

PROGRAM



The 15th Great Lakes GPCR Retreat & Club des Récepteurs à Sept Domaines Transmembranaires



Château Bromont
Quebec, Canada
October 2-4th, 2014

THURSDAY OCTOBER 2nd

- 15:00 Arrival and registration
- 16:30 Welcoming Remarks (Christine Lavoie and Richard Leduc, co-chairs)
Room: Grands Salons ABC

KEYNOTE ADDRESS: HYMAN NIZNIK MEMORIAL LECTURE

Chair : Michel Bouvier

- 16:45 **Bryan L. Roth**, University of North Carolina, Chapel Hill Medical School, USA
“Transforming GPCR-ology”
- 17:45 **Welcome reception and Poster Session I** (odd numbered posters)
Room: Salons Knowlton & Nouvelle Angleterre
- 19:30 **Dinner** - *Grands Salons ABC*

FRIDAY OCTOBER 3rd

7:30 Breakfast- *Les Quatre Canards and Bistro*

SESSION 1: BIOPHYSICAL STUDIES OF GPCRS

Chair: Mario Tiberi

8:30 **Michael R. Bruchas**, Washington University, St-Louis, MO, USA
"In vivo Spatiotemporal control of GPCR Signaling"

8:55 **James W. Wells**, University of Toronto, Canada
"Supramolecular organisation of M₂ muscarinic receptors"

9:20 **Kevin Xiao**, Duke University Medical Center, NC, USA
"The Great Power of Mass Spectrometry in GPCR Structural Study"

9:45 Short talk: **Benjamin Tehan**, Heptares Therapeutics, United Kingdom
"The A to C of GPCRs"

10:00 Coffee Break

SESSION 2: NOVEL ASPECTS OF GPCR SIGNALING

Chair : Peter Chidiac

10:30 **Stephen S.G. Ferguson**, University of Western Ontario, Canada
"GRK2 knock-down results in spontaneous hypertension and altered vascular GPCR signaling"

10:55 **Stefano Marullo**, Institut Cochin, Paris, France
"Cell surface export of GABA_B receptors is controlled by an ER gate-keeper"

11:20 **Jean-François Côté**, Université de Montréal, Canada
"The GPCR BAI3 promotes myoblast fusion by engaging the ELMO/DOCK1 pathway"

11:45 Short talk: **Hannah Stoveken**, University of Rochester Medical Center, NY, USA
"Revealing a Cryptic Tethered Agonist Permits Adhesion GPCRs GPR56 and GPR110 to Activate Heterotrimeric G proteins"

12:00 Lunch - *Les Quatre Canards and Bistro*

SESSION 3: GPCR TRAFFICKING

Chair : Stéphane Laporte

- 13:30 **Mark Von Zastrow**, University of California San Francisco, CA, USA
"GPCR signaling from endosomes"
- 13:55 **Graciela Piñeyro**, Université de Montréal, Canada
"Post-endocytic sorting of delta opioid receptors and recycling via late endosomal compartments"
- 14:20 **Wendy Walwyn**, University of California Los Angeles, CA, USA
"A novel GPCR signaling pathway: B-arrestin 1 and cofilin regulation of opioid receptor trafficking"
- 14:45 Short talk: **Stéphanie Rosciglione**, Université de Sherbrooke, Canada
"A new role for Gas: regulation of the post-endocytic sorting of GPCRs"
- 15:00 Coffee Break

SESSION 4: ALLOSTERIC REGULATION AND INTERACTING PARTNERS

Chair : Terrence E. Hébert

- 15:30 **Philippe Marin**, Université de Montpellier, France
"A GPCR/Cdk5 complex promotes neuronal differentiation"
- 15:55 **Michel Bouvier**, Université de Montréal, Canada
"Defining signalling efficacy at multiple GPCR downstream effectors"
- 16:20 **Patrick Sexton**, Monash University, Melbourne, Australia
"Controlling signaling at the glucagon-like peptide-1 receptor"
- 16:45 Short talk: **Jacob Mahoney**, University of Michigan Medical School, USA
"Mechanism for the allosteric effects of G proteins on orthosteric ligand binding to GPCRs"
- 17:00 **Poster Session #2** (even numbered posters)
Room: Salons Knowlton & Nouvelle Angleterre
- 19:30 **Dinner** - Grands Salons ABC
- 21:00 **Social Activity: TRIO ANDRÉ CAYER** (Vibraphone/Bending tone Théorie jazz)
Room: Grands Salons ABC
- 21:30 **Board Meeting** (to discuss next retreat) - All PI's are welcome to participate
Room: Salon Chasse-à-Courre

SATURDAY OCTOBER 4th

7:30 Breakfast- *Les Quatre Canards and Bistro*

SESSION 5: NON-CONVENTIONAL ASPECTS OF GPCR

Chair : Christine Lavoie

- 8:30 **Silvio Gutkind**, National Institute of Health (NIDCR), USA
"GPCRs and Cancer: The Hippo in the Room?"
- 8:55 **Xianhua Piao**, Harvard Medical School, MA, USA
"GPR56 signaling in oligodendrocyte development and CNS myelination"
- 9:20 **Martine J. Smit**, Vrije Universiteit, Amsterdam, Netherlands
"Viral GPCRs rewire cellular signaling networks"
- 9:45 Short talk: **Rhiannon Campden**, McGill University, Montreal, Canada
"Investigating GBy subunit interactions with nuclear proteins and potential roles in regulating gene expression"
- 10:00 Coffee Break

HUBERT VAN TOL SYMPOSIUM

SESSION 6: ANIMAL MODELS AND TRANSLATIONAL RESEARCH

Sponsored by the Van Tol/Seeger Family

Chair : Ali Salahpour

- 10:30 **Martin Beaulieu**, Université Laval, Quebec, Canada
"Beta-arrestin signaling cross-talk, a role in mood regulation"
- 10:55 **Brigitte Kieffer**, Douglas Institut Center, McGill University, Montreal, Canada
"GPR88: an orphan GPCR with potential for the treatment of brain disorders"
- 11:20 **Stefan Herlitze**, Ruhr-Universität, Bochum, Germany
"Control of Gi/o and Gq signals, neuronal activity and behavior by light activated GPCRs"
- 11:45 Short talk: **Lusine Bozoyan**, Université Laval, Quebec, Canada
"GPR84 deficiency reduces microgliosis, but accelerates dendritic degeneration and cognitive decline in a mouse model of Alzheimer's disease"
- 12:00 **Closing Remarks (Christine Lavoie)**
- 12:15 **Lunch and Farewell - BBQ on the Terrasse**