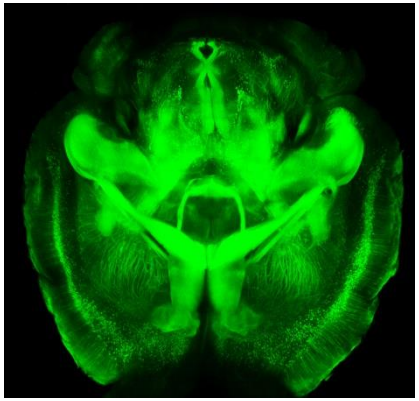
Moments in Materials Presentation:

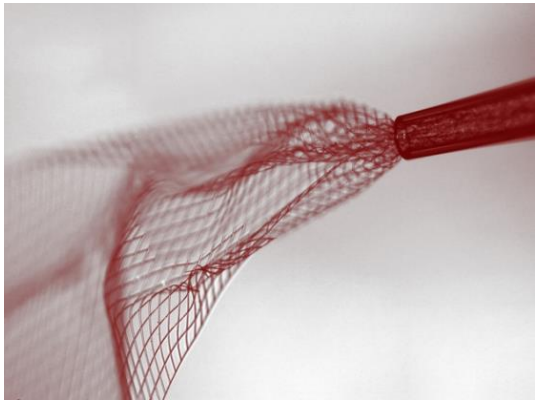
Tools for probing neural circuits

Speaker: Helen Tran (Campos lab)
When: Thursday, July 23rd 2015, 4:30 p.m.
Where: NWC, 7th floor meeting room, RM 703

How does the firing of individual brain cells translate to cognition, such as emotion and perception?

This MiMs talk will highlight the challenges and opportunities facing the neuroscience community whose interest is increasingly shifted to how collective neural circuits—rather than single or few neurons—lead to emergent properties. The development of new technological toolsets for studying the brain is a crucial cornerstone for understanding the neural language. I will review two recently published neurotechnology tools that are poised to provide insight on the neural circuit: syringe-injectable electronics (Lieber lab) and advanced CLARITY for rapid and high-resolution imaging of intact tissues (Deisseroth lab).





1. *Nat. Nanotechnol.* **10**, 629-636 (2015)
2. *Nat. Prot.* **9**, 1682-1697 (2014)
3. *Sci. Am.* 38-45 (March 2014)
4. *ACS Nano* **7**, 1850-1866 (2013)