

Département
de neurosciences
Faculté de médecine

Université 
de Montréal
et du monde.

Séminaires
scientifiques
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Masha Prager-Khoutorsky, Ph. D.

Professeur agrégé

Département de physiologie, École des sciences biomédicales

Faculté de médecine et des sciences de la santé

Université McGill

Glial cells as regulators of fluid and cardiovascular homeostasis

Vendredi 13 février 2026

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/81271307568?pwd=kTNeVDVaRHah4vb718KaNCJeGjpJ1X.1>

Intérêts de recherche

We are interested in understanding integrative mechanisms by which the brain regulates basic functions of the body, such as hunger, thirst, and hormonal levels. The area of the brain involved in this control is the hypothalamus, which coordinates the neuroendocrine system, cardiovascular system, energy metabolism, fluid homeostasis, and sleep. We are particularly interested in mechanisms by which specific hypothalamic areas communicate with the periphery to detect the levels of circulating molecules (metabolites, ions, and hormones) and to generate adaptive responses to adjust the physiological needs of the organism. Disruption of these mechanisms can lead to pathological conditions such as hypertension, obesity, and diabetes.

1. Cellular and molecular mechanisms underlying plasma sodium detection by the brain and their role in the salt-sensitive hypertension. Specifically, we study a function of specialized osmosensory neurons that are activated by increased levels of sodium in the blood.
2. Cellular and molecular mechanisms underlying the communication between the brain and the peripheral circulation: the role of non-neuronal cells (tancytes, astrocytes, pericytes, and endothelial cells) in the regulation of the blood brain barrier.
3. Cellular and molecular mechanisms underlying the regulation of the blood brain barrier in health and metabolic disorders.

Entrée libre

La conférence sera présentée en anglais

Personne-ressource pour rencontrer le conférencier : Richard Robitaille

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