This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Disease models			
Engineered bone marrow-on-a-chip system	<p>An engineered bone marrow-on-a-chip system could be useful in screening drug candidates for hematopoietic toxicity. The microchip consists of an engineered bone and bone marrow construct grown in mice that is inserted into an <i>in vitro</i> microfluidic culture system. The engineered bone marrow on the microchip retained the composition of natural bone marrow and recapitulated features of the hematopoietic niche. It also showed responses to radiation exposure and granulocyte colony-stimulating factor (G-CSF; CSF3) that were similar to those of bone marrow in live mice. Next steps include developing a humanized version of the bone marrow-on-a-chip system.</p> <p>SciBX 7(23); doi:10.1038/scibx.2014.687 Published online June 12, 2014</p>	Patent application filed; licensing discussions under way with undisclosed parties	<p>Torisawa, Y.-s. <i>et al. Nat. Methods</i>; published online May 4, 2014; doi:10.1038/nmeth.2938</p> <p>Contact: Donald E. Ingber, Harvard University, Cambridge, Mass. e-mail: don.ingber@wyss.harvard.edu</p>