PIONEERS IN BIOMEDICAL RESEARCH SEMINAR

Presented by the Fralin Biomedical Research Institute and co-sponsored by the research institute's Addiction Recovery Research Center and the Center for Health Behaviors Research



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In Person Seminar: Neural Circuits for Motivation and Reward

In order to survive and effectively navigate an ever-changing environment, organisms must readily adapt their behavior to seek out needed resources, while simultaneously avoiding life-threatening situations. These opposing processes are controlled by neural circuitry that is readily engaged by both environmental and physiological factors to promote behavioral output. The work of my lab studies the precise neural circuits that control both reward and aversive-related behavioral responses. By utilizing optogenetics, calcium imaging, and single cell sequencing, we aim to delineate the functional interactions between molecularly distinct neuronal populations that are critical for the generation of these critical behavioral states. A holistic understanding of the interconnected neural circuit elements that mediate diverse motivational behaviors will likely provide important insight into a variety of complex neurological and neuropsychiatric illnesses such as addiction, pain, and emotional disorders.

FRIDAY, APRIL 8, at 11:00 a.m.

