This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Disease models			
Engineered, functional bone organ as a model to study bone development and regeneration	An engineered, functional bone organ could be useful for studying bone development and regeneration. Human mesenchymal stem cells were seeded onto collagen-based scaffolds, cultured in chondrogenic conditions for three weeks and supplemented with IL-1β for another two weeks. The resulting constructs were then transplanted into a subcutaneous pouch in nude mice for up to 12 weeks. The implant became vascularized and had structure and functionality comparable to that of native bone. Next steps include developing a clinically relevant bone regeneration strategy in animal models and developing a humanized model of hematopoiesis. *SciBX* 6(7); doi:10.1038/scibx.2013.174 Published online Feb. 21, 2013	Unpatented; licensing status not applicable	Scotti, C. *et al. Proc. Natl. Acad. Sci. USA*; published online Feb. 11, 2013; doi:10.1073/pnas.1220108110 **Contact:** Ivan Martin, University Hospital Basel, Basel, Switzerland e-mail: imartin@uhbs.ch