

BPS-MPGPCR

British Pharmacological Society - Molecular Pharmacology of GPCRs meeting 2018
December 2nd-4th, 2018

Monash Institute of Pharmaceutical Sciences, Monash University, Parkville, VIC, Australia

Sunday 2 December

13:00-14:45pm - registration

14:45 - 15:00pm: Conference opening: Chaired by Denise Wootten & Karen Gregory

15:00-16:00pm: Keynote speaker – sponsored by Drug Discovery Biology

Marc Caron, Duke University

Leveraging Functional Selectivity/Biased Signaling of GPCRs for Therapeutic Advantage

16:00-17:30pm: 1min student poster previews

Chaired by Celine Valant

17:30-19:30pm: opening reception & poster session 1

Monday 3 December

8:30-10:30am: GPCRs in Endocrine Disorders

Chaired by Larry Miller

Debbie Hay, University of Auckland

Towards Novel Amylin Agonists for Metabolic Disease

Ming-Wei Wang, Fudan University

Glucagon-like Peptide-1 Receptor: Small Molecule Agonists, 3-dimensional Structures and Beyond

Katie Leach, Monash Institute of Pharmaceutical Sciences

Allosterism at Class C GPCRs

Selected short talks:

Peishen (Elva) Zhao Monash Institute of Pharmaceutical Sciences

The Dynamics of Ligand-GLP-1R-G protein Coupling and its Contribution to Biased Agonism

Tony Ngo, University of California, San Diego

The Geometry of a Complete CXC Receptor-Chemokine Complex Revealed by Experiment-Guided Molecular Modelling

10:30-11:00am – morning tea break & poster viewing

11:00-12:30pm: GPCRs in Pain and Inflammation

Chaired by Nicholas Veldhuis

Greg Scherrer, Stanford University

The Functional Organization of Opioid Receptors in Pain Neural Circuits

Alex Makriyannis, Northeastern University
The Structure and Function of the CB1 Cannabinoid Receptor

Xin Xie, National Center for Drug Screening, Shanghai Institute of Materia Medica
Targeting G Protein-Coupled Receptors for the Treatment of Autoimmune Diseases

12:30-13:30pm – lunch break & poster viewing

13:30-15:00pm: Targeting GPCRs: Moving Beyond the Bench

Chaired by Steven Charlton

Jess Nithianantharajah, Florey Institute of Neuroscience and Mental Health
Dissecting GPCRs in Cognition Using Touchscreens Towards Targeted Therapy

Howard Rockman, Duke University
Biased GPCR Signalling in the Heart

Kevin Pflieger, University of Western Australia
Molecular Pharmacology to Research Translation

15:00-15:30pm – afternoon tea break & poster viewing

15:30-17:10pm: Emerging MPGPCR Research Leaders – sponsored by ACS Pharmacology and Translational Science

Chaired by Patrick Sexton

Yi-Lynn Liang, Monash Institute of Pharmaceutical Sciences
Advances in Structural Understanding of GPCR Activation

Irina Vetter, University of Queensland
GPR151 – a New Target for Painful Neuropathies

Justin English, University of North Carolina
Directed Evolution for GPCR Research

Roshanak Irannejad, University of California, San Francisco
The Role of Spatial Signalling in GPCR Function

17:15-18:15pm – poster session 2 and pre-dinner drinks

18:30pm: all depart for Melbourne Zoo, 800m (10min) walk.

19:00-23:00pm – Conference dinner – Bong Su area, Melbourne Zoo



ACS
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Tuesday 4 December

9:00-11:00am: International Society for Neurochemistry symposium: Harnessing Molecular Insights to Target GPCRs for CNS Disorders

Chaired by Chris Langmead & Karen Gregory

Steve Ferguson, University of Ottawa
Targeting mGluR5 for the Treatment of Neurodegenerative Diseases

Graciela Pineyro, University of Montreal
Signalling Phenotypes of GPCR Ligands Allow to Infer Clinically Relevant Responses: Insights from Mu-opioid and beta2-adrenergic Receptor Ligands

Philippe Rondard, University of Montpellier
Dynamics and Modulation of the Metabotropic Glutamate Receptors

Selected short talks:

Simon Foster, University of Copenhagen
Identification and Pharmacological Characterisation of a Novel Small Molecule Agonist and Reference Ligands for the Orphan Receptor GPR139

Jianfeng Liu, Huazhong University of Science & Technology
GABAB Receptor Signalling and Aging

11:00-11:30am – morning tea break & poster viewing

Sponsored by Takeda

11:30-12:30pm: MPGPCR Student Oral Prize – sponsored by British Pharmacological Society

Chaired by Steve Hill

Alexandra Tichy, Monash University
Design and Functional Testing of Light-Sensitive Class B GPCR Chimeras

Margaret Mouat, Victor Chang Cardiac Research Institute
Orphan G Protein-Coupled Receptor GPR37L1 and the Cardiovascular System: Variability Across Methods and Models

Mohammed Safar, University of Strathclyde
P2Y₁ and P2Y₁₂ receptor Heterodimerisation: From Recombinant Systems to Native Detection

Wessel Burger, Monash Institute of Pharmaceutical Sciences
Molecular Basis of Subtype Selectivity of Positive Allosteric Modulators at the Muscarinic Acetylcholine Receptors: Identification of an Allosteric Network.

12:30-13:30pm – lunch break & poster viewing

13:30-15:00pm: GPCR Partners in Crime

Chaired by Andrew Tobin

Kathleen Caron, University of North Carolina

RAMP"ing Up GPCR Recycling

Rob Parton, University of Queensland

New Insights into the Formation and Function of Caveolae

J. Silvio Gutkind, University of California, San Diego

GPCR Oncogenic Signaling Circuitries

15:00-15:30pm – afternoon tea break

15:30-17:30pm: Molecular & Structural Insights into GPCR Function

Chaired by Arthur Christopoulos

Daniel Scott, The Florey Institute of Neuroscience and Mental Health

Using NMR to Investigate the Dynamic Events Underlying G Protein-Coupled Receptor Activation

Celine Valant, Monash Institute of Pharmaceutical Sciences

Understanding the Mechanisms of Subtype Selectivity of Muscarinic Acetylcholine Receptor Positive Allosteric Modulators

Chris Tate, MRC Laboratory of Molecular Biology

The Structural Basis for GPCR Pharmacology: Insights from Active State Structures of beta1AR, A2AR and 5HT1BR

Awarding of prizes and conference close: Denise Wootten & Karen Gregory



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