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# 4GPCRnet

International Symposium  
Leipzig Sept 26-29, 2022

## PROGRAM OVERVIEW

REGISTER NOW!



ABSTRACT  
SUBMISSION



**SEPTEMBER 26 – 29, 2022**  
**Leipzig, Germany**

NEUES AUGUSTEUM  
LEIPZIG UNIVERSITY  
CAMPUS AUGUSTUSPLATZ  
04103 LEIPZIG, GERMANY

Dear GPCR friends and colleagues,

Do not miss to join us in Leipzig (Germany), September 26–29, for the 4GPCRnet – International Symposium. Four of the biggest GPCR networks in Europe (**SFB1423**, **FOR2372**, **CA18240 Adher´n Rise**, **CA18133 ERNEST**) are bringing together renowned international experts of the field with early career ‘rising stars’. You can meet with and learn from the leaders of the international GPCR field, get one-on-one time with experts, and boost your knowledge through a diverse scientific program.

The event will take place in the heart of Leipzig, which offers a colorful mixture of culture and vivid social life.

Sincerely,  
Co-Chairs of the 4GPCRnet – International Symposium

**Annette G. Beck-Sickinger**  
Leipzig University, Chair of SFB1423



**Andreas Bock**  
Leipzig University & MDC Berlin, Grant Holder of CA18133 ERNES



**Evi Kostenis**  
University of Bonn, Chair of FOR2372



**Ines Liebscher**  
Leipzig University, Grant Holder of CA18240 Adher´n Rise



**Simone Prömel**  
Heinrich Heine University Düsseldorf, Chair of CA18240 Adher´n Rise



**Martha Sommer**  
ISAR Bioscience, Chair of CA18133 ERNEST



### MAIN TOPICS

- » Modulation of GPCR Signal Transduction
- » Holistic Concepts in GPCR Signal Transduction
- » Adhesion GPCRs: from Structure to Function / Physiology
- » GPCR in Physiology and Disease
- » Computational Design and GPCR Therapeutics
- » Molecular Structure and Dynamics of GPCRs

### FEES

Full Ticket	Reduced Ticket <sup>1</sup>	Industry Ticket	Gala Dinner at Zoo Leipzig <sup>2</sup>
590,00 Euro	350,00 Euro	790,00 Euro	70,00 Euro

Reduced Ticket<sup>1</sup> – Only valid for students and doctoral candidates, not for postdocs. Appropriate proof must be sent separately by e-mail to [gpcr-symposium@eventlab.org](mailto:gpcr-symposium@eventlab.org) at the time of registration.

Gala Dinner at Zoo Leipzig<sup>2</sup> – Booking (subject to availability) will start in June. We will inform you in time.

### CALL FOR ABSTRACTS

The deadline for oral abstract submissions is **May 31, 2022**.  
For poster presentation **July 15, 2022**.

### LOCAL ORGANIZER

event lab. GmbH | Richard-Lehmann-Str. 12 | 04275 Leipzig |  
[gpcr-symposium@eventlab.org](mailto:gpcr-symposium@eventlab.org)

### LOCATION

Leipzig University Neues Augusteum | Campus Augustusplatz |  
04103 Leipzig, Germany

	Session	Details
09:00	<b>COST ACTION MEETINGS</b>	
09:30		
10:00		
10:30		
11:00		
11:30	<b>COST ACTION Board Meeting</b>	
12:00		
12:30		
13:00	Break	
13:30	<b>Welcome Ceremony</b>	
14:00		
14:30	<b>Session 1</b> Modulation of GPCR Signal Transduction	<b>Mu-opioid receptor induced changes in beta-arrestin2 conformations</b> Meritxell Canals Buj
15:00		<b>Toward understanding the subcellular organization and reorganization of GPCR signaling</b> Mark von Zastrow
15:30		<b>Discussion</b>
15:45	Coffee break	
16:00	<b>Session 1</b> Modulation of GPCR Signal Transduction	<b>A Simple and Obvious Method for Microscopy Imaging of G-protein Signaling</b> Josef Lazar
16:30		<b>Mechanisms of Class F receptor activation and signal specification</b> Gunnar Schulte
17:00		<b>Chosen from abstracts</b>
17:30		<b>Discussion</b>
18:00	<b>Poster Session</b>	
20:00		

