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4GPCRnet International Symposium
Leipzig Sept 26-29, 2022

4GPCRnet

International Symposium

PROGRAM

SEPTEMBER 26–29, 2022

Leipzig, Germany

NEUES AUGUSTEUM
LEIPZIG UNIVERSITY
CAMPUS AUGUSTUSPLATZ
04103 LEIPZIG, GERMANY

4GPCRnet

International Symposium

GREETINGS

Dear friends and colleagues,

It is with joyous hearts that we welcome you all to the beautiful and historic city of Leipzig for this celebratory 4GPCR*net* International Symposium. This meeting takes place in the spirit of unity: our four Germany-based GPCR-focused research networks have joined forces to reunite the international community after two long pandemic years. Over the next four days, we will together experience the latest findings and approaches to GPCR signal transduction research spanning a broad range of perspectives from the molecular, cellular and physiological levels. The inclusive program highlights diverse and emerging topics in our field that will inspire us all. The Symposium aims to promote international and interdisciplinary cooperation by fostering an open synergistic environment. Among the 450 participants of the meeting are many of our field's most renowned researchers and also - most importantly - many early career investigators who we hope will be invigorated with new ideas and networking opportunities.

We wish you all an enjoyable experience in Leipzig!

Sincerely yours,

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

Evi Kostenis
University of Bonn, Chair of FOR2372

Andreas Bock
Leipzig University & Max Delbrück Center of Molecular Medicine, Grant Holder of CA18133 ERNEST

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

4GPCRnet
International Symposium

CONFERENCE VENUE

Leipzig University Neues Augusteum
Campus Augustusplatz
04103 Leipzig, Germany

CONFERENCE OFFICE

event lab. GmbH
Richard-Lehmann-Str. 12
04275 Leipzig
gpcr-symposium@eventlab.org

REGISTRATION DESK

Location: Ground floor

Opening hours:

Monday, 26 September 2022	12:00 – 20:00
Tuesday, 27 September 2022	08:00 – 17:30
Wednesday, 28 September 2022	08:00 – 20:00
Thursday, 29 September 2022	08:00 – 18:00

NAME TAGS

Official conference name tags will be required for admission to all conference functions and lectures and to the exhibition and poster area.

SPEAKERS PREVIEW

Location: Room 122, First floor

POSTER EXHIBITION

Location: in the Paulinum, Ground floor

All posters must be removed by 15:00 Thursday or will be disposed

CLOAKROOM

Location: Ground floor at the main entrance

Opening hours:

Monday, 26 September 2022	08:30 – 21:00
Tuesday, 27 September 2022	08:30 – 17:45
Wednesday, 28 September 2022	08:30 – 21:00
Thursday, 29 September 2022	08:30 – 18:15

Storage room for your coats and baggage.

COVID NOTICE

We would like to ask you, to please pay attention to your own health and the health of others.

The following hygiene measures apply:

- While indoors, it is strongly recommended to wear a mouth-nose protection and make sure you keep a sufficient distance.
- In case of symptoms, please do not participate in the scientific- or the social program. Please test yourself regularly before entering the venue.
- The organiser will not provide masks and tests.

WIFI ACCESS

Wireless internet access will be available in most areas.

Network: eduinfo
event name: 4GPCRnet-Syposium
Password: d48de-2022

TAXIS

Taxis are available around-the-clock at the taxi stand at the Goethestraße or at the Main Station.

In the Collaborative Research Centre 1423 "Structural Dynamics of GPCR Activation and Signalling", scientists from the life sciences, medicine, pharmacy and bioinformatics of Leipzig University are working together with partners at the Charité Medical University and Max Delbrück Center in Berlin, as well as the Martin Luther University Halle-Wittenberg. The aim of this German Research Foundation-funded initiative is to understand two understudied classes of GPCRs, the peptide receptors and the adhesion receptors, specifically the structural dynamics of ligand binding, signal transduction, and downstream control of G protein- and arrestin-signalling pathways. The goal of the CRC is to clarify the dynamic structural states of these GPCRs in order to understand their functions and thereby facilitate development of novel therapeutics.

Website: https://research.uni-leipzig.de/sfb1423/

The European Research Network on Signal Transduction (ERNEST) is an Action funded by COST (European Cooperation in Science and Technology, www.cost.eu). The main scientific objective of the Action is to develop a common, comprehensive and holistic understanding of signal transduction that will advance development of pathway-specific chemical modulators. ERNEST comprises a diverse multidisciplinary network of nearly 800 researchers worldwide. Diversity is manifest not only in core expertise, but also career level, gender, country of residence, and institutional sector. Since 2019, ERNEST has served the community with bi-annual meetings, training schools and ECI-organised initiatives, as well as financial support of cross-border scientific exchanges, open access publications, and reliable communication channels that support networking and cooperation.

