

Jesse Jackson, Ph. D.

Professeur adjoint, Département de physiologie
Université de l'Alberta

Investigating the role of the claustrum in offline states

Vendredi 22 novembre 2024

12 h à 13 h

En présentiel

Pavillon Paul-G.-Desmarais | 2960, chemin de la Tour, local 1120

En ligne

<https://umontreal.zoom.us/j/81334546167?pwd=evSqoCY4bmfsMunwmmfmyhWsaqpw3z.1>

Intérêts de recherche

- The organization of cells types and connections of the neocortex.** The neocortex is made up of different cells types. How do different cell types connect, and how do connectivity motifs enable specific activity patterns? We use in vivo calcium imaging and electrophysiology in awake mice to explore how ensembles of neurons in the neocortex correlate with behavior. In addition, we explore the roles of different cells types in the cortex through optogenetic and pharmacogenetic perturbations.
- The physiology and function of the claustrum.** The claustrum is a small subcortical region with exceptionally dense connections with many cortical regions. However, very little is known regarding the function of the claustrum. We have developed methods to specifically manipulate and record neural activity within the claustrum while maintaining pathway specificity. Experiments are underway to study the behavioral correlates of claustrum activity and the necessity of claustricortical pathways for innate and goal directed behavior.
- Stress and social behavior.** Mice, similar to humans, are highly social. What are the brain networks that control various aspects of social behavior in mice. How do mice recognize and learn from each other? Social isolation is a form of stress, and long deprivation of social interactions can have devastating consequences on the cellular function in the brain. We investigate how social isolation changes the structural and physiological organization of connections in the neocortex

Entrée libre

La conférence sera présentée en anglais

Personne-ressource pour rencontrer le conférencier : [Bénédicte Amilhon](mailto:benedicte.amilhon@umontreal.ca)
benedicte.amilhon@umontreal.ca