

GPCR WORKSHOP 2023

Agenda

DAY 1 January 3, 2023

2:00 - 4:00 pm **REGISTRATION** Foyer of Kamakahonu Ballroom

SESSION 1

4:00 - 4:20 pm Opening remarks

Brian Kobilka
Stanford University, CA, USA

4:20 - 5:00 pm Non-canonical activation of β -arrestin and G protein

Asuka Inoue
Tohoku University, Japan

5:00 - 5:40 pm tbd

Martin Lohse
University of Wuerzburg

6:00 - 9:00 pm **RECEPTION**

GPCR WORKSHOP 2023

Day 2 January 4, 2023

7:30 - 8:30 am **Breakfast (provided)** Foyer of ballroom

SESSION 2 - Chair Brian Kobilka

8:30 - 9:10 am Chemogenetic approaches to identify targets for novel antidiabetic drugs

Jurgen Wess
NIH

9:10 - 9:50 am Illuminating endogenous G proteins with CRISPR

Nevin Lambert
Augusta University

9:50 - 10:30 am Letting the little light of mind shine with genetically encoded indicators based on GPCRs

Lin Tian
UC Davis

10:30 - 11:10 am Leveraging novel GPCR signaling cascades in fat tissue to counteract metabolic disease.

Zachary Gerhart-Hines
University of Copenhagen

11:10 - 11:30 am Break

11:30 - 11:50 am Short Talk

tbd

11:50 - 12:10 pm Short Talk

tbd

12:10 - 3:00 pm Lunch (on your own) and poster viewing

GPCR WORKSHOP 2023

SESSION 3 - Chair Mark von Zastrow

3:00 - 3:40 pm	GPCR-mediated B-arrestin activation deconvoluted with single-molecule precision	Jonathan Javitch <i>Columbia University</i>
3:40 - 4:00 pm	Redirection of three-finger proteins to target GPCRs	Shoji Maeda <i>University of Michigan</i>
4:00 - 4:20 pm	Development of selective ligands for Class A GPCRs: functional selectivity and location-specific activity	Peter Gmeiner <i>Friedrich Alexander University Erlangen-Nürnberg</i>
4:20 - 4:40 pm	Short Talk	tbd
4:40 - 5:00 pm	Short Talk	tbd
5:00 - 6:00 pm	Poster viewing	
6:00 - 8:00 pm	Dinner (provided)	Location tbd
8:00 - 10:00 pm	INTERACTIVE SESSION 1	Chair Roger Sunahara <i>UC San Diego</i>

GPCR WORKSHOP 2023

Day 3 January 5, 2023

7:30 - 8:30 am Breakfast (provided) Foyer of ballroom

SESSION 4 - Chair Jonathan Javitch

8:30 - 9:10 am Seeing scents: towards a structural understanding of olfaction
Aashish Manglik
UCSF

9:10 - 9:50 am G protein-coupled versus arrestin-coupled receptors: exploiting mechanistic differences for therapeutic benefit.
Evi Kostenis
University of Bonn

9:50 - 10:30 am GPCRs as guidance receptors for immune cells.
Jason Cyster
UCSF

10:30 - 11:10 am Fantastic adhesion GPCRs and how to target them
Ines Liebscher
Leipzig University

11:10 - 11:30 am Break

11:30 - 11:50 am Short Talk
tbd

11:50 - 12:10 pm Short Talk
tbd

12:10 - 3:00 pm Lunch (on your own) and poster viewing

GPCR WORKSHOP 2023

SESSION 5 - Chair Aashish Manglik

3:00 - 3:40 pm Subcellular location and movement of GPCR-mediated signaling
Mark von Zastrow
UCSF

3:40 - 4:20 pm Dynamics of class-B GPCR
Osamu Nureki
University of Tokyo

4:20 - 4:40 pm Short Talk
tbd

4:40 - 5:00 pm Short Talk
tbd

5:00 - 5:20 pm Short Talk
tbd

6:00 - 8:00 pm Dinner (provided)

8:00 - 10:00 pm INTERACTIVE SESSION 2
Sebastian Granier
University of Montpellier, France

GPCR WORKSHOP 2023

Day 4 January 6, 2023

7:30 - 8:30 am **Breakfast (provided)** Foyer of ballroom

SESSION 6 - Chair Jurgen Wess

8:30 - 9:10 am Structural mass spectrometry to probe chemokine receptors interactions and dynamics

Cherine Bechara
University of Montpellier, France

9:10 - 9:50 am Neuropeptides controlling mosquito behavior

Laura Duvall
Columbia University

9:50 - 10:30 am Structural dynamics of Class C GPCRs using single molecule FRET techniques

Josh Levitz
Cornell University

10:30 - 11:10 am Structure driven drug discovery and design: case study of a Family A GPCR

Bingfa Sun
ConfometRx, Inc

11:10 - 11:30 am Break

11:30 - 11:50 am Short Talk

tbd

11:50 - 12:10 pm Short Talk

tbd

12:10 - 3:00 pm Lunch (on your own) and poster viewing

GPCR WORKSHOP 2023

SESSION 7 - Chair Osamu Nureki

3:00 - 3:40 pm UF Scripps Biomedical Research: Structure Functional Organization of orphan GPCR-RGS signaling complexes

Kirill Martemyanov
UF Scripps Biomedical Research

3:40 - 4:20 pm Riken: Function-related dynamics of GPCRs by NMR

Ichio Shimada
BDR Riken, Japan

4:20 - 5:10 pm Structure and activation mechanism of the RXFP1 relaxin receptor

Andrew Kruse
Harvard University

5:10 - 5:20 pm Closing Remarks

5:20 - 6:00 pm Poster take-down

6:00 - 9:00 pm **BANQUET DINNER**