This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Assays & screens			
RNA-based molecular diagnostic of infectious diseases	<p>Real-time RNA expression profiling of pathogens could provide a rapid diagnostic of infectious diseases. In cell culture, oligonucleotide probes targeting mRNA molecules unique to three different Gram-negative bacteria and <i>Mycobacterium tuberculosis</i> detected the pathogens in pure samples and in complex mixtures. Also in cell culture, the probes detected mRNA expression profiles that distinguished antibiotic-sensitive and antibiotic-resistant bacterial strains. In urine samples from patients testing positive for urinary tract infections, the mRNA probes identified <i>Escherichia coli</i> strains that were responsive to the generic antibiotic ciprofloxacin. Next steps include generating a large library of mRNA expression signatures that differentiate a range of drug-sensitive and drug-resistant bacterial pathogens.</p> <p>SciBX 5(16); doi:10.1038/scibx.2012.428 Published online April 19, 2012</p>	Patented; available for licensing from the Broad Institute of MIT and Harvard	<p>Barczak, A.K. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online April 2, 2012; doi:10.1073/pnas.1119540109 Contact: Deborah T. Hung, Broad Institute of MIT and Harvard, Cambridge, Mass. e-mail: hung@molbio.mgh.harvard.edu</p>