This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Imaging			
MRI probes for brain dopamine	<p>An <i>in vitro</i> and rat study identified protein-based MRI probes that bound dopamine in living brains and could be used to monitor levels of the neurotransmitter in Parkinson's disease (PD) and other neurological disorders. <i>In vitro</i> screens and mutagenesis were used to identify a cytochrome-derived protein fragment that bound dopamine with high affinity. Injection of the dopamine-binding protein into the brains of rats generated a detectable MRI signal that allowed monitoring of dopamine levels after injection of exogenous dopamine or after endogenous dopamine release. Next steps include developing assays that use the probe to monitor dopamine levels in models of PD.</p> <p>SciBX 3(11); doi:10.1038/scibx.2010.360 Published online March 18, 2010</p>	Patent pending; available for licensing	<p>Shapiro, M.G. <i>et al. Nat. Biotechnol.</i>; published online Feb. 28, 2010; doi:10.1038/nbt.1609</p> <p>Contact: Alan Jasanoff, Massachusetts Institute of Technology, Cambridge, Mass. e-mail: jasanoff@mit.edu</p>