	Session	Details
09:00	<b>Session 2</b> Holistic Concepts in GPCR Signal Transduction	<b>Variation in GPCR Signaling: Implications for Physiology and Drug</b> M. Madan Babu
09:30		<b>Role of GPCRs in regulation of hormone and neurotransmitter release</b> Heidi Hamm
10:00		<b>Discussion</b>
10:15	Coffeebreak	
10:30	<b>Session 2</b> Holistic Concepts in GPCR Signal Transduction	<b>Deciphering structural design principles for interaction specificity in G protein signaling</b> Mickey Kosloff
11:00		<b>Dual-activity GPCR: ACKR3 at the crossroads between chemokine and opioid peptide regulation</b> Andy Chevigne
11:30		<b>Chosen from abstracts</b>
12:00		<b>Discussion</b>
12:30	Lunch	
13:15	<b>Poster Session and Discussion</b>	
13:30		
14:00	<b>Session 3</b> aGPCR from Structure to Function	<b>Ligands identification and Structural studies of several aGPCRs</b> Jin-Peng Sun
14:30		<b>Structural basis for adhesion GPCR interactions in development</b> Elena Seiradake
15:00		<b>Chosen from abstracts</b>
15:30		<b>Discussion</b>
15:45	Coffee break	
16:00	<b>Session 3</b> aGPCR from Structure to Function	<b>In vivo investigations of adhesion GPCR function</b> Kelly Monk
16:30		<b>Chosen from abstracts</b>
17:00		<b>Discussion</b>
17:30		
18:00	<b>Gala Dinner</b> at Zoo Leipzig	
22:00		

	Session	Details
09:00	<b>Keynote Lecture</b>	<b>Adhesion-GPCR signaling in synapse formation</b> Thomas C. Südhof
09:30		
10:00		
10:15	Coffee break	
10:30	<b>Session 4</b> GPCR in Physiology and Disease	<b>Orphan GPCRs in the vascular and immune system</b> Nina Wettschureck
11:00		<b>How come that GIPR agonists and antagonists both result in weight loss?</b> Mette Rosenkilde
11:30		Chosen from abstracts
12:00		Discussion
12:30	Lunch	
13:15	<b>Poster Session and Discussion</b>	
13:30		
14:00	<b>Session 4</b> GPCR in Physiology and Disease	<b>Targeting GPCRs to enhance haematopoietic stem cell transplantation</b> Michael Freissmuth
14:30		<b>Targeting GPCRs to treat metabolic disease</b> I. Sadaf Farooqi
15:00		Chosen from abstracts
15:30		Discussion
15:45	Coffee break	
16:00	<b>Session 5</b> Computational Design and GPCR Therapeutics	<b>Application of computational methods in rational design of multi-target ligands as potential antipsychotics and antidepressants</b> Katarina Nikolic
16:30		<b>Partial agonism in the picture</b> Adriaan Ijzerman
17:00		Chosen from abstracts
17:30		Discussion
18:00	<b>Poster Session</b>	
20:00		

	Session	Details
09:00	<b>Session 5</b> Computational Design and GPCR Therapeutics	<b>Structural and Mechanistic insights into class B1 GPCR signalling and allostery (Cryo-EM)</b> Denise Wootten
09:30		<b>Integrated computational and structural approaches for GPCR drug discovery</b> Bryan Roth
10:00		Discussion
10:15	Coffee break	
10:30	<b>Session 6</b> Molecular Structure and Dynamics of GPCRs	<b>Structural insights into signal transduction of metabotropic glutamate receptors</b> Beili Wu
11:00		<b>Structural insights into allostery in GPCRs: G proteins, arrestin and dimers</b> Christopher G. Tate
11:30		Chosen from abstracts
12:00		Discussion
12:30	Lunch	
13:15	<b>Poster Session and Discussion</b>	
13:30		
14:00	<b>Session 6</b> Molecular Structure and Dynamics of GPCRs	<b>Structural insights into GPCR-beta-arrestin interaction and signaling</b> Arun K. Shukla
14:30		<b>GPCR-mediated endosomal ERK signaling through G proteins: implications to disease</b> Roger Sunahara
15:00		Chosen from abstracts
15:30		Discussion
15:45	Coffee break	
16:00	<b>Keynote Lecture</b>	<b>The role of protein dynamics in GPCR signaling</b> Brian Kobilka
16:30		
17:15	<b>CRC Closing remarks &amp; Farewell</b>	
17:30		
18:00	<b>Early Career Investigator Session and Awarding</b> at Moritzbastei Leipzig	
18:30		
19:00		
19:30		
20:00		

**DFG** Deutsche  
Forschungsgemeinschaft  
German Research Foundation

 **cost**  
EUROPEAN COOPERATION  
IN SCIENCE & TECHNOLOGY



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**hhu** Heinrich Heine  
Universität  
Düsseldorf



**ISAR**BIOSCIENCE



**MDC** MAX DELBRÜCK CENTER  
FOR MOLECULAR MEDICINE  
IN THE HELMHOLTZ ASSOCIATION



SFB1423



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2372



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**event lab.**