This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug delivery			
DNA aptamer micelles as detection and delivery vehicles	<p>An <i>in vitro</i> study suggests that DNA aptamer micelles could help detect cancer cells and deliver cancer therapeutics. The self-assembling micelles are constructed from DNA aptamers attached to a lipid tail with a polyethylene glycol (PEG) linker. In a human whole-blood sample spiked with target tumor cells, dye-containing micelles tagged and penetrated the cells without significantly tagging nontumor control cells. In a human cell line, the aptamer micelles showed greater cell binding than did the free aptamer. Next steps include evaluating whether the aptamer micelles can detect tumor cells and deliver chemotherapeutics in mice.</p> <p><i>SciBX</i> 3(3); doi:10.1038/scibx.2010.100 Published online Jan. 21, 2010</p>	<p>Patent application filed covering manufacturing of micelles and their use in imaging and therapy for cancer; available for licensing from the University of Florida Office of Technology Licensing Contact: John Byatt, University of Florida, Gainesville, Fla. phone: 352-392-4979</p>	<p>Wua, Y. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Dec. 21, 2009; doi:10.1073/pnas.0909611107 Contact: Weihong Tan, University of Florida, Gainesville, Fla. e-mail: tan@chem.ufl.edu</p>