This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug delivery			
Polyethylene glycol (PEG) coating to improve delivery of drug-loaded nanoparticles across the blood brain barrier (BBB)	Densely coating drug-loaded nanoparticles with PEG could help improve their delivery to the brain. Past studies have suggested nanoparticles need to have a diameter of 64 nm or less to transit the brain's extracellular spaces. In human and rat brain tissue samples, PEG-coated nanoparticles of up to 114 nm diameters diffused into tissues, whereas nanoparticles with carboxyl coatings did not. In rat brain tissue, PEG-coated nanoparticles loaded with paclitaxel diffused rapidly throughout tissues, whereas uncoated drug-loaded nanoparticles did not. Next steps could include using the coating approach to evaluate the delivery of other drugs across the BBB.	Patent pending; available for licensing	Nance, E.A. <i>et al. Sci. Transl. Med.</i> ; published online Aug. 29, 2012; doi:10.1126/scitranslmed.3003594 Contact: Justin Hanes, The Johns Hopkins University, Baltimore, Md. e-mail: hanes@jhu.edu
	SciBX 5(36); doi:10.1038/scibx.2012.967 Published online Sept. 13, 2012		