This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Disease models			
<i>Xenopus</i> model for oligodendrocyte myelination	A <i>Xenopus</i> model for myelination could help identify multiple sclerosis (MS) therapeutics. Transgenic <i>Xenopus laevis</i> were engineered to express a construct consisting of a fluorescent reporter linked to the <i>Escherichia coli</i> gene <i>type 1 nitroreductase</i> (<i>ntr</i>). The construct was then placed under the control of a regulatory sequence specific to mature oligodendrocytes. In the model, metronidazole, a generic prodrug that is converted into a cytotoxin by <i>ntr</i>, induced oligodendrocyte apoptosis and demyelination, resulting in a lower fluorescent signal than vehicle. Also in the model, the myelinating compound retinoic acid induced oligodendrocyte proliferation and remyelination, resulting in a greater fluorescent signal than vehicle. Next steps could include using the model to test new MS therapeutics. SciBX 5(39); doi:10.1038/scibx.2012.1042 Published online Oct. 4, 2012	Patent and licensing status unavailable	Kaya, F. <i>et al. J. Neurosci.</i>; published online Sept. 12, 2012; doi:10.1523/JNEUROSCI.2252-12.2012 Contact: Andre Mazabraud, University of South Paris XI, Orsay, France e-mail: andre.mazabraud@u-psud.fr