This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Assays & screens			
<i>In vivo</i> screening to identify genes mutated in <i>Mycobacterium tuberculosis</i> that alter bacterial sensitivity to antibiotics specifically in the <i>in vivo</i> environment	<p><i>In vitro</i> and mouse studies suggest that screening for drug-resistant <i>M. tuberculosis</i> mutants could lead to improved tuberculosis (TB) therapies. Drug-resistant <i>M. tuberculosis</i> strains were identified in mice that had been infected with a mixture of mutant <i>M. tuberculosis</i> strains and then treated with the generic TB therapy isoniazid. As proof of principle, <i>M. tuberculosis</i> strains lacking cytochrome transport transmembrane ATP-binding protein (CydC) had impaired persistence of growth and infection, whereas strains with a mutation near the operon of <i>rv0096–rv0101</i> had increased persistence in mice during isoniazid treatment. Next steps include developing therapeutics targeting <i>in vivo</i> persistence genes.</p> <p>SciBX 3(26); doi:10.1038/scibx.2010.801 Published online July 1, 2010</p>	Unpatented; licensing status not applicable	<p>Dhar, N. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online June 21, 2010; doi:10.1073/pnas.1003219107 Contact: Neeraj Dhar, Swiss Federal Institute of Technology Lausanne (EPFL), Lausanne, Switzerland e-mail: neeraj.dhar@epfl.ch</p>