This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Disease models			
Microdevice for modeling lung function	A microdevice could be useful for evaluating therapies for lung disorders. Researchers engineered a microfluidic system containing human alveolar epithelial and pulmonary microvascular cells separated by a porous membrane. The microdevice, which mimicked structural, functional and mechanical properties of the human lung's alveolar-capillary interface, showed that mechanical strain on lung tissue led to greater nanoparticle uptake, nanoparticle-induced toxicity and inflammatory responses than no strain. Next steps include seeking an industry partner to help identify disease indications in which animal models are unavailable or ineffective at predicting results in humans and developing the microdevice for those indications. SciBX 3(27); doi:10.1038/scibx.2010.839 Published online July 15, 2010	Patent application filed; available for licensing from the Harvard University Office of Technology Development	Huh, D. <i>et al. Science</i>; published online June 24, 2010; doi:10.1126/science.1188302 Contact: Donald E. Ingber, Harvard University, Boston, Mass. e-mail: don.ingber@wyss.harvard.edu Contact: Dongeun Huh, same affiliation as above e-mail: dan.huh@wyss.harvard.edu