This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Disease models			
Mouse models of epilepsy and anxiety	<p>A study in mice suggests neuron type-specific perturbation of glycine receptor $\alpha 3$ (GLRA3) could help model epilepsy and neuropsychiatric disease. RNA editing can lead to a gain-of-function mutation in <i>GLRA3</i> that is associated with drug-resistant temporal lobe epilepsy. Mice expressing a transgenic, gain-of-function <i>Gla3</i> variant in glutamatergic neurons showed signs of epilepsy including elevated electrophysiological activity and defects in memory and cognitive function. Mice expressing transgenic, gain-of-function <i>Gla3</i> in interneurons of inhibitory circuits had greater anxiety but normal cognition compared with controls not expressing the transgene. Next steps include testing glycine receptor-modulating compounds in these transgenic mice.</p> <p>SciBX 7(6); doi:10.1038/scibx.2014.184 Published online Feb. 13, 2014</p>	Unpatented; licensing status not applicable	<p>Winkelmann, A. <i>et al. J. Clin. Invest.</i>; published online Jan. 16, 2014; doi:10.1172/JCI71472 Contact: Jochen C. Meier, Max Delbrueck Center for Molecular Medicine, Berlin, Germany e-mail: jochen.meier@mdc-berlin.de</p>