



## PROGRAM

THURSDAY NOVEMBER 2<sup>ND</sup>

### Shuttle from the Auberge Héritage to Le Château Montebello

Departure time: 11:30 am (10 people max)

Departure time: 1:00 pm (10 people max)

### REGISTRATION

11:00 am - 1:30 pm (Foyer Outaouais)

**1:30 pm Welcome Remarks (Outaouais Room)**

### TRAINEE SYMPOSIUM ! (Outaouais Room)

**Chairs:** Kathleen Caron/Khaled Abd-Elrahman

- 1:45 pm **Eric Johansen**, Johns Hopkins University (10 min talk, 5 min questions)  
**Title:** Virion Display to Discover a Novel Ligand of the Orphan GPCR GPRC5B and its Role in Obesity
- 2:00 pm **Grace Mazarura**, McGill University (10 min talk, 5 min questions)  
**Title:** Modeling Cardiac Fibrosis in a Dish: Combining hiPSC-Derived Fibroblasts and FRET Biosensors to Unravel GPCR-Mediated Cardiac Fibrosis Activation in Dilated Cardiomyopathy
- 2:15 pm **Émile Breault**, Université de Sherbrooke (10 min talk, 5 min questions)  
**Title:** Characterization of Novel Opioid-Neurotensin Bifunctional Ligands Designed to Target Pain Management
- 2:30 pm **Bassam Albraidy**, Ottawa Hospital Research Institute (10 min talk, 5 min questions)  
**Title:** Synapse-Associated Protein 102 and Post-Synaptic Density 95 Differentially Shape Dopamine D1 Receptor Signaling
- 2:45 pm *Coffee Break*

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# PROGRAM

## THURSDAY NOVEMBER 2<sup>ND</sup>

### TRAINEE SYMPOSIUM II (Outaouais Room)

**Chairs:** Patrick Sexton/Fabiola Ribeiro

- 3:00 pm **Amr Mousa**, University of Western Ontario (10 min talk, 5 min questions)  
**Title:** Linking Proteinase Activated Receptor (PAR) Cleavage to Osteoarthritis (OA) Severity
- 3:15 pm **Louis-Philippe Picard**, University of Toronto Mississauga (10 min talk, 5 min questions)  
**Title:** Balancing G Protein Selectivity and Efficacy in the Adenosine A2A Receptor
- 3:30 pm **Remi Janicot**, Boston University (10 min talk, 5 min questions)  
**Title:** Development of a Transgenic Mouse Platform for the Detection of Endogenous G protein Activity
- 3:45 pm **Meredith Skiba**, Harvard University (10 min talk, 5 min questions)  
**Title:** Antibodies Expand the Scope of Angiotensin Receptor Pharmacology
- 4:00 pm **Check-in**

### INAUGURAL MARC G. CARON KEYNOTE LECTURE (Outaouais Room)

SPONSORED BY UNIVERSITY OF OTTAWA BRAIN AND MIND RESEARCH INSTITUTE

**Chairs:** Mario Tiberi/Stephen Ferguson

- 4:30 pm: **Kathleen M. Caron**, University of North Carolina-Chapel Hill (45 min talk, 15 min questions)  
**Title:** "Have a nice weekend, and I'll see you tomorrow!": RAMP-interacting GPCR Pathways
- 5:30 pm **Reception (Hors d'oeuvres) and Poster Session #1 (odd numbered posters)**  
(Canada Room)
- 8:00 pm **Dinner** (Outaouais Room)

**Shuttle from Le Château Montebello to the Auberge Héritage**

Departure Time: 9:30 pm (10 people max)

Departure Time: 10:30 pm (10 people max)

## FRIDAY NOVEMBER 3<sup>RD</sup>

### **Shuttle from the Auberge Héritage to Le Château Montebello**

Departure time: 7:00 am (10 people max)

Departure time: 7:30 am (10 people max)

**7:30 am**      **Breakfast (Aux Chantignoles Room)**

### **MARC G. CARON HONORARY SYMPOSIUM I (CARON LAB ALUMNI)**

**SPONSORED BY DUKE UNIVERSITY CELL BIOLOGY DEPARTMENT**

**(Outaouais Room)**

**Chairs:**      **Stephane Laporte/Michel Bouvier**

**8:30 am**      **Mario Tiberi**, Ottawa Hospital Research Institute (20 min talk, 5 min questions)

**Title:** Dopamine-Mediated Motor Recovery after Ischemic Stroke

**8:55 am**      **Bruno Giros**, McGill University (20 min talk, 5 min questions)

**Title:** A Journey from Duke to McGill along the Dopamine Circuit

**9:20 am**      **Ali Salahpour**, University of Toronto (20 min talk, 5 min questions)

**Title:** Cannabinoid Compounds to Augment L-DOPA Treatment in Parkinson's Disease

**9:45 am**      **Josh Gross**, Duke University Medical Center (20 min talk, 5 min questions)

**Title:** Pharmacological and Genetic Preclinical Models of Ghrelin Receptor Functional Selectivity to Investigate Metabolic Disease Pathophysiology

