This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug delivery			
Tissue-specific drug delivery with antibody-coated, polymer, rod-shaped nanoparticles (nanorods)	<p>Nanorods could help deliver drugs to target tissues with higher specificity than spherical nanoparticles. In cultured rat brain endothelial cells and in a microfluidic model for the vascular system lined with such cells, nanorods coated with antibody against mouse intercellular adhesion molecule-1 (Icam-1; Cd54) showed greater cellular uptake and adhesion than spherical nanoparticles coated with the same antibody. In normal mice, nanorods coated with antibodies against Icam-1 or mouse transferrin receptor showed higher accumulation in lungs and brain compared with spherical nanoparticles coated with the same respective antibodies. Next steps could include testing drug-loaded nanorods in animal models for cancer.</p> <p>SciBX 6(27); doi:10.1038/scibx.2013.703 Published online July 18, 2013</p>	Patent and licensing status unavailable	<p>Kolhar, P. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online June 10, 2013; doi:10.1073/pnas.1308345110 Contact: Samir Mitragotri, University of California, Santa Barbara, Calif. e-mail: samir@engr.ucsb.edu Contact: Erkki Ruoslahti, Sanford-Burnham Medical Research Institute, La Jolla, Calif. e-mail: ruoslahti@sanfordburnham.org</p>