This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Assays & screens			
<i>In vivo</i> RNAi screen for tumor suppressor genes	<p>A small hairpin RNA-based screen of mouse tumor genomes could be useful for identifying human tumor suppressor genes that could be targeted to treat cancer. In a mosaic mouse model of hepatocellular carcinoma (HCC), researchers delivered pools of shRNAs targeting mouse orthologs of genes deleted in human HCC, and a number of these pools accelerated tumor growth. The tumors were then screened to determine the most abundant shRNAs, which targeted the murine equivalents of 13 human tumor suppressor genes, including <i>exportin 4</i> (<i>XPO4</i>). <i>XPO4</i> encodes a nuclear export protein whose substrate, EIF5A2, is amplified in human tumors, is required for proliferation in XPO4-deficient tumor cells and promotes HCC in mice. Next steps could include additional studies to investigate the mechanisms behind how the identified genes suppress tumorigenesis.</p> <p>SciBX 1(43); doi:10.1038/scibx.2008.1057 Published online Dec. 4, 2008</p>	Patent application filed; unlicensed	<p>Zender, L. <i>et al. Cell</i>; published online Nov. 13, 2008; doi:10.1016/j.cell.2008.09.061</p> <p>Contact: Scott W. Lowe, Cold Spring Harbor Laboratory, Cold Spring Harbor, N.Y. e-mail: lowe@cshl.edu</p>