This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Assays & screens			
Conditional transposon-based genetic screening system for identification of cancer-associated genes (Sleeping Beauty Transposon system)	<p>The Sleeping Beauty transposon system may be a useful genetic screen in mice to identify new cancer-associated genes. The system can be used to induce traceable oncogenic mutations in a tissue of interest. In two proof-of-concept studies, researchers used transgenic mice either with Sleeping Beauty transposition to the liver to induce hepatocellular carcinoma (HCC) or with Sleeping Beauty transposition to the gastrointestinal tract epithelium to induce colorectal cancer. The studies identified known HCC and colorectal cancer-associated genes and implicated additional genes for each disease. Next steps include using the system to identify genes associated with other cancers.</p> <p>SciBX 2(10); doi:10.1038/scibx.2009.421 Published online March 12, 2009</p>	<p>Patent pending covering use of Sleeping Beauty transposon system to identify cancer genes in laboratory animals using a forward genetics approach; available for licensing from the University of Minnesota Office for Technology Commercialization</p>	<p>Keng, V.W. <i>et al. Nat. Biotechnol.</i>; published online Feb. 22, 2009; doi:10.1038/nbt.1526 Contact: David Largaespada, University of Minnesota, Minneapolis, Minn. e-mail: larga002@umn.edu</p> <p>Starr, T.K. <i>et al. Science</i>; published online Feb. 26, 2009; doi:10.1126/science.1163040 Contact: David Largaespada, University of Minnesota, Minneapolis, Minn. e-mail: larga002@umn.edu Contact: Timothy K. Starr, same affiliation as above e-mail: star0044@umn.edu</p>