear transfer is in a special class. The authors also have addressed the issue of social justice and representation of all ethnic groups and the governance issues of biobanks that will oversee such tissue collections.

The one issue that was not raised or discussed was the issue of potential profits—from commercial use of lines that came from donated samples and whether donors can profit from such a donation. Indeed, most of the new consent forms discuss this explicitly. However, some previously collected specimens likely do not contain such explicit language, and we are left uncertain as to the donor's intent. Would the donor have made the donation if this had been explicitly explained?

Overall, the authors are to be commended on tackling this difficult topic and making the effort to gather all viewpoints. Presenting this as a "points to consider" manuscript will also ensure that the consensus will evolve as additional people join the debate.

1 Lomax GP, Hull SC, Isasi RM. The DISCUSS Project: Revised points to consider for the derivation of induced pluripotent stem cell lines from previously collected research specimens. *STEM CELLS TRANSLATIONAL MEDICINE* 2015;4:123–129.

2 Lomax GP, Hull SC, Lowenthal J et al. The DISCUSS Project: Induced pluripotent stem cell lines from previously collected research biospecimens and informed consent: points to consider. *STEM CELLS TRANSLATIONAL MEDICINE* 2013;2:727–730.



Mahendra S. Rao, M.D., Ph.D.
Section Editor
Standards, Policies, Protocols, and Regulations for Cell-Based Therapies

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Mahendra S. Rao

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