



Neuroscience Center of Excellence

Seminar

"Behavioral and Network States: Making Sense of Variability in Sensory Response"

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Sensory cortices are often thought to translate sensory input into faithful and invariant representations ready to be unambiguously decoded by higher order areas. In fact, however, sensory responses vary over multiple time scales –across learning, across changes in cognitive state, from trial to trial, and even within trials. To completely understand perceptual processes, it is therefore important to understand these dynamics, their geneses, and their impacts. My research has two main foci: first, I am engaged in a programmatic exploration of the variables that affect sensory responses, starting with simple differences in levels of vigilance and moving toward increasingly ecologically real behavioral states; second, I am taking a full-system, network-level view of sensory function to characterize the underpinnings of state-dependent modulation.

Over the course of the presentation I will discuss how taking into account behavioral and network states can help us understand sensory responses to gustatory stimuli as recorded with multi-electrode techniques in awake rats.

**11:45am-12:45pm October 9, 2007,
8th Floor Neuroscience Center
Conference Room, LSU Lion's Building,
2020 Gravier Street
New Orleans**