



CELLULAR & SYSTEMS NEUROSCIENCE SEMINAR SERIES

Co-sponsored by MCDB, N&B, NRI, and DYNs

Next Speaker:
Wednesday, November 9th
3PM | BioE 1001



Feeling the Heat: Tips and tricks of a thermosensory neuron in *C. elegans*



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Thermosensation is a critical sensory modality for all organisms. *C. elegans* exhibits the remarkable ability to detect temperature changes of as little as 0.01°C across a 10°C temperature range, and exhibits experience-dependent thermosensory behaviors. Thermosensation in the innocuous temperature range is mediated primarily by the single AFD sensory neuron pair. I will discuss our lab's work on identifying the signal transduction mechanisms and morphological specializations that confer extraordinary thermosensitivity onto AFD. I will also describe ongoing work exploring the temperature experience-dependent transcriptional and non-transcriptional mechanisms that operate in this single sensory neuron pair to drive behavioral plasticity.