



Progress in Neuroscience Seminar Series (PINS)

Seminar Series of the Brain & Mind Research Institute Weill Cornell Medicine (WCM)

&

The Graduate Program in Neuroscience of WCM and Sloan Kettering Institute

Thursday, 10/4/18 4 PM, coffee at 3:45 PM Weill Auditorium (C-200)

"Circuit and Molecular Mediators of Goal-Directed Function"

Marc Fuccillo, MD/Ph.D., Assistant Professor of Neuroscience Department of Neuroscience, School of Medicine, University of Pennsylvania

Goal-directed action is a fundamental organizing principle of behavior and is frequently perturbed across neuropsychiatric disorders. Our lab explores the cellular and circuit-level mechanisms that align motor output with outcome, including the formation of action-outcome associations, the weighing of benefits and costs and the regulation of behavioral variability. Here I will highlight recent work focusing on the functional relevance of striatal interneuron subtypes for action-reward association and the potential role for the synaptic adhesion molecule Neurexin1a in circuits for value-based choice.

- Choi K, Holly EN, Davatolhagh MF, Beier KT, Fuccillo MV. Eur J Neurosci. 2018 Jan 23. doi: 10.1111/ejn.13829. PMID: 29359830
- 2. Fuccillo MV. Front Neurosci. 2016 Feb 9;10:27. doi: 10.3389/fnins.2016.00027. eCollection 2016. Review. PMID: 26903795
- Fuccillo MV, Földy C, Gökce Ö, Rothwell PE, Sun GL, Malenka RC, Südhof TC. Neuron. 2015 Jul 15;87(2):326-40. doi: 10.1016/j.neuron.2015.06.028. PMID: 26182417