Département de neurosciences Faculté de médecine Université de Montréal

SÉMINAIRES SCIENTIFIQUES HEBDOMADAIRES

Bosiljka Tasic, Ph. D.

Director, Molecular Genetics Allen Institute

Titre à venir

Vendredi 14 octobre 2022

12 h à 13 h

En présentiel

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

<u>En ligne</u>

https://umontreal.zoom.us/j/88066173443?pwd=ajlvdzA0a09FSGIFc3NuRUdFNVhNdz09

Research Interests

Mammalian nervous systems are composed of diverse neurons, some of which have been identified by one or more properties: specific shape, physiology or molecular signature. However, a consensus approach to neuronal classification does not exist, and the correlations of different types of neuronal properties with one another and neuronal function have not been systematically examined. Therefore, we still don't know how many different flavors of cellular building blocks comprise even relatively simple mammalian brains such as the mouse brain. At the Allen Institute, I am part of the Cell Types program, which aims to characterize and categorize neurons in mouse and human cortex. My team is approaching this question at the molecular level, by analyzing transcriptomes and epigenetic landscapes of individual neurons or defined neuronal populations, mostly in the mouse cortex. Through these efforts, we have discovered a number of specific genetic markers that we are now using to create tools for genetic access to specific cell types. We also collaborate with a number of other teams across the institute to establish multi-modal neuronal phenotyping and classification. In the long run, we hope our studies will reveal how molecular characteristics determine neuronal phenotypes, and how they have changed during mammalian evolution to produce species-specific neuronal types and functions.

Entrée libre

Personne-ressource pour rencontrer le conférencier : Eilif Muller, eilif.muller@umontreal.ca

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