This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Cultured human muscle satellite cells to restore gene function in muscular dystrophies	<p>Cell culture and mouse studies suggest cultured human muscle satellite cells could be used to restore gene function to treat muscular dystrophies. In cultured human muscle fiber fragments (HMFFs) obtained from muscle biopsies, paired box gene 7 (PAX7)-expressing satellite cells could be propagated for up to three weeks, during which time they began to differentiate into myogenic cells. In cultured HMFFs, co-transfection with a transposase and a fluorescent protein at day 2 resulted in formation of fluorescent myoblasts for up to 35 days. In immunodeficient mice with focal irradiation of anterior tibial muscle, transplanted HMFFs differentiated into human myoblasts and showed fused myotube development in the injured muscle. Next steps include conducting longer-term transplantation studies, evaluating the cells in other muscles and delivering dystrophy-associated genes into the HMFFs.</p> <p>SciBX 7(37); doi:10.1038/scibx.2014.1110 Published online Sept. 25, 2014</p>	Patented; available for licensing	<p>Marg, A. <i>et al. J. Clin. Invest.</i>; published online Aug. 26, 2014; doi:10.1172/JCI63992 Contact: Simone Spuler, Charité Medical Faculty and Max Delbrueck Center for Molecular Medicine, Berlin, Germany e-mail: simone.spuler@charite.de</p>