

# 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  $\beta$ -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	<b>Jonathan Javitch</b> <i>Columbia University</i>
3:40 - 4:20 pm	Autoregulation of GPCR signaling through the third intracellular loop	<b>Sivaraj Sivaramakrishnan</b> <i>University of MN</i>
4:20 - 5:00 pm	Development of selective ligands for Class A GPCRs: functional selectivity and location-specific activity	<b>Peter Gmeiner</b> <i>Friedrich Alexander University Erlangen-Nürnberg</i>
5:00 - 6:00 pm	Poster viewing	
6:00 - 8:00 pm	Dinner (provided)	<b>Location tbd</b>
8:00 - 10:00 pm	INTERACTIVE SESSION 1	<b>Chair Roger Sunahara</b> <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  
**Christian Billesboelle**  
*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      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**