This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Imaging			
Optical imaging of structural and molecular features in intact brain tissue	<p>A method of rendering intact brain tissue amenable to optical imaging could help identify new drug targets. Treatment of whole brains or brain tissue from mice, zebrafish and humans with hydrogel monomers and an electrophoretic tissue-clearing technique resulted in an optically transparent hydrogel-tissue hybrid. In transformed tissue, multiple rounds of fluorescence imaging enabled visualization of various features including long-range projections, protein complexes and neurotransmitters. In a frontal lobe sample from a deceased patient with autism, the method revealed interneuronal dendritic bridges that were not seen in normal, age-matched tissue. Next steps could include using the method to identify disease-related structural or molecular features in brain tissue from models for CNS diseases.</p> <p>SciBX 6(16); doi:10.1038/scibx.2013.403 Published online April 25, 2013</p>	Patent and licensing status unavailable	<p>Chung, K. <i>et al. Nature</i>; published online April 10, 2013; doi:10.1038/nature12107 Contact: Karl Deisseroth, Stanford University, Stanford, Calif. e-mail: deissero@stanford.edu</p>