This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug delivery			
Nanospheres to deliver drugs to the brain	<p><i>In vitro</i> and mouse studies suggest that nanospheres conjugated to transferrin receptor (TFRC) antibodies could help deliver therapeutics to the brain. Polyethylene glycol-coated nanospheres were conjugated to a mouse mAb that bound TFRC on cerebral vasculature to help the nanospheres penetrate the blood brain barrier. In mice with middle cerebral artery occlusion, i.v. injection of the conjugated nanospheres loaded with a caspase-3 (CASP3; CPP32) inhibitor decreased infarct volume and neurological defects compared with injection of nonloaded or nonconjugated nanospheres. Next steps include testing the nanocarrier technique in larger animal models.</p> <p>SciBX 2(44); doi:10.1038/scibx.2009.1647 Published online Nov. 12, 2009</p>	Findings unpatented; unavailable for licensing	<p>Karatas, H. <i>et al. J. Neurosci.</i>; published online Nov. 4, 2009; doi:10.1523/JNEUROSCI.4246-09.2009</p> <p>Contact: Turgay Dalkara, Hacettepe University, Ankara, Turkey e-mail: tdalkara@hacettepe.edu.tr</p>