PROGRAM SUMMARY

Thursday October 25th, 2018

MEETING REGISTRATION (11:30 am – 1:30 pm) Atheneum Hotel, Detroit
1:30 pm Welcome Remarks by Gregory Tall, Manoj Puthenveedu, Alan Smrcka

TRAINEE RESEARCH SHOWCASE
(1:45 pm – 3:45 pm)
Coffee Break

HYMAN NIZNIK LECTURE
4:30 pm Mark Von Zastrow Chairs: Alan Smrcka and TBD
5:30 pm Welcome Reception and Poster Session #1
7:30 pm Dinner

Friday October 26th, 2018

7:30 am Breakfast
SYMPOSIUM I OPIOID RECEPTOR SIGNALING
8:55 am – 10:10 am Chairs: John Traynor and Brigitte Kieffer

Coffee Break

SYMPOSIUM II GPCR SIGNALING FROM INTRACELLULAR SITES
10:40 am – 12:10 pm Chairs: Manoj Puthenveedu and Christine Lavoie

Lunch Fishbone’s Restaurant

1:30 pm – 1:55 pm Hamamatsu and Codex Biosolutions

SYMPOSIUM III STRUCTURAL BIOLOGY OF GPCRs and SIGNALING PROTEINS
2:00 pm – 3:30 pm Chairs: Scott Prosser and John Tesmer

Coffee Break

SYMPOSIUM IV PEPTIDE-ACTIVATED GPCRs
4:00 pm – 5:30 pm Chairs: Rithwik Ramachandran and Gregory Tall

5:30 pm Reception and Poster Session #2
7:30 pm Dinner
9:30 pm Board Meeting, Sophocles Room (All PIs welcome)
Saturday October 27th, 2018

7:30 am  Breakfast

**SYMPOSIUM V G Protein Signaling**
8:30 am – 10:00 am  Chairs: Alan Smrcka and Stephane Laporte
Coffee Break

**HUBERT VAN TOL SYMPOSIUM (ANIMAL MODELS/PHYSIOLOGY)**
10:25 am – 11:30 am  Chairs: Rick Neubig and Michael Holinstat

**JOHN F MACDONALD LECTURE**
11:30 pm  Roger Cone  Chairs: Steve Ferguson and Greg Tall

12:20 pm  Closing Remarks
_Lunch and Farewell_

**CONFERENCE ROOM** -- Grand Ballroom
_Breakfast_ -- Foyer Buffet/Grand Ballroom
_Friday Lunch_ -- Fishbone’s Rhythm Café
_Saturday Lunch_ -- Foyer/Grand Ballroom
_Dinners_ -- Grand Ballroom
_Posters_ -- Grand Ballroom and Balconies
**PROGRAM**

**Thursday October 25th, 2018**

**MEETING REGISTRATION (11:30 am – 1:30 pm)**  Atheneum Hotel, Detroit

1:30 pm Welcome Remarks by Gregory Tall, Manoj Puthenveedu, and Alan Smrcka

**TRainee RESEARCH SHOWCASE** (10 min talks, 5 min Q/A)

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3:45 pm  **Coffee Break**

**HYMAN NIZNIK LECTURE**  (45 min talk, 10 min Q/A)

Chairs: Alan Smrcka and TBD

4:30 pm  Mark Von Zastrow, University of California San Francisco

“Recent insights to the subcellular organization of GPCR signaling”

5:30 pm  Welcome Reception (beer, wine, and cheese) and Poster Session #1

7:30 pm  Dinner and Introduction by Steve Lanier, Wayne State University

**Friday October 26th, 2018**

7:30 am  Breakfast

**Symposium I Opioid Receptor Signaling**  (20 min talks, 5 min Q/A)

**Chairs:** John Traynor and Steve Husbands

8:55 am  Louis Gendron, University of Sherbrooke

“Identification of Rab10 as a regulator of the delta-opioid receptor trafficking using an epitope tagged knockin mouse”

9:20 am  Laura Bohn, Scripps Institute

“Using biased agonism to make safer opioid analgesics”

9:45 am  Aashish Manglik, University of California San Francisco

“Structure-based discovery of opioid analgesics”

10:10 am  **Coffee Break**
**SYMPOSIUM II GPCR SIGNALING FROM INTRACELLULAR SITES**  
(20 min talks, 5 min Q/A)