Website: https://ernest-gpcr.eu/

Based at the University of Bonn, the Research Unit 2372 "G-protein signalling cascades: with new molecular probes and agents to new pharmacological concepts" is funded by the German Research Foundation and involves partners at the BMRZ-Goethe University in Frankfurt, Otto-von-Guericke-University Magdeburg, and the Paul Scherrer Institute in Switzerland. This multi-disciplinary consortium aims at the rational design and the generation of novel, cell-permeable signalling inhibitors with selectivity for G protein families. Molecular-mechanistic analyses of these inhibitors provide insights into the relevance of individual signalling cascades within complex signalling networks and (patho-)physiological events. Since GPCRs serve as molecular targets for a plethora of drugs, novel principles for piloting intracellular signalling might also inspire the development of therapies addressing GPCRs themselves.

Website: https://www.for2372.uni-bonn.de/

Adher 'N Rise (ADHEsion GPCR Network: Research and Implementation Set the path for future Exploration) is an Action funded by COST (European Cooperation in Science and Technology, www.cost.eu). Its aim is to promote, stimulate and translate research on Adhesion-G protein-coupled receptors (aGPCRs) 'from bench to bedside' in Europe. Scientists as well as clinicians with divergent expertise and interests begin to recognise the biological importance of aGPCRs and their unexploited pharmacological potential. The Action supports this relatively young and growing community of aGPCR researchers by providing communication platforms and opportunities to interact. Early Career Investigators (ECIs) are of utmost importance to Adher 'N Rise as they ensure the development of novel ideas and the long-term progress of the field.

Website: https://www.adhernrise.eu/

Brian Kobilka, MD

Professor, Department of Molecular and Cellular Physiology

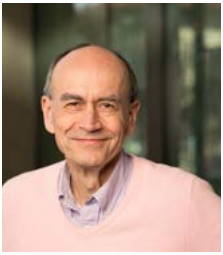
Hélène Irwin Fagan Chair in Cardiology

Stanford University

Brian Kobilka received Bachelor of Science Degrees in Biology and Chemistry from the University of Minnesota, Duluth in 1977. He graduated from Yale University School of Medicine in 1981, and completed residency training in Internal Medicine at the Barnes Hospital, Washington University School of Medicine, St. Louis, Missouri in 1984. From 1984-1989 he was a postdoctoral fellow in the laboratory of Robert Lefkowitz at Duke University.

While in the Lefkowitz lab, he and his colleagues cloned the gene that encodes the receptor for the hormone adrenaline. They found that the receptor was similar to rhodopsin, the light sensing receptor. It was later discovered that there is an entire family of receptors that look and act in similar ways. These receptors are known as G-protein-coupled receptors (GPCRs); they are responsible for the body's response to the majority of hormones and neurotransmitters.

In 1989 he joined the faculty of Medicine and Molecular and Cellular Physiology at Stanford University. Research in the Kobilka lab focuses on the structure and mechanism of action of GPCRs. They apply a spectrum of biochemical, biophysical and structural approaches to understand GPCR signalling at the molecular level. He is a member of the National Academy of Sciences, the National Academy of Medicine, and the American Academy of Arts and Sciences. In 2012, Kobilka was awarded the Nobel Prize in Chemistry with Robert Lefkowitz for their work on GPCRs.



Thomas C. Südhof, M.D.

Avram Goldstein Chair,

Professor of Molecular and Cellular Physiology, and
Investigator of the Howard Hughes Medical Institute,

Stanford University School of Medicine

Thomas Christian Südhof, M.D., serves as the Avram Goldstein Professor in the School of Medicine of Stanford University, as a Professor of Molecular & Cellular Physiology, Neurosurgery, and by courtesy, of Neurology and Psychiatry, and as an Investigator of the Howard Hughes Medical Institute. Südhof's research interests focus on how synapses that transmit and process information in neural circuits are formed and specified, and how their role becomes dysfunctional in neuropsychiatric and neurodegenerative diseases. Towards this goal, Südhof uses genetic manipulations in human and mouse neurons as well as biophysical and cell-biological approaches to dissect the contributions of trans-synaptic signaling complexes to the construction of synapses and their properties and plasticity.

M. Madan Babu | St. Jude Children's Research Hospital | USA

Wednesday | 28 September 2022 | 16:45 - 17:15

Variation in GPCR Signaling: Implications for Physiology and Drug Discovery.

