This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Imaging			
Genetically encoded fluorescent calcium sensors for neuronal activity imaging	<p><i>In vitro</i> and mouse studies identified fluorescent calcium sensors that could improve the sensitivity of neuronal imaging. Mutagenesis studies identified optimized, genetically encoded fluorescent calcium sensors with better sensitivity and kinetics than other synthetic or genetically encoded sensors. In mice, adenovirus vector-encoded optimized sensors enabled reliable reporting of both single action potentials and activity in large groups of neurons for up to two months without perturbing cortical circuits. Next steps include using the sensors as research tools.</p> <p>SciBX 6(32); doi:10.1038/scibx.2013.878 Published online Aug. 22, 2013</p>	Patent application filed; available for nonexclusive licensing to not-for-profit researchers and commercial entities	<p>Chen, T.-W. <i>et al. Nature</i>; published online July 17, 2013; doi:10.1038/nature12354 Contact: Douglas S. Kim, Howard Hughes Medical Institute, Ashburn, Va. e-mail: kimd@janelia.hhmi.org Contact: Karel Svoboda, same affiliation as above e-mail: svobodak@janelia.hhmi.org Contact: Loren L. Looger, same affiliation as above e-mail: loogerl@janelia.hhmi.org Contact: Vivek Jayaraman, same affiliation as above e-mail: jayaramanv@janelia.hhmi.org Contact: Michael B. Orger, Champalimaud Centre for the Unknown, Lisbon, Portugal e-mail: michael.orger@neuro.fchampalimaud.org</p>