**10:25 am**      **Coffee Break**

### **SYMPOSIUM II GPCR STRUCTURE & SIGNALING I**

**(Outaouais Room)**

**Chairs:**      **Patrick Giguère/Martin Audet**

**10:40 am**      **Louis Gendron**, Université de Sherbrooke (20 min talk, 5 min questions)

**Title:** Regulation and Role of Mitochondria Delta Opioid Receptors

**11:05 am**      **Patrick Sexton**, Monash University (20 min talk, 5 min questions)

**Title:** Biased Agonism at the GLP-1 Receptor: From Structure to Animal Models of Disease

**11:30 am**      **Robert Laprairie**, University of Saskatchewan (20 min talk, 5 min questions)

**Title:** Complex Allosteric Cannabinoid Receptor Pharmacology

**11:55 am**      **Catalina Ribas**, University Autonoma of Madrid (10 min talk, 5 min questions)

**Title:** Unveiling Non-Canonical Functions for Gαq Signaling Pathways

**12:10 pm**      **Lunch (Aux Chantignoles Room)**

**SYMPOSIUM III GPCRS & NEUROSCIENCES (Outaouais Room)**

**Chairs:** Mark Rasenick/Louis Gendron

- 1:30 pm **Fabiola Ribeiro**, Federal University of Minas Gerais, Brazil (20 min talk, 5 min questions)  
**Title:** Interaction with the Cell Adhesion Molecule NEGR1 Affects mGluR5 Cell Signalling
- 1:55 pm **Khaled S. Abd-Elrahman**, The University of British Columbia (20 min talk, 5 min questions)  
**Title:** A positive Allosteric Modulator of M1 Acetylcholine Receptors Improves Cognitive Deficits in Male and Female Alzheimer's Mice
- 2:20 pm **Karim Ibrahim**, University of Ottawa (10 min talk, 5 min questions)  
**Title:** Genetic Deletion of Atypical VGLUT3 Rescues Huntington's Disease Phenotype and Neurodegeneration in zQ175 Mice
- 2:35 pm **Heidi Hamm**, Vanderbilt University (20 min talk, 5 min questions)  
**Title:** Removing the GPCR-Mediated Brake on Exocytosis Enhances Insulin Action, Promotes Adipocyte Browning, and Protects Against Diet-Induced Obesity

**3:00 pm** Coffee Break

**SYMPOSIUM IV GPCRS & CANCER (Outaouais Room)**

**Chairs:** Heidi Hamm/Scott Prosser

- 3:30 pm **Silvio Gutkind**, UC San Diego (20 min talk, 5 min questions)  
**Title:** G Proteins and GPCRs in Cancer: Novel Precision Targeted and Immunotherapies
- 3:55 pm **Robert Rottapel**, University of Toronto (20 min talk, 5 min questions)  
**Title:** Inhibition of Relaxin Autocrine Signaling Confers Therapeutic Vulnerability in Ovarian Cancer
- 4:20 pm **Victoria Rasmussen**, Rockefeller University (10 min talk, 5 min questions)  
**Title:** Developing a PROTAC to Degrade the Constitutively Active Onco-GPCR in Uveal Melanoma
- 4:35 pm **John Stagg**, CHUM, Université de Montréal (20 min talk, 5 min questions)  
**Title:** Targeting Adenosine Signaling for Immuno-Oncology
- 5:00 pm **Reception (Hors d'oeuvres) and Poster Session #2 (even numbered posters)**  
**(Canada Room)**
- 7:30 pm **Dinner & 50 Proof Band: One Dinner Set + Two Rock n Roll Dancing Sets**  
**(Outaouais Room)**
- 9:30 pm **Board Meeting (to discuss next retreat, All PIs welcome)**

**Shuttle from Le Château Montebello to the Auberge Héritage**

Departure Time: 9:30 pm (10 people max)

Departure Time: 10:30 pm (10 people max)

## SATURDAY NOVEMBER 4<sup>TH</sup>

### Shuttle from the Auberge Héritage to Le Château Montebello

Departure time: 7:00 am (10 people max)

Departure time: 7:30 am (10 people max)

