

# The Friedman Brain Institute

## 2025 FBI Research Scholars

On behalf of the Philanthropic Leadership Council of The Friedman Brain Institute, we are pleased to announce the 2025 recipients of The FBI Research Scholars Awards.

### Lipschultz Research Scholar Award



**Deepak Kaji, MD, PhD**  
Instructor, Psychiatry

#### **Unraveling the Acute and Chronic Effects of NMDA-R inhibition on neocortical development and network function**

Schizophrenia is a neurodevelopmental disorder linked to glutamatergic dysfunction. While NMDA-R antagonism with ketamine mimics schizophrenia symptoms in healthy individuals, it fails to capture the neurodevelopmental elements of the disease and has made it difficult to design effective treatments. This study proposes using human induced pluripotent stem cells (hiPSCs) to create 3D neocortical organoids and compare the effects of acute and chronic ketamine exposure, with organoids generated from healthy control lines, and iPSC lines from patients with schizophrenia. We hypothesize that comparing the transcriptomic and electrophysiological signatures from these four conditions will untangle the temporal contributions of NMDA-R dysfunction to schizophrenia and lead to the development of new pharmacologics.



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