This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Assays & screens			
Microfluidic ultra–high throughput screening platform for discovery of new proteins or nucleic acids	*In vitro* studies suggest that a high throughput microfluidic platform could be a fast and cost-effective method for drug screens. The microfluidic platform uses aqueous drops that contain yeast as the reaction vessel and screens thousands of drops per second for enzymatic activity. As proof of concept, the platform screened about 10 million variants of the horseradish peroxidase (HRP) enzyme in about 10 hours to identify several HRP mutants with greater catalytic activity than the wild-type enzyme. The platform has a 1,000-fold reduction in time and a 1 million–fold reduction in cost compared with current robotic screening systems. Next steps could include applying this method to different enzymes. *SciBX* 3(8); doi:10.1038/scibx.2010.258 Published online Feb. 25, 2010	Patent and licensing status unavailable	Agresti, J. *et al. Proc. Natl. Acad. Sci. USA*; published online Feb. 8, 2010; doi:10.1073/pnas.0910781107 **Contact:** Jeremy J. Agresti, Harvard University, Cambridge, Mass. e-mail: ja@seas.harvard.edu