Brain Mapping Center

SEMINAR SERIES

Sponsored by the Brain Mapping Medical Research Organization and Brain Mapping Support Foundation

The focus of these talks is on advancing the use of brain mapping methods in neuroscience with an emphasis on contemporary issues of neuroplasticity, neurodevelopment, and biomarker development in neuropsychiatric disease.

Hosted By: Shantanu Joshi, Ph.D., Neurology, UCLA

"Circular reasoning in cognitive neuroscience: A case study in the neuroscience of fear"



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A central goal of cognitive neuroscience is to map mental phenomena onto the brain, yet debates about these mappings often persist across decades. In this talk, I examine one reason why: assumptions embedded in study design and analysis can shape results in ways that risk circular reasoning. Using fear as a case study, I show how the same data can appear to support different theoretical conclusions depending on how mental states are operationalized and how data is analyzed. In particular, I contrast approaches motivated by basic emotion theories, which posit relatively discrete neural signatures, with constructionist accounts that emphasize variability across instances. Although the empirical focus is on fear, the broader issues extend across cognitive neuroscience. These considerations highlight that no experiment or data analytical approach is theory-free and motivate a need to be explicit about how theoretical assumptions implicit in research shape our scientific conclusions.

April 2, 2026 11:00 am - 12:00 pm PDT

In-person: Gordon Neuroscience Research Building (NRB 132)
635 Charles E. Young Dr. South
Zoom: https://ucla.in/4lxxrbD

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