This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
<i>In vitro</i> generation of Purkinje cells	<p>A technique for differentiating embryonic stem cells (ESCs) into Purkinje cells could aid in developing a cell therapy for spinocerebellar ataxia, a disease involving Purkinje cell degeneration. <i>In vitro</i>, ESCs treated with fibroblast growth factor-2 (FGF-2), insulin and the hedgehog pathway antagonist cyclopamine differentiated into Purkinje cell precursors that matured when cocultured with cerebellar granule cells. In embryonic mice, Purkinje cell precursors injected into the cerebellar plate differentiated into mature Purkinje cells and had greater integration into the Purkinje cell layer than into other layers of the cerebellar cortex. Next steps include developing a method to increase the grafting efficiency into the brains of adult mice.</p> <p>SciBX 3(37); doi:10.1038/scibx.2010.1134 Published online Sept. 23, 2010</p>	Patent application filed; licensing status undisclosed	<p>Muguruma, K. <i>et al. Nat. Neurosci.</i>; published online Sept. 12, 2010; doi:10.1038/nn.2638 Contact: Yoshiki Sasai, RIKEN Center for Developmental Biology, Kobe, Japan e-mail: yoshikisasai@cdb.riken.jp</p>