Session 5: Computational Design and GPCR Therapeutics

Meritxell Canals Buj | The University of Nottingham | UK

Monday | 26 September 2022 | 14:30 - 15:00

Mu-opioid receptor induced changes in beta-arrestin2 conformations

Session 1: Modulations of GPCR Signal Transduction

Andy Chevigné | Luxembourg Institute of Health | Luxembourg

Tuesday | 27 September 2022 | 11:30 - 12:00

Dual-activity GPCR: ACKR3 at the crossroads between chemokine and opioid peptide regulation

Session 2: Holistic Concepts in GPCR Signal Transduction

I. Sadaf Farooqi | University of Cambridge | UK

Wednesday | 28 September 2022 | 14:30 - 15:00

GPCRs and metabolic disease

Session 4: GPCR in Physiology and Disease

Michael Freissmuth | Medical University Wien | Austria

Wednesday | 28 September 2022 | 14:00 - 14:30

Targeting GPCRs to enhance haematopoietic stem cell transplantation

Session 4: GPCR in Physiology and Disease

Joshua Frenster | Universitat Pompeu Fabra | Spain

Tuesday | 27 September 2022 | 14:30-15:00

GPR133 (ADGRD1) signaling is increased by the dissociation of its extracellular NTF and by binding of its new positive allosteric modulator PTK7

Session 3: aGPCR: from Structure to Function

Heidi Hamm | Vanderbilt University | USA

Tuesday | 27 September 2022 | 9:00 - 9:30

Role of GPCRs in regulation of hormone and neurotransmitter release.

Session 2: Holistic Concepts in GPCR Signal Transduction

Adriaan Ijzermann | Leiden University | Netherlands

Wednesday | 28 September 2022 | 16:15 - 16:45

Partial agonism in the picture

Session 5: Computational Design and GPCR Therapeutics

Brian Kobilka | Stanford University | USA

Thursday | 29 September 2022 | 16:15 - 17:30

The role of protein dynamics in GPCR signaling

Keynote Lecture

Mickey Kosloff | University of Haifa | Israel

Tuesday | 27 September 2022 | 11:00 - 11:30

Deciphering structural design principles for interaction specificity in G protein signaling

Session 2: Holistic Concepts in GPCR Signal Transduction

Josef Lazar | Institute of Organic Chemistry and Biochemistry of the Czech Academy of Sciences | Czech Republic

Monday | 26 September 2022 | 16:30 - 17:00

A Simple and Obvious (in Retrospect) Method for Microscopy Imaging of G-protein Signaling

Session 1: Modulations of GPCR Signal Transduction

Kelly Monk | The Vollum Institute Oregon Health & Science University | USA

Tuesday | 27 September 2022 | 16:15 - 16:45

In vivo investigations of adhesion GPCR function

Session 3: aGPCR: from Structure to Function

Katarina Nikolic | Belgrade University | Serbia

Thursday | 29 September 2022 | 9:00 - 9:30

Application of computational methods in rational design of multi-target ligands as potential antipsychotics and antidepressants

Session 5: Computational Design and GPCR Therapeutics

Mette Rosenkilde | University of Copenhagen | Denmark

Wednesday | 28 September 2022 | 11:15 - 11:45

How come that GIPR agonists and antagonists both result in weight loss?

Session 4: GPCR in Physiology and Disease

Bryan Roth | University of North Carolina UNC | USA

Thursday | 29 September 2022 | 9:30 - 10:00

Integrated computational and structural approaches for GPCR drug discovery

Session 5: Computational Design and GPCR Therapeutics

Gunnar Schulte | Karolinska Institute | Sweden

Monday | 26 September 2022 | 17:00 - 17:30

Mechanisms of Class F receptor activation and signal specification

Session 1: Modulations of GPCR Signal Transduction

Arun K. Shukla | Indian Institute of Technology | India

Thursday | 29 September 2022 | 14:00 - 14:30

Structural insights into GPCR-beta-arrestin interaction and signaling

Session 6: Molecular Structure and Dynamics

Thomas C. Südhof | Stanford University School of Medicine | USA

Wednesday | 28 September 2022 | 9:00 - 10:15

Adhesion-GPCR signaling in synapse formation

Keynote Lecture

Jin-Peng Sun | Shandong University | China

Tuesday | 27 September 2022 | 14:00 - 14:30

Ligands identification and Structural studies of several aGPCRs

Session 3: aGPCR: from Structure to Function

Roger Sunahara | University of California San Diego | USA

Tuesday | 27 September 2022 | 9:30 - 10:00

GPCR-mediated endosomal ERK signaling through G proteins: implications to disease

Session 2: Holistic Concepts in GPCR Signal Transduction

Christopher A. Tate | MRC Laboratory of Molecular Biology | UK

Thursday | 29 September 2022 | 11:30 - 12:00

Structural insights into allostery in GPCRs: G proteins, arrestin and dimers

Session 6: Molecular Structure and Dynamics

Mark von Zastrow | University of California | USA

Monday | 26 September 2022 | 15:00 - 15:30

Toward understanding the subcellular organization and reorganization of GPCR signaling

