This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Assays & screens			
<i>In vitro</i> blood brain barrier (BBB) with pluripotent stem cells	<p><i>In vitro</i> studies suggest human pluripotent stem cells could be used to screen for BBB-modulating compounds. In cell culture, pluripotent stem cell-derived neural progenitor cells treated with media conditioned by endothelial cells differentiated into endothelial cells. When cocultured with astrocytes, the endothelial cells formed tight junctions and had lower electrical resistance than undifferentiated cell culture controls. In an <i>in vitro</i> assay of drug permeability, the astrocyte-endothelial cell culture had greater expression of BBB-associated markers than undifferentiated controls. Next steps include scaling up the coculture system to test for compounds that modulate the BBB or therapeutics that are resistant to BBB exclusion.</p> <p>SciBX 5(28); doi:10.1038/scibx.2012.740 Published online July 19, 2012</p>	Patent pending; available for licensing	<p>Lippmann, E.S. <i>et al. Nat. Biotechnol.</i>; published online June 24, 2012; doi:10.1038/nbt.2247</p> <p>Contact: Eric V. Shusta, University of Wisconsin-Madison, Madison, Wis. e-mail: shusta@engr.wisc.edu</p> <p>Contact: Sean P. Palecek, same affiliation as above e-mail: palecek@engr.wisc.edu</p>