



2020/BAW

BRAIN AWARENESS WEEK VISITING SPEAKER



Microglia and pannexin1: a cellular Rubik's cube

DATE

Tuesday, March 17, 2020 | 12 PM

LOCATION

Theatre C | Basic Medical Sciences Building | Bannatyne

SPEAKER

Dr. Tuan Trang

Associate Professor | Faculty of Veterinary Medicine & Cumming School of Medicine | University of Calgary

BIO

Dr. Tuan Trang is an Associate Professor in the Faculty of Veterinary Medicine and Cumming School of Medicine at the University of Calgary. His research is directed towards unlocking the mysteries of chronic pain, and how to better treat it. By understanding the cellular and molecular causes of chronic pain, his goal is to develop better pain therapies and to improve the safety of opioid drugs.

Dr. Trang has received Young Investigator Awards from CIHR, the Canadian Association for Neuroscience, and Canadian Society for Pharmacology and Therapeutics. He has also gained international recognition from the American Pain Society, Rita Allen Foundation, and the International Narcotics Research Conference. Dr. Trang leads the Alberta Pain Research Network, University of Calgary Spinal Cord and Pain NeuroTeam, and Chairs the Scientific Program Committee for the Canadian Pain Society.

ABSTRACT

Opioid analgesics are an essential class of drugs for treating pain. The increasing use of opioids is concerning and has contributed to a striking rise in opioid related deaths. Adverse opioid side effects are increasingly linked to activity of microglia, which are immune cells that reside in the central nervous system. This presentation will focus on the interplay between microglia and opioids, as well as the emerging sexual dimorphic role of microglia in chronic pain. We are beginning to unlock pieces of the cellular puzzle that will allow us to better understand the inner workings of microglia.

OBJECTIVES

1. Understand the importance of microglia in chronic pain
2. Define how sex differences contribute to chronic pain
3. Learn how opioids modulate microglia activity and its implications for use of opioid medications.