Session 1: Modulations of GPCR Signal Transduction

Nina Wettschureck | Max Planck Institute for Heart and Lung Research

Department of Pharmacology | Germany

Wednesday | 28 September 2022 | 10:45 - 11:15

Orphan GPCRs in the vascular and immune system

Session 4: GPCR in Physiology and Disease

Denise Wootten | Monash University
Monash Institute of Pharmaceutical Sciences | Australia

Thursday | 29 September 2022 | 14:30 - 15:00

Structural and Mechanistic insights into class B1 GPCR signalling and allostery (Cryo-EM)

Session 6: Molecular Structure and Dynamics

Beili Wu | Chinese Academy of Sciences | China

Thursday | 29 September 2022 | 11:00 - 11:30

Structural insights into signal transduction of metabotropic glutamate receptors

Session 6: Molecular Structure and Dynamics of GPCRs

PROGRAM MONDAY
September 26, 2022

09:00	**COST ACTION Meetings**	
11:30	**COST ACTION Board Meeting**	
13:30	**Welcome Ceremony**	
14:15	**Break**	
14:30	**Session 1** **Modulation of GPCR Signal Transduction** *Chair: Evi Kostenis* **Room: Audimax**	**Mu-opioid receptor induced changes in beta-arrestin2 conformations** Meritxell Canals Buj, The University of Nottingham, UK **Toward understanding the subcellular organization and reorganization of GPCR signaling** Mark von Zastrow, University of California, USA **Chemogenetic G protein-ligand pairs for causal investigation of cellular biology in vitro and in vivo** Judith Ahlenfelder, University of Bonn, GER **Cotranslational insertion of GPCRs into nanoparticle membranes and their structural evaluation by cryo-electron microscopy in complex with G-proteins** Zoe Köck, Goethe University Frankfurt, GER
16:00	**Coffee Break**	
16:30	**Session 1** **Modulation of GPCR Signal Transduction** *Chair: Torsten Schöneberg* **Room: Audimax**	**A Simple and Obvious (in Retrospect) Method for Microscopy Imaging of G-protein Signaling** Josef Lazar, Czech Academy of Sciences, CZ **Mechanisms of Class F receptor activation and signal specification** Gunnar Schulte, Karolinska Institute, SWE **In vitro and in vivo regulation of β-Adrenoceptors signaling using synthetic light-regulated molecules** Xavier Rovira, The Spanish National Research Council (CSIC), ESP **Cis-on photoswitchable G protein-biased ligand for melatonin receptors** Gloria Somalo-Barranco, Université de Paris, FRA **β-arrestin1 and 2 exhibit distinct phosphorylation-dependent conformations when coupling to the same GPCR in living cells** Carsten Hoffmann, University Hospital Jena, GER
18:15 18:45	**Poster Appetizer Session** **Room: Audimax** | *Chair: Ralf Jockers*	
19:00 21:00	**Poster Session with Drinks and Snacks supported by IRN** **Room: Paulinum**	

09:00	**Session 2** **Holistic Concepts in GPCR Signal Transduction** *Chair: Martha Sommer* **Room: Audimax**	**Role of GPCRs in regulation of hormone and neurotransmitter release** Heidi Hamm, Vanderbilt University, USA
		GPCR-mediated endosomal ERK signaling through G proteins: implications to disease Roger Sunahara, University of California San Diego, USA
		New nanobodies illuminate opioid receptor signaling with subcellular precision Miriam Stoeber, University of Geneva, CHE
		Molecular mechanism for GPCR spatial organization at the cell surface Gabriele Kockelkoren, University of Copenhagen, DNK
10:30	**Coffee Break**	
11:00	**Session 2** **Holistic Concepts in GPCR Signal Transduction** *Chair: Andreas Bock* **Room: Audimax**	**Deciphering structural design principles for interaction specificity in G protein signaling** Mickey Kosloff, University of Haifa, ISR
		Dual-activity GPCR: ACKR3 at the crossroads between chemokine and opioid peptide regulation Andy Chevigné, Luxembourg Institute of Health, LUX
		Lipid regulation of ligand binding to atypical chemokine receptor 3 Martin Gustavsson, University of Copenhagen, DNK
		Unveiling of the elusive signaling pathways activated by the super conserved orphan receptors GPR27, GPR85 and GPR173 Julien Hanson, University of Liege, BEL
12:30	**Poster Appetizer Session** **Room Audimax** | *Chair: Norbert Sträter*	
13:00	**Lunch** | **Room: Foyer** **and** **Poster Session** | **Room: Paulinum**	

