This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Disease models			
Mice with humanized ectopic bone engraftments to test leukemia therapeutics	<p>Mice with humanized ectopic bone engraftments could help identify new leukemia therapeutics. In mice, subcutaneous injection of a combination of human endothelial colony-forming cells (ECFCs), mesenchymal stem cells (MSCs) and Matrigel generated well-vascularized, bone-like tissues in the flank. In the same mice, i.v. transplantation of human acute myelogenous leukemia (AML) cells led to human AML engraftment in mouse skeleton and humanized ectopic bone. Also in the model, mice with MSC-specific hypoxia-inducible factor 1α (Hif1α; Hif1α) small hairpin RNA expression had a 50% decrease in AML engraftment in humanized ectopic bone compared with mice that had MSC-specific control shRNA expression. Next steps include reducing the time to bone marrow formation.</p> <p>SciBX 5(18); doi:10.1038/scibx.2012.476 Published online May 3, 2012</p>	Patent application filed; available for licensing	<p>Chen, Y. <i>et al. Blood</i>; published online April 5, 2012; doi:10.1182/blood-2011-11-389957 Contact: Michael Andreeff, The University of Texas MD Anderson Cancer Center, Houston, Texas e-mail: mandreef@mdanderson.org</p>