

2nd Annual Cognitive Neuroscience of Development and Aging (CoNDA) Center Colloquium

Thursday, Feb 17, 2022, | 1.15 PM – 5.05 PM CST; Virtual Event



Keynote Speaker

Neuroimmune Interactions shaping social behavior

Gloria Choi, PhD

Associate Professor,
The Picower Institute for Learning & Memory,
Department of Brain and Cognitive Sciences,
Massachusetts Institute of Technology.

Abstract: The beneficial effects of infection and the ensuing inflammation on neurological disorders have previously been noted. For example, a subset of children with autism spectrum disorder (ASD) exhibits temporary but considerable improvements in their behavioral symptoms during episodes of fever, a sign of systemic inflammation. However, a mechanistic understanding of how fever-associated immune responses translate into behavioral relief—both at the molecular and neural level—is lacking. We show that the social behavioral deficits in offspring exposed to maternal immune activation can be temporarily rescued by the inflammatory response elicited by the administration of lipopolysaccharide (LPS). This behavioral rescue was accompanied by a reduction in neural activity in the primary somatosensory cortex dysgranular zone (S1DZ), the hyperactivity of which has previously been implicated in the manifestation of behavioral phenotypes associated with offspring exposed to MIA. We also show that both the behavioral rescue and the reduction in neural activity are mediated through the expression of IL-17 receptor subunit a (IL-17Ra) in the neurons of the S1DZ.

Schedule for the Colloquium

- 1.15 PM – 1.20 PM [Anna Dunaevsky](#): Welcome
- 1.20 PM - 1.40 PM [Kelly Stauch](#): Immunometabolism in a Rat Model of Hereditary Parkinson's Disease: Peripheral Marker and Correlation with Neuroimaging ([Pilot Project](#)).
- 1.40 PM -2.10 PM [Janelle Beadle](#): The Impact of Aging on the Neural & Behavioral Bases of Empathy ([RPL](#)).
- 2.10 PM – 2.30 PM [Aaryn Mustoe](#): Neurocognitive outcomes in response to social isolation stress in aging marmosets ([Pilot Project](#)).
- 2.30 PM – 3.30 PM [Gloria Choi](#): Neuroimmune Interactions shaping social behavior (Keynote).**
- 3.30 PM – 3.35 PM **Break**
- 3.35 PM – 4.05 PM [Olga Taraschenko](#): Neurogenesis in autoimmune seizures: progress update ([RPL](#)).
- 4.05 PM – 4.15 PM [Yunfan Kong](#): Injectable Hyaluronic Acid-Based Hydrogel for Peripheral Nerve Injury And Chronic Neuropathic Pain Treatment ([Mini-Grant Voucher](#)).
- 4.15 PM – 4.35 PM [Anastasia Kerr-German](#): Profiles of Risk for ADHD: Bridging Brain to Behavior in Toddlers ([Pilot Project](#)).
- Introduction to New CoNDA Projects*
- 4.35 PM - 4.45 PM [Leonardo da Silva Augusto](#): The role of host amino acid metabolism in neurological alterations during chronic toxoplasmosis (RPL).
- 4.45PM – 4.55 PM [Valentina Gumenyuk](#): MEG study of Bioelectrical Brain Markers for Early Detection of Cognitive Impairments in Dementias (Pilot Project Candidate).
- 4.55PM – 5.05 PM [Jee-Yeon Hwang](#): Neuroinflammation in neurodegeneration and cognitive impairment associated with global ischemia (Pilot Project Candidate)

[Register for the Virtual Colloquium](#)

