TMU Talk

**Dopamine and Motivation: A Fly Story**

Motivation is an internal drive that directs behavior towards a desired future state. To do so, motivation affects how we make decisions and how we perceive the world. Motivation also interacts with memory systems, so that learning and memory recall are more efficient under a relevant motivational state. Despite its clear importance, a complete biological description of how motivations are represented in the brain, how they control behavior, and how they affect learning and memory remains to be established. We investigate these fundamental questions using the fruit fly *Drosophila*, where powerful genetic techniques and the relative simplicity of the brain allow us to manipulate neural circuits with fine temporal precision at single-cell resolution. In this talk, I will discuss our recent findings that reveal an elegant neural mechanism from which the specificity of motivated behavior emerges.