This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Computational models			
Repositioning drug indications with parallel analysis of disease and drug gene expression signatures	<p>Parallel analysis of gene expression signatures underlying disease and drug effects could help repurpose compounds. Analysis of signatures from 100 diseases and 164 drugs identified the antiulcer compound cimetidine as a candidate to treat lung adenocarcinoma. In mice with human lung adenocarcinoma cells, cimetidine decreased tumor growth compared with saline control. Mice with human renal carcinoma cells were unaffected by cimetidine. Next steps include testing cimetidine in additional models of lung cancer.</p> <p>NuMedii Inc., a bioinformatics company cofounded by Atul Butte, uses molecular data to identify new indications for existing drugs.</p> <p>SciBX 4(35); doi:10.1038/scibx.2011.997 Published online Sept. 8, 2011</p>	Patent application filed covering cimetidine to treat lung cancer; available for licensing from NuMedii	<p>Sirota, M. <i>et al. Sci. Transl. Med.</i>; published online Aug. 17, 2011; doi:10.1126/scitranslmed.3001318</p> <p>Contact: Atul J. Butte, Stanford University School of Medicine, Stanford, Calif. e-mail: abutte@stanford.edu</p>