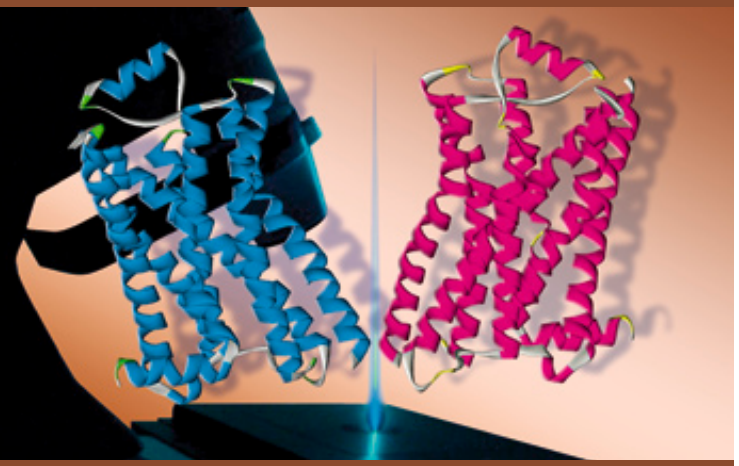
Description

In the past years, growing evidence indicates that some G-protein-coupled receptors (GPCRs) can form both homodimers and heterodimers. The function of the dimerization still remains enigmatic. The GPCR Dimer Symposium features internationally renowned speakers in this research field to discuss new findings.

Research on GPCR Dimers needs a variety of microscopy techniques. Therefore, the annual Dynamic Microscopy Workshop will be held in parallel to the GPCR Dimer Symposium. The goal of the workshop is to introduce and present some of the most modern microscopy techniques, with the emphasis on imaging techniques of receptors. The workshop will feature industry lectures and demonstrations and exclusive, sign-up only courses.



Contact

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Organizers

Martin Lohse
Gregory Harms

Location

All events will take place at the

Rudolf Virchow Center

DFG Research Center for Experimental Biomedicine
University of Würzburg
Josef-Schneider-Str. 2, Building D 15
97080 Würzburg
Germany

For more information about the program, and how to reach us, see:
www.rudolf-virchow-zentrum.de and
www.dynamicmicroscopy.de

Sponsored by

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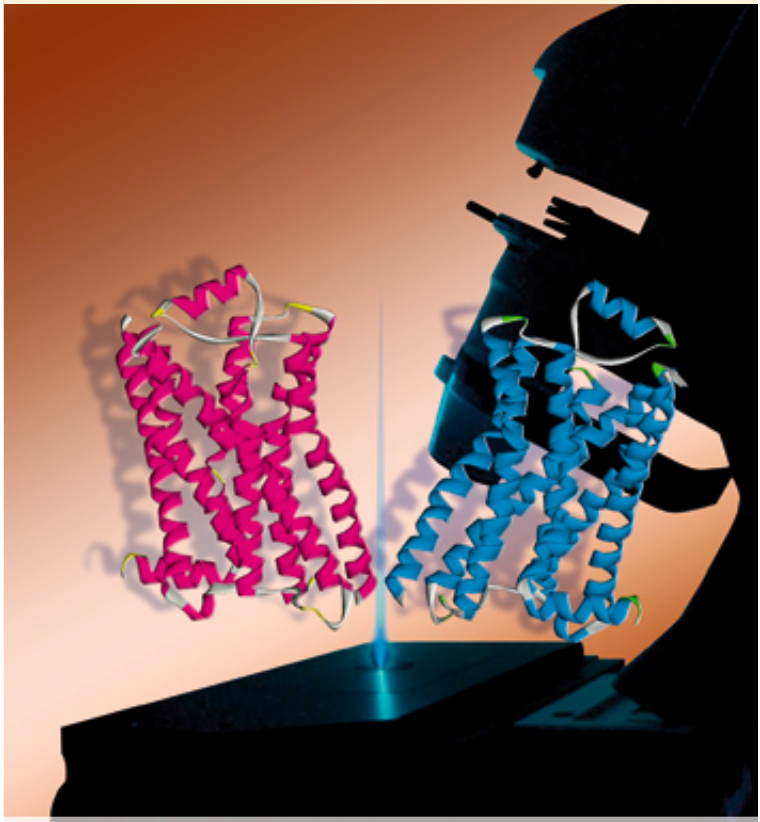
Dynamic Microscopy meets GPCR Dimer Research 2009

Workshop and Symposium

October 08-10, 2009



Rudolf Virchow Center/ DFG Research Center for Experimental Biomedicine and Bio-Imaging Center, University of Würzburg, Germany

