This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug delivery			
Drug delivery into deep tumor tissue using nanoparticle-quantum dot constructs	<p>Nanoparticles embedded with drug-loaded quantum dots could be used to deliver therapeutics deep into solid tumor tissue. As proof of concept, 100 nm nanoparticles made of gelatin, a substance cleaved by proteases in the tumor microenvironment, were embedded with 10 nm fluorescent quantum dots. In xenograft mice with fibrosarcoma tumors, intratumoral injection of the quantum dot-embedded gelatin nanoparticles led to greater quantum dot penetration and fluorescence in the tumor tissue than injection of dots embedded in noncleavable nanoparticles. Next steps include optimizing the i.v. delivery and formulation of the nanoparticle system.</p> <p>SciBX 4(6); doi:10.1038/scibx.2011.177 Published online Feb. 10, 2011</p>	<p>Patent application filed; available for licensing Contact: Lambert Edelmann, Partners Research Ventures & Licensing, Boston, Mass. e-mail: ledelmann@partners.org Contact: Technology Licensing Office, Massachusetts Institute of Technology, Cambridge, Mass. e-mail: tlo@mit.edu</p>	<p>Wong, C. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Jan. 17, 2011; doi:10.1073/pnas.1018382108 Contact: Dai Fukumura, Massachusetts General Hospital and Harvard Medical School, Boston, Mass. e-mail: dai@stele.mgh.harvard.edu Contact: Mouni Bawendi, Massachusetts Institute of Technology, Cambridge, Mass. e-mail: mgb@mit.edu</p>