

10th Anniversary
2009 Great Lakes G Protein-Coupled Receptor Retreat

October 15-18, 2009

Memorial Art Gallery of the University of Rochester
500 University Avenue
Rochester, NY 14607

Thursday, October 15, 2009

2:00 p.m.- Registration, Memorial Art Gallery

4:30-6:30 p.m. **Session I: The Hubert Van Tol Model Organism Symposium**
(*Gallery Auditorium*)

Henrik G. Dohlman, University of North Carolina
“G Protein Regulation by Mono- and Poly-ubiquitination”

Jurgen Wess, Molecular Signaling Section, NIDDK
“Phenotypic Analysis of Conditional Muscarinic V2 Vasopressin Receptor Knockout Mice: Clinical Implications”

Janet Robishaw, Weis Center for Research, Geisinger Clinic
“In Vivo Veritas: Using Zebrafish and Mice to Probe the Biological Functions of G Protein γ Subtypes”

TBD, selected from poster abstracts.

6:30-8:00 p.m. **Dinner**
(*M&T Bank Ballroom*)

8:00-8:45 p.m. **Keynote Address**
(*Gallery Auditorium*)

Thomas P. Sakmar, The Rockefeller University
“Molecular mechanisms of transmembrane signal transduction by G protein-coupled receptors”

Friday, October 16, 2009

7:15-8:15 a.m. Breakfast
(*Strathallan Hotel*)

8:30-10:30 a.m. **Session II: Structure and Function of GPCR signaling**
(*Gallery Auditorium*)

Steven O. Smith, State University of New York at Stony Brook
“Structural Insights into the Mechanism of Light-activation of the Visual Pigment Rhodopsin”

Stephen Sprang, University of Montana, Missoula

“The role of protein dynamics in Ric-8A-catalyzed nucleotide exchange”

John J. G. Tesmer, University of Michigan

“Activation of G Protein-Coupled Receptor Kinases by GPCRs”

TBD, selected from poster abstracts.

10:30-11:00 a.m. Coffee Break
(Bausch and Lomb Parlor)

11:00-1:00 p.m. **Session III: Scaffolding and Trafficking of GPCRs**
(Gallery Auditorium)

Mark Dell'acqua, University of Colorado, Denver

“Organization of cAMP and calcium second messenger signaling pathways at the postsynaptic excitatory neuronal synapses”

Stephane Laporte, McGill University

“Regulation of G protein coupled receptor signaling by β -arrestin”

Patricia M. Hinkle, University of Rochester Medical Center

“Regulation of Melanocortin Receptor Trafficking and Signaling by Novel Accessory Proteins”

Katherine Roche, NIH

“Regulation of mGluR trafficking”

1:00-2:00 p.m. Lunch
(M&T Bank Ballroom)

2:00-4:00 pm, **Session IV: GPCR activation and Signaling Mechanisms**
(Gallery Auditorium)

Michel Bouvier, University of Montreal

“Dynamics of G Protein Signalling Complexes Determining Ligand-biased Signalling and Functional Selectivity”

Roger Sunahara, University of Michigan

“Molecular mechanisms of hormone activation of G protein coupled receptors.”

Maurine Linder, Washington University, St. Louis

“Regulation of G protein palmitoylation”

TBD, selected from poster abstracts

5:00-7:00 p.m. **Poster Session I**
(Vanden Brul Pavilion)

7:30 p.m. **Dinner**
(M&T Bank Ballroom)

Saturday, October 17, 2009

7:15-8:15 a.m. Breakfast

(Strathallan Hotel)

8:30-10:30 a.m. **Session V: GPCR Directed Ligand Screening**
(Gallery Auditorium)

Bryan Roth, University of North Carolina
“Novel GPCR-based therapeutics to treat human disease.”

P. Jeffrey Conn, Vanderbilt University Medical Center
“Allosteric Modulators of GPCRs as a Novel Approach for Treatment of CNS Disorders”

Marlene Jacobson, Merck
“Allosteric Modulators of Metabotropic Glutamate Receptors for the Treatment of Schizophrenia”

TBD, selected from poster abstracts

10:30-11:00 a.m. Coffee Break
(Bausch and Lomb Parlor)

11:00-1:00 p.m. **Session VI: G protein Coupled Receptor Signaling**
(Gallery Auditorium)

Paul Sternweis, University of Texas, Southwestern Medical Center at Dallas
“Mechanisms for Regulation of RhoGEFs by the Heterotrimeric G12 and G13 Proteins”

David P. Siderovski, University of North Carolina-Chapel Hill School of Medicine
“GoLoco and RGS Proteins: Emerging Genetic and Small Molecule Tools to Assess Function”

Joe Blumer, Medical University of South Carolina
“Role of G-protein regulatory (GPR) proteins in mammalian cell division and the immune system”

Lily Jiang, University of Texas Southwestern Medical Center
“A Novel Regulation of cAMP Signaling in the Immune System”

1:00-2:00 p.m. Lunch
(M&T Bank Ballroom)

2:00-4:00 pm **Session VII: Translational/Pharmacogenomics**
(Gallery Auditorium)

Stephen B. Liggett, University of Maryland School of Medicine
“Pharmacogenomics of cardiovascular disease.”

Paul Insel, University of California at San Diego
“GPCRs and cAMP Signaling Components as Novel Drug Targets in Disease”

Ross Feldman, Robarts Research Institute
“Regulation of cAMP synthesis beyond GPCR/G protein activation: Implications in cardiovascular regulation”

TBD, Selected from poster abstracts

5:00-7:00 p.m. **Poster Session II**
(*Vanden Brul Pavilion*)

7:30 p.m. **Dinner**
(*M&T Bank Ballroom*)

Sunday, October 18, 2009

7:15-8:15 a.m. Breakfast
(*Strathallan Hotel*)

Depart