



Synapses, Shadows and Stress Contagion

## SEMINAR & VISITING SPEAKER SERIES WORLD WIDE NEURO PLATFORM

## DATE

Monday, November 29, 2021 12:00 PM (noon) CST

world wide NEURO LINK https://www.crowdcast.io/e/mnn-seminar1

MEETING ID & PASSCODE None required

SPEAKER Jaideep Bains, PhD

Professor, University of Calgary, Hotchkiss Brain Institute, Department of Physiology and Pharmacology

## BIO

Jaideep Bains is Professor of Physiology and Pharmacology and Research Director of the Hotchkiss Brain Institute at the University of Calgary. His lab uses multiple approaches to understand how stress is detected, transmitted and remembered by the brain. They have described multiple forms of synaptic metaplasticity in the hypothalamus and are now developing new behavioral approaches to better understand the role of hypothalamic CRH neurons in gating stress behaviors.

## RESEARCH

Survival is predicated on the ability of an organism to respond to stress. The reliability of this response is ensured by a synaptic architecture that is relatively inflexible (i.e. hardwired). Our work has shown that in naive animals, synapses on CRH neurons in the paraventricular nucleus of the hypothalamus are very reluctant to modification. If animals are stressed, however, these synapses become willing to learn. This seminar will focus on mechanisms linking acute stress to metaplastic changes at glutamate synapses, and also show how stress, and these synaptic changes can be transmitted from one individual to another.

For more information:

T: 204-235-3939 E: info@manitobaneuroscience.ca





