This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Modified mRNAs to generate induced pluripotent stem (iPS) cells	<p><i>In vitro</i> experiments suggest that synthetic, modified mRNAs could be used to generate iPS cells for cell-based therapies and regenerative medicine. In human fibroblasts, synthetic mRNAs encoding four reprogramming transcription factors led to faster and more efficient iPS cell conversion than four retroviruses expressing the same transcription factors. In newly produced iPS cells, modified mRNA encoding the myogenic transcription factor myogenic differentiation 1 (MYOD1; MYOD) led to terminally differentiated myotubes compared with control mRNA. Next steps could include further refinement of the procedure and differentiation to other cell types.</p> <p>SciBX 3(40); doi:10.1038/scibx.2010.1223 Published online Oct. 14, 2010</p>	Patent and licensing status undisclosed	<p>Warren, L. <i>et al. Cell Stem Cell</i>; published online Sept. 30, 2010; doi:10.1016/j.stem.2010.08.012</p> <p>Contact: Derrick J. Rossi, Harvard Medical School, Boston, Mass. e-mail: rossi@idi.harvard.edu</p>