The Friedman Brain Institute
2023 FBI Research Scholars

On behalf of the Philanthropic Leadership Council of The Friedman Brain Institute, we are pleased to announce the 2023 recipients of The FBI Research Scholars Awards.

Lipschultz Research Scholar Award

Xiaoting Wu, PhD
Assistant Professor, Neuroscience

Denise J Cai, PhD
Associate Professor, Neuroscience

Investigation and rescue of aberrant hippocampal ensemble activity in ASD-associated mouse models

Social memory, the ability to recognize and remember conspecifics, is impaired in autism spectrum disorder (ASD). Hippocampal subregion CA2 encodes social memory, and its ensemble activity is disrupted in ASD-associated mice. Yet, it remains elusive how aberrant hippocampal ensemble activity arises in ASD. As antipsychotics are ineffective in improving social cognitive symptoms, there are currently no medications which can ameliorate the devastating impact of social memory deficits. Therefore, we will characterize CA2 ensemble activity in healthy and disease states and establish a pipeline for drug screening which will allow us to easily identify drug candidates which can rescue neural and behavioral deficits in social memory. This proposal will investigate multiple ASD-associated lines to provide a common framework for developing improved therapeutics for social cognitive deficits.

Icahn School of Medicine at Mount Sinai