This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Induction of pluripotent stem (iPS) cells by a single transcription factor	<p>Exogenous expression of a single transcription factor—Oct4—in adult mouse neural stem cells could be sufficient to generate iPS cells for therapeutic applications. Fibroblasts engineered to express four transcription factors—Oct4, Sox2, Klf4 and c-Myc—have previously been shown to be sufficient to reprogram human fibroblasts to a pluripotent state. <i>In vitro</i>, Oct4-induced iPS cells differentiated into neural stem cells, cardiomyocytes and germ cells. The iPS cells were also capable of teratoma formation and germline transmission <i>in vivo</i>. Next steps include additional studies to determine whether expression of Oct4 can be induced without viral integration.</p> <p>SciBX 2(6); doi:10.1038/scibx.2009.253 Published online Feb. 12, 2009</p>	Patent and licensing status undisclosed	<p>Kim, J. <i>et al. Cell</i>; published online Feb. 5, 2009; doi:10.1016/j.cell.2009.01.023 Contact: Hans R. Schöler, Max Planck Institute for Molecular Biomedicine, Münster, Germany e-mail: office@mpi-muenster.mpg.de</p>