

172nd WPI-IIIS Seminar

Hippocampal engrams

Learning is thought to strengthen the connections between co-activated neurons, leading to the formation of a neuronal ensemble (or ‘engram’) corresponding to a specific memory. Using immediate early gene (IEG)-based methods to tag and manipulate engrams, I will present two unpublished stories. The first story asks whether the nature of engrams changes across development, and I will show how age-dependent increases in engram sparsity are responsible for age-dependent increases in memory precision. The second story asks how experience modifies existing engrams. Specifically, we have found that extinction recruits microglia to engram cells leading to complement-dependent remodeling of engram cell connectivity.



Dr. Paul Frankland

Hospital for Sick Children, Toronto,
CANADA

Date: **Wednesday, November 2, 2022**

Time: **11:00 – 12:00**

Venue: **Join us online via Teams**

Register now! (deadline Nov. 1)

<https://forms.gle/j6wXGKireSbDJdjd9>

*** Teams information will be sent
to registered participants**



Contact: International Institute for Integrative Sleep Medicine, University of Tsukuba
029-853-5857 (ext.5857) | wpi-iiis-alliance@ml.cc.tsukuba.ac.jp