**7:30 am**      **Breakfast (Aux Chantignoles Room)**

### SYMPOSIUM V GPCR STRUCTURE & SIGNALING II (Outaouais Room)

**Chairs:**      **Amy Ramsey/Martin Beaulieu**

**8:15 am**      **Michel Bouvier**, Université de Montréal (20 min talk, 5 min questions)  
**Title:** Distinct sub-cellular signal propagation as a component of functional selectivity

**8:40 am**      **Sudarshan Rajagopal**, Duke University Medical Center (20 min talk, 5 min questions)  
**Title:** Biochemical Mechanisms Underlying Location Bias in GPCR Signaling

**9:05 am**      **Peter Gmeiner**, Friedrich-Alexander University of Erlangen-Nürnberg (20 min talk, 5 min questions)  
**Title:** Structure-based discovery of functionally selective 5-HT<sub>1A</sub> receptor agonists

**9:30 am**      **Tracy Handel**, UC San Diego (20 min talk, 5 min questions)  
**Title:** Atypical Structure and Function of Typical Chemokine Receptors

**9:55 am**      **Coffee Break**

### HUBERT VAN TOL SYMPOSIUM VI (ANIMAL MODELS/PHYSIOLOGY) (Outaouais Room)

**SPONSORED BY DR MONICA SEGER-VAN TOL AND FAMILY**

**Chairs:**      **Paul Albert/Graciela Pineyro**

**10:10 am**      **Scott Leiser**, University of Michigan (20 min talk, 5 min questions)  
**Title:** Using Food Perception and Biogenic Amine Signaling Networks to Slow Aging

**10:35 am**      **Martin Beaulieu**, University of Toronto (20 min talk, 5 min questions)  
**Title:** Interrogating Multiscale Receptor Functions in Space

**11:00 am**      **Amy Ramsey**, University of Toronto (20 min talk, 5 min questions)  
**Title:** Repurposing in Nature: Multiple Roles for NMDA Receptors

### HYMAN B. NIZNIK KEYNOTE LECTURE (Outaouais Room)

**Chairs:**      **Ali Salahpour/Oliver Ernst**

**11:30 am**      **Stephane Laporte**, McGill University (45 min talk, 15 min questions)  
**Title:** Illuminating Functional Selectivity and Allostereism at GPCRs.

**12:30 pm**      **Closing Remarks**

**Lunch and Farwell**

**Shuttle from Le Château Montebello to the Auberge Héritage**

Departure Time: 1:00 pm (10 people max)

Departure Time: 1:30 pm (10 people max)

# Program summary

**THURSDAY NOVEMBER 2<sup>ND</sup>**

**REGISTRATION** (11:00 am - 1:30 pm)

**1:30 pm** Welcome Remarks

**TRAINEE SYMPOSIUM**

**1:45-2:30** Trainee symposium

**2:45** *Coffee Break*

**3:00-3:45** Trainee symposium

**4:00** *Check-in*

**Conference: - OUTAOUAIS ROOM**

**Breakfast/Lunch: - AUX CHANTIGNOLES ROOM**

**Dinner: - OUTAOUAIS ROOM**

**Poster: - CANADA ROOM**

**Board meeting: - QUEBEC ROOM**

**INAUGURAL MARC G. CARON KEYNOTE LECTURE**

**4:30pm** Kathleen M. Caron

**5:30pm** *Welcome Reception and Poster Session #1 (odd numbered posters)*

**8:00pm** *Dinner*

**FRIDAY NOVEMBER 3<sup>RD</sup>**

**7:30am** *Breakfast*

**MARC G. CARON HONORARY SYMPOSIUM I**

**8:30-9:45**

**10:25** *Coffee Break*

**SYMPOSIUM II - GPCR STRUCTURE & SIGNALING I**

**10:40-11:55**

**12:10** *Lunch*

**SYMPOSIUM III - GPCRS & NEUROSCIENCE**

**1:30-2:35**

**3:00** *Coffee Break*

**SYMPOSIUM IV - GPCRS & CANCER**

**3:30-4:35**

**5:00pm** *Reception and Poster Session #2 (even numbered posters)*

**7:30pm** *Dinner & 50 Proof*

**9:30pm** Board Meeting (All PIs welcome)

**SATURDAY NOVEMBER 4<sup>TH</sup>**

**7:30am** *Breakfast*

**SYMPOSIUM V - GPCR STRUCTURE AND SIGNALING II**

**8:15-9:30**

**9:55** *Coffee Break*

**HUBERT VAN TOL SYMPOSIUM VI (ANIMAL MODELS/PHYSIOLOGY)**

**10:10-11:00**

**HYMAN B. NIZNIK KEYNOTE LECTURE**

**11:30** Stephane Laporte

**12:30** Closing Remarks

*Lunch and Farwell*

