This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Assays & screens			
Virus-based <i>in vivo</i> RNAi screens to identify host interactions	<p><i>In vitro</i> and <i>in vivo</i> RNAi screens to identify virus-host interactions could help identify new targets to treat and prevent viral infections. The screen uses a library of Sindbis viruses that encode and deliver into host cells inhibitory artificial microRNAs that act as small interfering RNAs. In cell culture, the screen identified DEAD box polypeptide 58 (DDX58; RIG-I) and inhibitor of κ-light polypeptide gene enhancer in B cells kinase-β (IKBKB; IKK2) as key modulators of viral replication. In mice, the screen identified interferon-stimulated genes and factors involved in host transcription as modulators of viral replication. Next steps include adapting the system to study the transmission of influenza virus and the virulence of various alphaviruses.</p> <p>SciBX 6(40); doi:10.1038/scibx.2013.1139 Published online Oct. 17, 2013</p>	Patent application filed covering use of RNA viruses as delivery vehicles for heterologous RNAs; available for licensing	<p>Varble, A. <i>et al. Cell Host Microbe</i>; published online Sept. 11, 2013; doi:10.1016/j.chom.2013.08.007</p> <p>Contact: Benjamin R. tenOever, Icahn School of Medicine at Mount Sinai, New York, N.Y. e-mail: benjamin.tenoever@mssm.edu</p>