This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Direct conversion of fibroblasts into functional neurons	<p>A cell culture study suggests that the direct conversion of mouse fibroblasts into functional neurons could be useful for developing new models and treatments for neurological diseases. Conventional protocols to convert fibroblasts into neuronal cells involve first reverting cells into a potentially tumorigenic pluripotent state. In mouse fibroblasts, forced expression of three transcription factors—achaete-scute complex homolog 1 (Ascl1), POU class 3 homeobox 2 (Pou3f2; Brn2) and myelin transcription factor 1-like (Myt1l)—converted the cells into neuronal cells without first reverting them to a pluripotent state. The converted cells expressed neuron-specific proteins, generated action potentials and formed functional synapses. Next steps include attempting to replicate the result in human fibroblasts.</p> <p>SciBX 3(7); doi:10.1038/scibx.2010.230 Published online Feb. 18, 2010</p>	<p>Patent application filed for undisclosed indications; available for licensing from Stanford University's Office of Technology Licensing Contact: Gregg Kyle, Stanford University, Stanford, Calif. phone: 650-725-3476 e-mail: gregg.kyle@stanford.edu</p>	<p>Vierbuchen, T. <i>et al. Nature</i>; published online Jan. 27, 2010; doi:10.1038/nature08797 Contact: Marius Wernig, Stanford University School of Medicine, Stanford, Calif. e-mail: wernig@stanford.edu</p>