14:00	**Session 3** **aGPCR from Structure to Function** *Chair: Ines Liebscher* **Room: Audimax**	**Ligands identification and Structural studies of several aGPCRs** Jin-Peng Sun, Shandong University, CHN
		GPR133 (ADGRD1) signaling is increased by the dissociation of its extracellular NTF and by binding of its new positive allosteric modulator PTK7 Joshua Frenster, Universitat Pompeu Fabra, ESP
		Identifying Novel Ligands for ADGRG5/GPR114 with a new Ultra-large Library Screening Algorithm in Rosetta Jens Meiler, Leipzig University, GER
		A transgenic system to monitor adhesion G protein-coupled receptor dissociation Tobias Langenhan, Leipzig University, GER
15:30	**Coffee Break**	
16:15	**Session 3** **aGPCR from Structure to Function** *Chair: Simone Prömel* **Room: Audimax**	**In vivo investigations of adhesion GPCR function** Kelly Monk, The Vollum Institute Oregon Health & Science University, USA
		Adhesion GPCRS in oncology: emerging roles, functions and therapeutic directions David Favara, University of Cambridge, UK
		Regulation of glucose homeostasis by Adhesion GPCRs Doreen Thor, Leipzig University, GER
18:30	**Transfer to Zoo**	
19:00 – 01:00	**Conference dinner at Zoo Leipzig**	

09:00	**Keynote Lecture** *Chair: Nicole Scholz* **Room: Audimax**	**Adhesion-GPCR signaling in synapse formation** Thomas C. Südhof , Stanford University School of Medicine, USA
10:15	**Coffee Break**	
10:45	**Session 4** **GPCR in Physiology and Disease** *Chair: Martin Lohse* **Room: Audimax**	**Orphan GPCRs in the vascular and immune system** Nina Wettschureck, MPI, GER
		How come that GIPR agonists and antagonists both result in weight loss ? Mette Rosenkilde, University of Copenhagen, DNK
		Oncomodulation explained: cancer going viral Nick D. Bergkamp, Vrije Universiteit Amsterdam, NLD
		Structural and Functional Diversity Among Agonist-Bound States of the GLP-1 Receptor Brian P. Cary, University of Wisconsin-Madison, USA
		The orphan G protein-coupled receptor, GPR50, and its involvement in obesity and type2 diabetes Julie Dam, Inserm CNRS Paris, FRA
12:30	**Poster Appetizer Session** **Room Audimax** | *Chair: Peter Schmidt*	
13:00	**Lunch** | **Room: Foyer** **and** **Poster Session** | **Room: Paulinum**	

14:00	**Session 4** **GPCR in Physiology and Disease** *Chair: Peter Kühnen* **Room: Audimax**	**Targeting GPCRs to enhance haematopoietic stem cell transplantation** Michael Freissmuth, Medical University of Vienna, AUT
		GPCRs and metabolic disease I Sadaf Farooqi, University of Cambridge, UK
		A NanoBiT/BRET-based binding assay for CRISPR-Cas9-edited FZD7 allows real-time analysis of ligand binding in the colorectal cancer model Pawel Kozielewicz, Karolinska Institutet, SWE
		G protein-coupled receptor 84 is an evolutionary conserved Gα15-coupled immune cell receptor Claudia Stäubert, Leipzig University, GER
15:30	**Coffee Break**	
16:15	**Session 5** **Computational Design and GPCR Therapeutics** *Chair: Andrea Sinz* **Room: Audimax**	**Partial agonism in the picture** Adriaan Ijzermann, Leiden University, NLD
		Variation in GPCR Signaling: Implications for Physiology and Drug Discovery M Madan Babu, St. Jude Children's Research Hospital, USA
		Structure-Based Computer Driven Discovery of GPCR Ligands with New Chemotypes and Functional Selectivity Vsevolod Katrich, University of Southern California, USA
		Optical control of family A GPCRs using azobenzene-derived photoswitchable ligands Rob Leurs, Vrije Universiteit Amsterdam, NLD
		Caenorhabditis elegans as model organism for GPCR research Anette Kaiser, Leipzig University, GER
18:00	**Short Break**	
18:15 – 18:45	**Greetings & Poster Appetizer Session** **Room: Audimax** | *Chair: Marie Hoffmann (Project Manager Science Funding, Stiftung Charité) & Peter Hildebrand*	
19:00 – 21:00	**Poster Session with Drinks and Snacks - funded by Stiftung Charité** **Room: Paulinum**	

