This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Assays & screens			
<i>In vitro</i> screening for genetic signatures associated with sensitivity to targeted cancer therapeutics	<p>Combined genetic and chemical screening of lung cancer cells for altered genetic signatures could reveal sensitivity to therapeutic candidates. The screening approach involved identifying small molecule inhibitors and small interfering RNAs that reduced growth of cancer cells from a patient tumor sample but had no effect on growth of normal cells from the same patient. The small molecules and siRNAs were then tested in a panel of 91 non-small cell lung cancer (NSCLC) cell lines to identify common signatures of sensitivity. <i>K-Ras</i> (<i>KRAS</i>) and <i>serine/threonine kinase 11</i> (<i>STK11</i>; <i>LKB1</i>) mutations correlated with sensitivity to knockdown of <i>constitutive photomorphogenic 1</i> (<i>COP1</i>; <i>RFWD2</i>). In addition, a seven-gene expression signature correlated with sensitivity to an indolotriazine-based compound. Next steps could include using this approach to identify sensitivity to therapeutics in additional cancer types.</p> <p>SciBX 6(46); doi:10.1038/scibx.2013.1330 Published online Dec. 5, 2013</p>	Patent and licensing status unavailable	<p>Kim, H.S. <i>et al. Cell</i>; published online Oct. 24, 2013; doi:10.1016/j.cell.2013.09.041 Contact: Michael A. White, The University of Texas Southwestern Medical Center, Dallas, Texas e-mail: michael.white@utsouthwestern.edu</p>