This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Disease models			
Transgenic mouse model for migraine	<p>A transgenic mouse model of photophobia could aid in the development of new migraine treatments. Photophobia and light avoidance are commonly reported during acute migraine attacks. The researchers generated transgenic mice that expressed the human receptor activity modifying protein 1 (hRAMP1) in their nervous tissue. hRAMP1 is a subunit of the calcitonin-related polypeptide alpha (CALCA; CGRP) receptor, which can trigger migraine-like headaches when activated. The animals showed increased light avoidance compared with control littermates that did not express hRAMP1 ($p=0.0002$). Also, the CGRP receptor antagonist olcegepant prevented light avoidance. Next steps include evaluating triptan-family anti-migraine drugs in the mouse model to see if they prevent light aversion.</p> <p>Telcagepant, a CGRP receptor antagonist from Merck & Co. Inc., is in Phase III testing to treat migraines. Olcegepant, a CGRP receptor antagonist from Boehringer Ingelheim GmbH, was in Phase II testing for acute migraine when development was discontinued in 2007 for undisclosed reasons.</p> <p>SciBX 2(28); doi:10.1038/scibx.2009.1126 Published online July 23, 2009</p>	Model is unpatented; available for licensing from The University of Iowa Foundation	<p>Recober, A. <i>et al. J. Neurosci.</i>; published online July 8, 2009; doi:10.1523/JNEUROSCI.1727-09.2009</p> <p>Contact: Andrew F. Russo, University of Iowa, Iowa City, Iowa e-mail: andrew-russo@uiowa.edu</p>