This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Engineered Fc γ -receptor engagement enhances broadly neutralizing antibodies (bNAbs) against influenza A virus	<p>Mouse studies suggest bNAbs engineered to activate Fc γ-receptors on immune cells could help prevent influenza infection. bNAbs that bind the invariant stalk region of hemagglutinin (HA) were modified with Fc regions designed to bind a subset of Fc γ-receptors on immune cells that activate an antiviral response. In a mouse model of lethal influenza infection, the engineered bNAbs increased survival and decreased viral titers in the lung compared with antibodies containing Fc regions that engaged inhibitory Fc γ-receptors or were deficient in Fc γ-receptor binding. In humanized mice exclusively expressing human Fc γ-receptors, an engineered HA stalk-specific bNAb increased survival after viral infection compared with an unmodified bNAb. Next steps could include building Fc portions into therapeutic bNAbs that enable interactions with activating Fc γ-receptors in the host.</p> <p>SciBX 7(6); doi:10.1038/scibx.2014.185 Published online Feb. 13, 2014</p>	Patent and licensing status unavailable	<p>DiLillo, D.J. <i>et al. Nat. Med.</i>; published online Jan. 12, 2014; doi:10.1038/nm.3443 Contact: Jeffrey V. Ravetch, The Rockefeller University, New York, N.Y. e-mail: ravetch@rockefeller.edu</p>