09:00	**Session 5** **Computational Design and GPCR Therapeutics** *Chair: Peter Stadler* **Room: Audimax**	**Application of computational methods in rational design of multi-target ligands as potential antipsychotics and antidepressants** Katarina Nikolic, Belgrade University, SRB
		Integrated computational and structural approaches for GPCR drug discovery Bryan Roth, University of North Carolina UNC, USA
		In Silico Hit Discovery for GPCRs across Scale and Sector Brian Bender, Sosei Heptares, UK
		GPCR structure analysis platform and activation mechanisms David Gloriam, University of Copenhagen, DNK
10:30	**Coffee Break**	
11:00	**Session 6** **Molecular Structure and Dynamics** *Chair: Patrick Scheerer* **Room: Audimax**	**Structural insights into signal transduction of metabotropic glutamate receptors** Beili Wu, Chinese Academy of Sciences, CHN
		Structural insights into allostery in GPCRs: G proteins, arrestin and dimers Christopher G Tate, MRC Laboratory of Molecular Biology, UK
		Live-cell structural insights into arrestin interactions with a secretin-like GPCR Irene Coin, Leipzig University, GER
		A modular ligand-directed approach to label endogenous aminergic GPCRs in live cells Xavier Gómez-Santacana, Université de Montpellier, CNRS and INSERM, ESP
12:30	**Poster Appetizer Session** **Room Audimax** | *Chair: Paolo Annibale*	
13:00	**Lunch** | **Room: Foyer** **and** **Poster Session** | **Room: Paulinum**	

14:00	**Session 6** **Molecular Structure and Dynamics** *Chair: Daniel Huster* **Room: Audimax**	**Structural insights into GPCR-beta-arrestin interaction and signaling** Arun A Shukla, Indian Institute of Technology, IND **Structural and Mechanistic insights into class B1 GPCR signalling and allostery (Cryo-EM)** Denise Wootten, Monash University, AUS **Allosteric modulation of metabotropic glutamate receptor activation resolved by single molecule FRET using minimally invasive labeling strategies** Robert B. Quast, Centre de Biologie Structurale (CBS), FRA **Structural and functional studies of CC chemokine receptor 5 phosphorylation and its interaction with arrestin2** Polina Isaikina, University of Basel, CHE
15:45	**Coffee Break**	
16:00	**Keynote Lecture** *Chair: Peter Hildebrand* **Room: Audimax**	**The role of protein dynamics in GPCR signaling** Brian Kobilka, Stanford University, USA
17:30	**CRC Closing Remarks & Farewell** **Annette G. Beck-Sickinger** **Room: Audimax**	
17:45 – 22:00	**Closing Party** **Early Career Investigator Session and Awarding** **at Moritzbastei**	

Promega

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POSTER SESSIONS

We are very pleased with the high number of scientific contributions submitted.

The posters can be viewed in the Paulinum during regular opening hours.

During the five Poster Sessions, especially young investigators have the opportunity to present their work to an international audience. The schedule of the poster sessions is as follows:

The poster authors have been given the opportunity to present their poster at the beginning of each poster session, each with 1-2 slides in the form of a short talk – so called Poster Appetizer.

The following posters will be presented during the Poster Appetizer Sessions:

Monday

P-I-07, P-I-09, P-I-10, P-I-11, P-I-13, P-I-19, P-I-29, P-I-37, P-I-40, P-I-77, P-I-80

Tuesday

P-I-21, P-I-26, P-I-33, P-I-50, P-I-54, P-I-57, P-I-68, P-I-71

Wednesday - Lunch

P-I-55, P-II-02, P-II-05, P-II-06, P-IV-02, P-IV-06, P-IV-18, P-IV-29

Wednesday - Evening

P-V-01, P-V-02, P-V-04, P-V-11, P-V-14, P-V-17, P-VI-01, P-VI-02, P-VI-07

Thursday

P-VI-18, P-VI-31, P-VI-38, P-VI-39, P-VI-40, P-VI-46

Poster Session Monday – supported by IRN

18:15 – 18:45 Poster Appetizer Session, Audimax

19:00 – 20:00 poster viewing of the poster topics P-I – P-III

20:00 – 21:00 poster viewing of the poster topics P-IV – P-VI

Food and Drinks will be provided

Poster Session Wednesday – funded by Stiftung Charité

18:15 – 18:45 Poster Appetizer Session, Audimax
Introduction and greetings: Marie Hoffmann, Project Manager Science Funding, Stiftung Charité

19:00 – 20:00 poster viewing of the poster topics P-IV – P-VI

20:00 – 21:00 poster viewing of the poster topics P-I – P-III

Food and Drinks will be provided

A selected poster jury will evaluate all posters. During the Closing Party at Mortizbastei on Thursday, the best posters will be honoured with a prize.

Be there and support the poster authors!

