This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Disease models			
Full-length infectious cDNA clone of Middle East respiratory syndrome coronavirus (MERS-CoV)	A red fluorescent protein (RFP)-expressing, recombinant, full-length, infectious cDNA clone of MERS-CoV could be used to characterize viral pathogenesis and screen for antivirals. Reverse genetic strategies generated a MERS-CoV that lacked <i>open reading frame 5</i> and encoded RFP. The RFP-expressing MERS-CoV replicated to high levels in several primary lung cells including fibroblasts, type II pneumocytes and nonciliated human airway epithelial cells and could be quantified by fluorescence. Ongoing studies include using the MERS-CoV clone to test compounds for antiviral activity and have identified hits that show broad-based activity against viral strains including MERS-CoV.	Reverse genetic strategies for SARS, mouse hepatitis virus and other coronaviruses, including MERS-CoV, are patented; unlicensed	Scobey, T. <i>et al. Proc. Natl. Acad. Sci. USA</i> ; published online Sept. 16, 2013; doi:10.1073/pnas.1311542110 Contact: Ralph S. Baric, The University of North Carolina at Chapel Hill, Chapel Hill, N.C. e-mail: rbaric@ad.unc.edu
<i>SciBX</i> 6(41); doi:10.1038/scibx.2013.1171 Published online Oct. 24, 2013			