This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug delivery			
pH (low) insertion peptides (pHLIPs) for delivery of gold nanoparticles to tumors	<p>pHLIPs could be used to target gold nanoparticles to tumors, which tend to have lower pH than normal tissue. pHLIPs are water-soluble polypeptides derived from the bacteriorhodopsin C helix. In mice with human cervical cancer tumors, intratumoral injection of pHLIP-conjugated gold nanoparticles led to a sixfold increase in gold accumulation in tumor tissues compared with injection of nonconjugated gold nanoparticles. Next steps include developing nanoparticle coatings that could further increase bioavailability and tumor targeting and reduce accumulation in off-target tissues.</p> <p>SciBX 6(2); doi:10.1038/scibx.2013.45 Published online Jan. 17, 2013</p>	<p>Patented; use of radionuclide-labeled pHLIPs as a diagnostic tool for imaging of acidic tissues licensed to General Electric Co.; other diagnostic applications and all therapeutic applications available for licensing</p>	<p>Yao, L. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Dec. 24, 2012; doi:10.1073/pnas.1219665110 Contact: Oleg A. Andreev, University of Rhode Island, Kingston, R.I. e-mail: andreev@mail.uri.edu Contact: Donald M. Engelman, Yale University, New Haven, Conn. e-mail: donald.engelman@yale.edu</p>