**Chairs:** Manoj Puthenveedu and Christine Lavoie

**10:30 am**  
**JoAnn Trejo**, University of California at San Diego  
“A Tyrosine Switch on NEDD4-2 E3 Ligase Transmits GPCR Endosomal Signaling”

**10:55 am**  
**Aylin Hanyaloglu**, Imperial College, London  
“Multi-endosomal programming of GPCR signaling: applications to sex, drugs and...food”

**11:20 am**  
**Karen O’Malley**, Washington University  
“Intracellular metabotropic glutamate receptor mGlu5 plays a key role in synaptic plasticity”

**11:45 am**  
**12:00 pm**  
Short Talk selected #1  
“TBA”

**12:15 pm**  
*Lunch Fishbone’s Restaurant*

**TECHNOLOGIES FOR ANALYSIS OF GPCR ACTIVITY**

**1:30 pm – 1:55 pm**  
Hamamatsu Corporation and Codex Biosolutions  
(20 min talk, 5 min Q/A)

**SYMPOSIUM III STRUCTURAL BIOLOGY OF GPCRs and SIGNALING PROTEINS**  
(20 min talks, 5 min Q/A)

**Chairs:** Scott Prosser and John Tesmer

**2:00 pm**  
**Angeline Lyon**, Purdue University  
*Molecular Mechanisms of Phospholipase Cε Regulation*

**2:25 pm**  
**Roger Sunahara**, University of California at San Diego  
“Structure- and function-based discovery of orthosteric and allosteric ligands for GPCRs”

**2:50 pm**  
**Oliver Ernst**, University of Toronto  
“How GPCRs talk to G proteins: Insights from X-ray, EPR and cryo-EM.”

**3:15 pm**  
**3:30 pm**  
Short Talk selected #2  
“TBA”  
*Coffee Break*

**SYMPOSIUM IV PEPTIDE-ACTIVATED GPCRs**  
(20 min talks, 5 min Q/A)

**Chairs:** Rithwik Ramachandran and Gregory Tall

**4:00 pm**  
**James Bridges**, University of Cincinnati  
“G Protein Signaling in Pulmonary Alveolar Homeostasis”

**4:25 pm**  
**Carole Parent**, University of Michigan  
“Exosomes and Neutrophil Chemotaxis”
4:50 pm Morley Hollenberg, University of Calgary  
“Protease activated receptor activation”

5:15 pm Short Talk selected #3  
“TBA”  
(10 min talk, 5 min Q/A)

5:30 pm Reception (beer, wine, and cheese) and Poster Session #1

7:30 pm Dinner

9:30 pm Board Meeting, Sophocles Room (All PI’s welcome)

Saturday October 27th, 2018

7:30 am Breakfast

**SYMPOSIUM V G protein Signaling**  
(20 min talks, 5 min Q/A)

**Chairs:** Alan Smrcka and Stephané LaPorte

8:30 am Terry Hebert, McGill University  
“G protein Signaling in the Nucleus”

8:55 am Nevin Lambert, Augusta University  
“Diversity in GPCR-G protein coupling”

9:20 am Kirill Martemyanov, Scripps Florida  
“Deciphering G protein signaling diversity”

9:45 am Ajith Karunarathne, University of Toledo (10 min talk, 5 min Q/A)  
“G protein Signaling at the Golgi apparatus”

10:00 am Coffee Break

**HUBERT VAN TOL SYMPOSIUM (ANIMAL MODELS/PHYSIOLOGY)**  
(20 min talks, 5 min Q/A)

**Chairs:** Rick Neubig and Michael Holinstat

10:25 am Steve Ferguson, University of Ottawa  
“Metabotropic Glutamate Receptors as targets in Neurodegeneration”

10:50 am Julien Sebag, University of Iowa  
“Role of MRAP2 in the regulation of energy and glucose homeostasis”

11:15 am Short Talk selected #4  
“TBA”  
(10 min talk, 5 min Q/A)

**JOHN F MACDONALD LECTURE**  
(40 min talk, 10 min Q/A)
Chairs: Steve Ferguson and Greg Tall

11:30 pm Roger Cone, University of Michigan
“Melanocortin Receptor Signaling in Metabolism”

12:20 pm Closing Remarks by Alan Smrcka, Greg Tall and Manoj Puthenveedu

Lunch and Farewell