This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug delivery			
DNA nanorobots for programmable and targeted drug delivery	<p><i>In vitro</i> studies suggest DNA nanorobots could be used for targeted drug delivery. DNA nanorobots were designed with DNA aptamer-based locks that allow release of payloads upon binding specific cell surface proteins. In cultured leukemia cells, DNA nanorobots with locks targeting leukemia cell surfaces discriminated between cancer cells and healthy cells. In cell culture, nanorobots loaded with human anti-CD33 antibodies and human sialic acid binding Ig-like lectin 7 (SIGLEC7; CDw328) Fab fragments inhibited leukemia cell growth compared with unloaded nanorobots. Next steps include rodent studies.</p> <p>SciBX 5(8); doi:10.1038/scibx.2012.215 Published online Feb. 23, 2012</p>	Patent application filed; available for licensing	<p>Douglas, S.M. <i>et al. Science</i>; published online Feb. 17, 2012; doi:10.1126/science.1214081 Contact: Shawn M. Douglas, Harvard Medical School, Boston, Mass. e-mail: shawn.douglas@wyss.harvard.edu Contact: George M. Church, same affiliation as above e-mail: gmc@harvard.edu</p>