



MONTREAL CONFERENCE ON PAIN CIRCUITS

Thursday, July 17, 2025

18h30 Welcome reception (Delta Hotel, Jardin d’automne or Upper lobby in case of rain)

Friday, July 18, 2025

8h30 Welcome remarks (IRCM auditorium)

SENSORY SYSTEM AND DEVELOPMENT

Session chair: Dr. Lauren Orefice

- 9h00 **Dr. Helen Lai:** *Development of the Somatosensory System*
- 9h30 **Dr. Simon Beggs:** *The Persistent Influence of Early Life Pain Across the Lifespan*
- 10h00 **Kevin Sangster:** *Teneurin-3 and Latrophilin-2 Are Required for Somatotopic Map Formation in the Dorsal Horn* (Dr.Artur Kania)
- 10h15 **Dr. Charline Kambrun:** *Peripheral Sensory Neuron Dysfunction Dynamically Alters Somatosensory Circuit Function Across Development in ASD Models* (Dr. Lauren Orefice)
- 10h30 **Introduction of the Community discussion**
- 10h45 Coffee break
- 11h15 **Dr. David Margolis:** *Chronic Pain, Movement, and Sensorimotor Plasticity*
- 11h45 **Dr. Arlene George:** *Dissecting Striatal Circuit Dynamics During the Transition from Acute to Chronic Pain* (Dr. Victoria Abraira)
- 12h00 **Dr. Brian Roome:** *Ontogeny of The Spinal Cord Dorsal Horn* (Dr. Ariel J. Levine)

12h15 Buffet lunch and networking

COMMUNITY DISCUSSION

Session chair: Dr. Rajesh Khanna

- 13h15 **Discussion leaders for “Novel technologies”**
 - Dr. Benoit Gosselin
 - Dr. Juliette Viellard

COMMUNITY DISCUSSION

Session chair: Dr. Mike Hildebrand

- 14h45 **Discussion leaders for “Best practices for behavior”**
 - Dr. Francesco Ferrini
 - Dr. Nader Ghassemlou
 - Dr. Steven Prescott
 - Dr. Chris Dedek

16h00 Coffee break

CENTRAL CIRCUITS (PART I)

Session chair: Dr. Juan Deng

- 16h30 **Dr. Fan Wang:** *Decoding and Modulating the Emotional Aspect of Pain*
- 17h00 **Dr. Bo Duan:** *Recruitment of a Silent Spinal Circuit Underlies Thermal Hypersensitivity in Neuropathic Pain*
- 17h30 **Dr. Sebastian Choi:** *Analysis of Spinal Out Circuits in Chronic Pain*

18h30 Cocktail and poster viewing (IRCM lobby)



MONTREAL CONFERENCE ON PAIN CIRCUITS

Saturday, July 19, 2025

8h00 Welcoming participants (IRCM lobby)

CENTRAL CIRCUITS (PART II)

Session chair: Dr. Amaury François

- 8h30 **Dr. Andrew Todd:** *Novel Insights into the Organisation of Anterolateral System Projection Neurons*
- 9h00 **Dr. Juan Deng:** *Functional Role of Spino-Parabrachial Pathways for Pain Processing*
- 9h30 **Dr. Hendrik Wildner:** *GABAergic Gbx1 Neurons of the Superficial Dorsal Horn Are Critical Elements of a Spinal Circuit for Stress-Induced Analgesia*
- 9h45 **Samuel Fung:** *Ca²⁺ Activity Dynamics in the Spinal Cord Are Altered in Acute and Chronic Pain Models.* (Dr. Robert P Bonin)
- 10h00 Coffee break
- 10h30 **Dr. Stephanie Koch:** *Shaping Pain Behaviour: Experience Dependent Plasticity in Somatosensory Circuits*
- 11h00 **Dr. Ariel Levine:** *Spinal Neural Activity for Withdrawal Reflex*
- 11h30 **Dr. Sekun Park:** *Delineation of the Neural Circuit(s) and Molecular Changes that Allow CalcaPBN Neuron Activation to Drive Nociceptive Pain* (Dr. Richard Palmiter)
- 11h45 Buffet lunch and networking

PERIPHERAL PAIN CIRCUITS

Session chair: Dr. Stephanie Koch

- 13h30 **Dr. Lauren Orefice:** *The Organizational Logic of Gut-to-Spinal Cord Circuits and their Dysfunction in Autism Spectrum Disorder*
- 14h00 **Dr. Wenqin Luo:** *Single-Soma RNA-seq DRG and TG neurons*
- 14h30 **Dr. Emmanuel Bourrinet:** *Functional Expression of the T-Type Cav3.2 Calcium Channel in Female and Male Human DRG Neuron*
- 15h00 **Einer Munoz-Pino:** *Direct Functional Interrogation of Individual Terminals of Small-Diameter Primary Afferents* (Dr. Yves de Koninck)

15h15 Coffee break

SENSORY SYSTEMS AND NEW PERSPECTIVES

Session chair: Dr. Feng Wang

- 15h45 **Dr. Sarah Ross:** *A New Perspective on Pain*
- 16h15 **Dr. Rebecca Seal:** *Unlocking the Mammalian Spinal Dorsal Horn: Insights into Key Circuits and Novel Cross-Species Research Tools*
- 16h15 **Dr. Marie-Ève Paquet:** *New Naturally Occurring AAVs for Gene Delivery into the CNS*
- 17h15 **Allutas Alhamwi:** *Modulating Chemotherapy-Induced Neuropathic Pain through Perineuronal Nets: A Novel Insight into Pain Regulation* (Dr. Emerson Krock)
- 17h30 **Haoyi Qiu:** *Feedforward Inhibition of Dorsal Horn Inhibitory Neurons that Gate Mechanical Allodynia After Nerve Injury* (Dr. Reza Sharif-Naeini)

17h45 Closing remarks

18h00 Conference dinner (Concerto Room, Delta Hotel)