

PIONEERS IN BIOMEDICAL RESEARCH SEMINAR

Presented by the Fralin Biomedical Research Institute at VTC and co-sponsored by the institute's Center for Human Neuroscience Research



NANTHIA SUTHANA, Ph.D.

Associate Professor-in-Residence
Department of Psychiatry & Biobehavioral Sciences
Associate Director, Neuromodulation Division
Semel Institute of Neuroscience and Human Behavior
David Geffen School of Medicine at UCLA

In Person Seminar: Theta Oscillations, Memory, and Emotion: Insights from Mobile Intracranial EEG Recordings and Closed-Loop Stimulation in Humans

While prior human neuroimaging studies have predominantly relied on stationary behavioral tasks, recent technological advancements have allowed for the investigation of deep brain activity during memory phenomena in humans navigating freely within real or virtual environments. Through these methods, Dr. Suthana and her lab have demonstrated that theta oscillations in the hippocampus, entorhinal cortex, and amygdala are modulated by a range of factors, including movement speed and eye movements to emotional valence and memory success. This presentation will provide a comprehensive overview of these findings and discuss the potential clinical applications of using these methodologies in treating neuropsychiatric disorders including conditions like post-traumatic stress disorder.

FRIDAY, FEB. 2, at 11 a.m.

Room G101 A/B, 4 Riverside Circle
Watch live via Zoom at <https://FralinBioMed.info/PBR-Join>



**FRALIN BIOMEDICAL
RESEARCH INSTITUTE AT VTC**
VIRGINIA TECH.