This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Assays & screens			
Nano-plasmonic exosome (nPLEX) sensor for high throughput, label-free, quantitative analysis of exosome proteins	<p>Patient sample studies suggest an nPLEX sensor can help diagnose and/or monitor cancer treatment. The nPLEX sensor is comprised of an array of nanopores in a metal film functionalized with affinity ligands for specific proteins and a miniaturized imaging system. Binding of affinity ligands to proteins on exosomes results in a spectral shift. In ascites derived from patients with ovarian cancer, epithelial cell adhesion molecule (EpCAM) and CD24 arrays detected more exosomes and higher levels of protein per exosome than what was seen in ascites derived from patients with cirrhosis. Next steps include performing large-scale proteomic analysis on exosomes.</p> <p>SciBX 7(20); doi:10.1038/scibx.2014.596 Published online May 22, 2014</p>	<p>Patents on nPLEX device and assays filed; available for licensing from Massachusetts General Hospital</p> <p>Contact: Dan Castro, Massachusetts General Hospital, Boston, Mass. e-mail: dc654@partners.org</p>	<p>Im, H. <i>et al. Nat. Biotechnol.</i>; published online April 20, 2014; doi:10.1038/nbt.2886</p> <p>Contact: Hakho Lee, Massachusetts General Hospital, Boston, Mass. e-mail: hlee@mgh.harvard.edu</p> <p>Contact: Ralph Weissleder, same affiliation as above e-mail: rweissleder@mgh.harvard.edu</p>