	P-I – Modulation of GPCR Signal Transduction	
P-I-01	Voltage sensitivity of G protein coupled receptors	*Y. Ben-Chaim*
P-I-02	Nanodelivery: A new and efficient method for transfer and characterization of cell-free synthesized G-protein coupled receptors into living cells	*S. Umbach et al.*
P-I-03	Constitutive vs. agonist-induced internalization of mGlu receptors	*M. Cimadevila et al.*
P-I-05	Allosteric modulation of GPCR-induced β-arrestin trafficking and signaling by a synthetic intrabody	*M. Chaturvedi et al.*
P-I-06	Pathway selectivity in Frizzleds is achieved by conserved microswitches defining pathway-determining, active conformations	*L. Grätz et al.*
P-I-07	The impact of lipid polyunsaturation in the Dopamine D2 activation and signaling	*I. D. Alves*
P-I-08	Initiation and regulation of glucagon receptor signaling by glucagon, stable glucagon analogs, and RAMPs	*J. M. Mathiesen et al.*
P-I-09	Heteromerization with the cell adhesion molecule CD44 modulates the constitutive activity and agonist-induced signaling of the serotonin receptor 7	*S. Borsdorf et al.*
P-I-10	Different Effects of Ageing on the Expression of Bitter Taste Receptors in Human and Rat Colon	*F. Jalševac et al.*
P-I-11	New insights into the non-canonical desensitization of Gq-signaling by GRK2/3 expression levels	*N. Jaiswal et al.*
P-I-12	Pharmacological characterization of new Angiotensin II receptors fluorescent ligands as tracer for in vitro and in vivo labeling	*C. Delaitre et al.*
P-I-13	Dissecting the GPCR signaling cascade one step at the time: a fluorescence spectroscopy investigation of adrenergic-mediated signaling upon cell swelling	*A. Sirbu et al.*
P-I-14	Location-resolved signaling profiles of opioid receptors	*A. Radoux-Mergault et al.*
P-I-15	Development of a β-Arrestin2-biased Photoswitchable Cannabinoid 2 Receptor Agonist	*S. A.M. Steinmüller et al.*
P-I-16	Tuning GPCR expression, stability and allostery by directed evolution in mammalian cells	*C. Klenk et al.*
P-I-17	Shedding light on the internalisation mechanism of glucagon-like peptide 1 receptor	*E.V. Moo et al.*

P-I-18	Single cell studies reveal distinct pharmacological profiles of GPCRs depending on their oligomerization state	*K. L. Martinez et al.*
P-I-19	Functional modulation of PTH1R activation and signalling by RAMP2	*K. Nemec et al.*
P-I-20	The Electrostatic Switch: a new model for CCR5 desensitization based on dynamic modulation of negative charges at the receptor-ligand interface	*I. Pinheiro et al.*
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GALA DINNER AT LEIPZIG ZOO

Date: Tuesday, 27 September 2022

Entrance: 19:00

Address: Gondwanaland
Pfaffendorfer Straße 25

In Germany's largest tropical adventure world, Gondwanaland, the beautifully Asian-designed Patakan restaurant is at your disposal. Experience the flora and fauna of the rainforest after the zoo has closed and gain an insight into the history of the earth's origins during a boat trip on the primeval forest river Gamanil.

The ticket price of 70.00 EUR per person includes the following services:

- the entrance to the tropical hall, Gondwanaland, with a boat tour through the rainforest
- Welcome drink
- varied Buffet and midnight snack
- alcoholic free drinks, beer and wine

Tickets can be purchased directly at the registration counter.*

**According to availability*

CLOSING PARTY AT MORITZBASTEI LEIPZIG

Early Career Investigator Session & Awarding

Date: Thursday, 29 September 2022

Entrance: 18:00

Address: Moritzbastei Leipzig | Kurt-Masur-Platz 1


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The Moritzbastei is Leipzig's best-known cultural centre. Located in the heart of the city, right next to the New Gewandhaus and the university, it combines historical architecture and modern cultural life in all its diversity.

The Moritzbastei is the last remaining part of Leipzig's old city fortifications. Since it was built in 1551-1553, it can look back on an eventful history.

Enjoy the evening in convivial company incl. drinks, buffet and music.

Admission is free of charge. However, for better planning, we kindly ask you to register.

