

Monthly Neuro Seminar Series

Spring 2026



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Innovations in mapping and manipulating the primate amygdala

The amygdala is a cornerstone of learning and emotion, and recent cross-species molecular profiling has finally allowed us to identify the specific excitatory and inhibitory neuron classes that are conserved across the primate lineage. But despite this granular molecular map, it remains fundamentally unclear how these transcriptomically distinct populations actually orchestrate the complex computations required for adaptive decision-making. In this seminar, I will demonstrate how specific cell types within the basolateral complex—particularly those projecting to the nucleus accumbens—anchor a distributed network that regulates the trade-off between exploration and exploitation. Using a combination of pathway-specific chemogenetics and monosynaptic rabies tracing, I will show how these neurons occupy unique positions within motivational circuits to exert dissociable influences on learning and choice. Finally, I will describe our ongoing efforts to translate these primate circuit mechanisms into human behavioral tasks, providing a cross-species framework for understanding the circuit-level foundations of psychiatric dysfunction.

Tuesday, February 3
4:00 p.m.
SLC 285



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