This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Disease models			
Engineered skeletal muscle tissue to model diseased muscle	Engineered skeletal muscle could help identify new muscle-regenerating therapies. Neonatal rat myogenic cells cultured for two weeks resulted in the generation of highly organized muscle bundles composed of laminin-surrounded myofibers encased by fibroblasts, which resembles native muscle. The engineered muscle responded to electrical stimulation and underwent satellite cell-mediated regeneration following muscle injury. In nude mice, implantation of engineered muscles led to vascularization, spontaneous contraction and increased muscle force generation after two weeks post-implantation, whereas implantation of undifferentiated muscle cells led to less integration and function. Next steps include designing a functional human muscle for disease modeling.	Findings unpatented; licensing status not applicable	Juhas, M. <i>et al. Proc. Natl. Acad. Sci. USA</i> ; published online March 31, 2014; doi:10.1073/pnas.1402723111 Contact: Nenad Bursac, Duke University, Durham, N.C. e-mail: nbursac@duke.edu
	SciBX 7(17); doi:10.1038/scibx.2014.502 Published online May 1, 2014		