This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Assays & screens			
Multiplex screening for interacting compounds (MuSIC) to help identify drug combinations to treat HIV/AIDS	<p>MuSIC could be used to help identify drug combinations to treat HIV infection. A primary screen using pooled compounds to increase throughput was used to evaluate about 500,000 drug pairs of 1,000 FDA-approved or clinically tested compounds in HIV-infected cells. The screen identified the glucocorticoid prednisolone and the antiprotozoal nitazoxanide as the top synergistic pair hit. The pair was confirmed by a separate screen and by two distinct methods to quantify drug synergy. Additional cell-based studies showed that prednisolone and nitazoxanide synergized with the HIV integrase inhibitor Isentress raltegravir. Ongoing work includes testing other combinations identified in the study and using MuSIC to identify combinations that could be used to treat other infectious diseases, cancer or asthma.</p> <p>SciBX 5(42); doi:10.1038/scibx.2012.1121 Published online Oct. 25, 2012</p>	Unpatented; licensing status not applicable	<p>Tan, X. <i>et al. Nat. Biotechnol.</i>; published online Oct. 14, 2012; doi:10.1038/nbt.2391</p> <p>Contact: Stephen J. Elledge, Harvard Medical School and Brigham and Women's Hospital, Boston, Mass. e-mail: selledge@genetics.med.harvard.edu</p>