March 10
Tuesday, 12:30 pm
Weekly Colloquium
Billings Building
Rosedale Conference Room

Abstract
How do we move? Our lab aims to understand the circuit-level mechanisms in the mouse's sensorimotor pathways controlling forelimb movements. I’ll present results from two lines of investigation. One is a bottom-up approach to characterize the cell-type-specific connections of forelimb motor and somatosensory cortex neurons both locally and remotely, particularly in thalamus, where results are showing both shared and divergent connectivity patterns in cortico-thalamo-cortical circuits across areas. The other is a top-down ethological approach, aiming to characterize at high spatiotemporal resolution how mice move their hands and digits during natural feeding behaviors. Analysis of high-speed, close-up video is revealing the kinematic building-blocks of dexterous food-handling movements, including a prominent role of the thumbs and ultra-fast stereotyped maneuvers.

Speaker: Gordon MG Shepherd, M.D., Ph.D.
Associate Professor of Physiology
Principal Investigator, Shepherd Laboratory
Department of Physiology & NUIN
Feinberg School of Medicine
Northwestern University
Chicago, Ill

Hosts: Yutaka Yoshida, Ph.D.

For more information, please contact
Lindsey Echevarria
lechevarria@med.cornell.edu

Burke Neurological Institute
Academic Affiliate of Weill Cornell Medicine
785 Mamaroneck Avenue
White Plains, NY 10605
burke.weill.cornell.edu