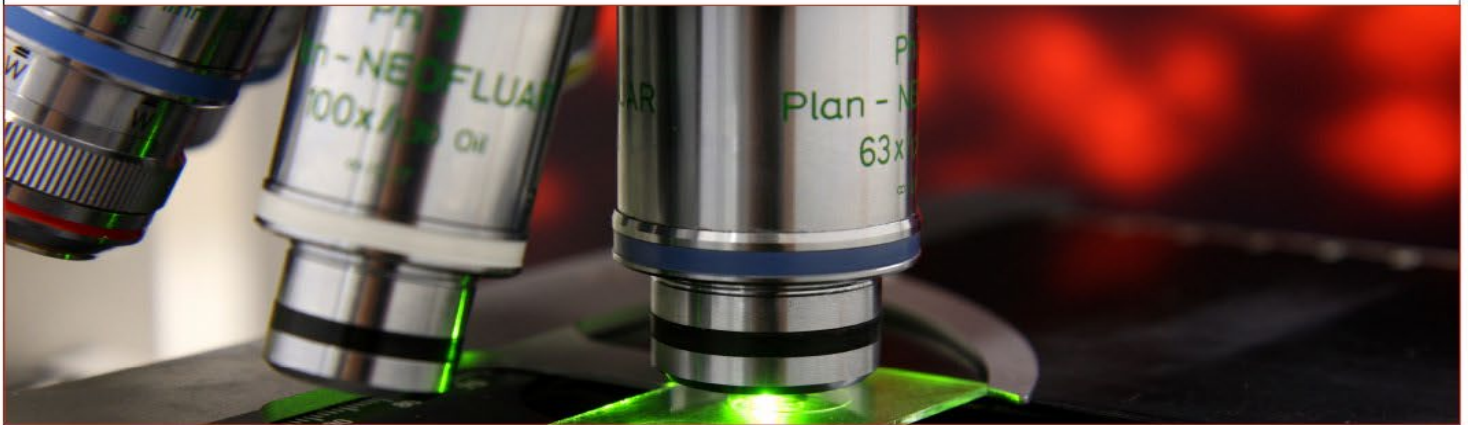


SÉMINAIRES ET CONFÉRENCES



REZA SHARIF NAEINI

Department of Physiology

McGill University

“Spinal mechanisms of neuropathic pain”

Chronic neuropathic pain affects approximately 1 in 15 individuals and is largely resistant to standard analgesic treatments. Patients suffering from this condition often experience **mechanical allodynia**, where a gentle, touch-like, stimulus can provoke excruciating pain. While it is generally accepted that reduced inhibition within the spinal cord contributes to this pathology, the precise mechanisms remain unclear. In this study, we investigate a subset of inhibitory neurons in the spinal cord that play a critical role in the segregation of touch and pain inputs from the periphery. We demonstrate that a key factor in the development of neuropathic pain is a change in the action potential coding patterns of these neurons, driven by a dysfunction in their regulation of intracellular calcium. Our findings reveal that these inhibitory neurons express a calcium-binding protein that is crucial for maintaining their coding properties and preventing mechanical allodynia. Understanding and targeting these mechanisms may pave the way for new therapeutic strategies to relieve chronic pain.



Lundi 28 octobre 2024, 11h30

Pavillon Joseph-Armand-Bombardier, Salle : 1035

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