Dynamic Microscopy 2009

Organizer: Gregory Harms

Thursday, October 08, 2009

General location for exhibitions, meals and refreshments: **Foyer**

09:00-16:00 **Vendor exhibition**
Zeiss, Nikon, Leica, PerkinElmer, Visitron Systems

Parallel vendor lectures

Lecture hall

10:30 Zeiss
11:00 Nikon
11:30 Leica

Seminar room, 1st floor

10:30 PerkinElmer
11:00 Visitron Systems

12:00-13:00 **Lunch break + Posters (1st floor)**

13:00-15:30 **Workshop Dynamic Microscopy,** Special courses
FRET Microscopy (Visitron Systems)
TIRF Microscopy (Zeiss)
TIRF and Confocal Microscopy (Nikon)
Spinning Disc Confocal Microscopy (PerkinElmer)
Deep Tissue Imaging (Bio-Imaging)-Microscopy lab

17:00 **Inauguration of the new building for the RVZ and ZINF/IMIB** (see separate program)

Friday, October 09, 2009

General location for exhibitions, meals and refreshments: **Foyer**

09:00-16:00 **Vendor exhibition**
Zeiss, Nikon, Leica, PerkinElmer, Visitron Systems

13:00-15:00 **Workshop Dynamic Microscopy,** Special courses
FLIM and FCS (Leica)-Microscopy lab
STED Microscopy (Leica)-Microscopy lab

Advances in Microscopy, 09 October, 2009 (Location: Lecture hall)

Vendor lectures

16:30 **High Resolution Microscopy: PALM,** Zeiss Microimaging

17:00 **High Sensitivity - Single Molecule Microscopy,** Leica Microsystems

GPCR Dimer Symposium

Organizer: Martin Lohse

Friday, October 09, 2009

General location: **Seminar room, 1st floor**

Introduction

09:00 **Martin Lohse**
Rudolf-Virchow-Zentrum, Würzburg
"Why receptor dimers?"

Techniques to study GPCR assemblies

09:30 **Michel Bouvier**
Université de Montréal
"Probing the multimeric assemblies of GPCR using multi-colour BRET and dual BRET/BiFC approaches"

10:15 **Roger Sunahara**
University of Michigan, Ann Arbor
„Modulation of high affinity ligand binding by G proteins"

11:00 **Coffee break (Foyer) + Posters**

11:30 **Moritz Bünemann**
Universität Würzburg/Marburg
"Stability and extent of receptor oligomerization analyzed by FRAP microscopy"

12:15 **Sergi Ferré**
National Institute on Drug Abuse, NIH, Bethesda
"Electrostatic interactions as key determinants of the quaternary structure of receptor heteromers"

13:00-14:00 **Lunch (Foyer) + Posters (1st floor)**

GPCR Dimers – yes or no, how or when?

14:00 **Philippe Deterre**
Université Pierre et Marie Curie, Paris
"Pharmacological evidences for GPCR dimers: a skeptical view"

Advances in Microscopy, 09 October, 2009 (Location: Lecture hall)

Inauguration of the STED Microscope

17:30 **High Resolution Microscopy: STED,** Leica Microsystems

Open House of Leica Microscope Systems – Bio-Imaging Center

14:45 **Klaus Peter Hofmann**
Campus Charité Mitte, Berlin
"Mechanism of signal transfer from receptor to G protein: the rhodopsin transducin model"

15:30 **Jean-Louis Banères**
Université Montpellier
"Receptor activation in a GPCR heterodimer"

16:15-16:30 **Coffee break (Foyer) + Posters (1st floor)**

GPCR Dimer Symposium

Organizer: Martin Lohse

Saturday, October 10, 2009

General location: **Seminar room, 1st floor**

Functional consequences of GPCR dimerization

09:00 **Jean-Philippe Pin**
INSERM CNRS, Montpellier
"Class C GPCR dimers and oligomers: role in G protein activation"

09:45 **Graeme Milligan**
University of Glasgow
"The role of GPCR dimerisation in cell surface delivery and trafficking"

10:30 **Coffee break (Foyer) + Posters (1st floor)**

11:00 **Rafael Franco**
Universitat de Barcelona
"Heteromer-based pharmacology in drug discovery"

11:45 **Lakshmi Devi**
Mount Sinai School of Medicine, NY
"GPCR dimerization: Implications in novel signaling and drug development"

12:30 **Concluding discussion**
"What experiments to do next?"

13:00 **Lunch (Foyer) + Posters (1st floor)**

Poster sessions of the Graduate School of Life Sciences will take place from October 08 to October 10 on the 1st floor.