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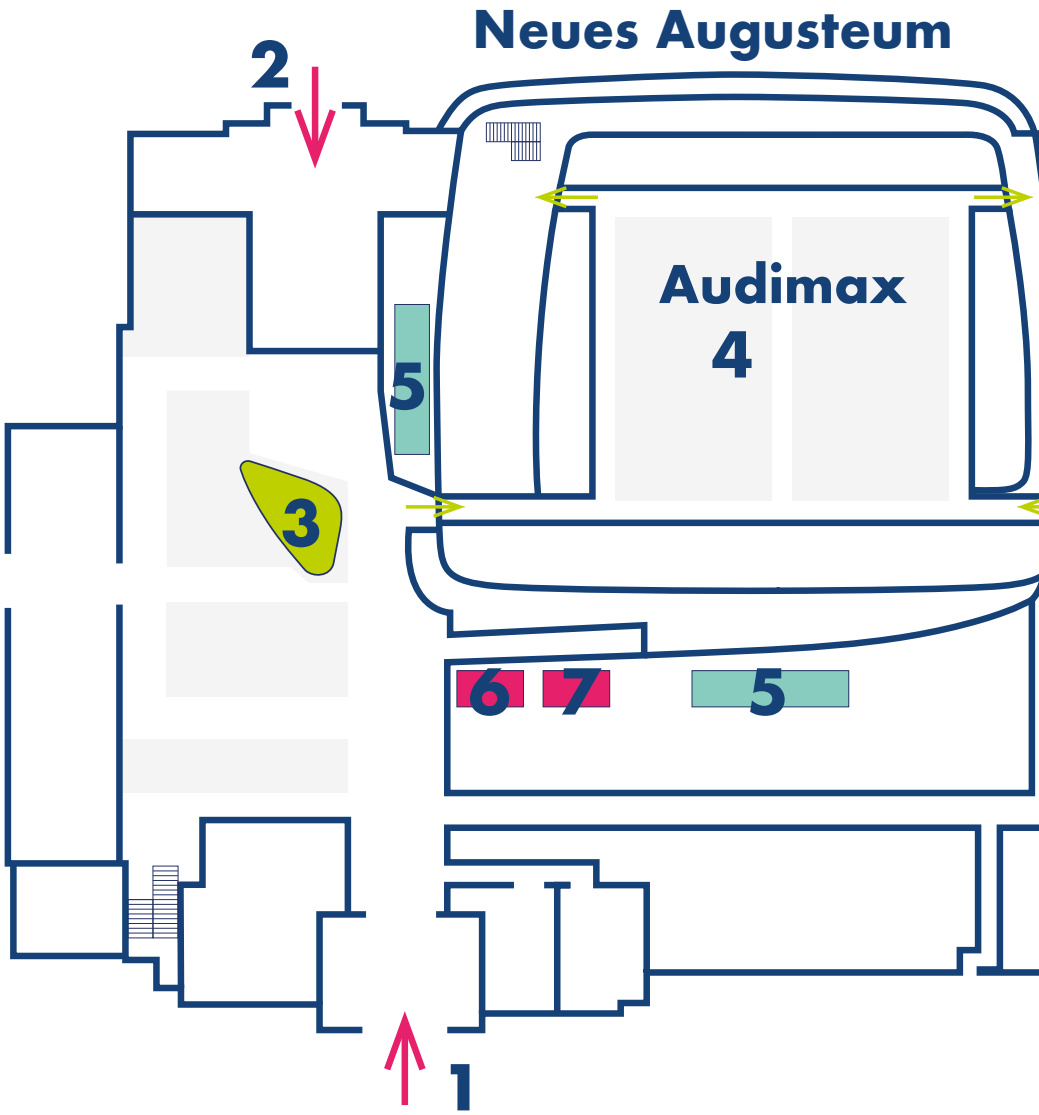
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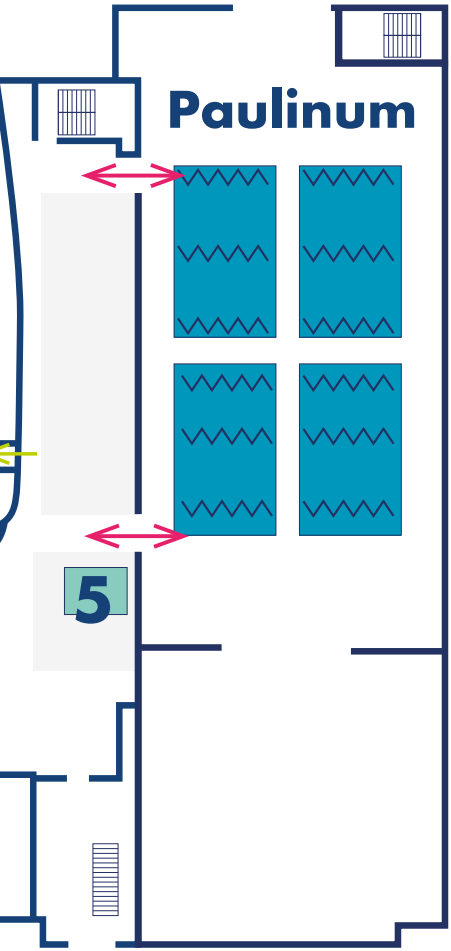

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