Rudolf Virchow Zentrum

DFG-Forschungszentrum
für Experimentelle Biomedizin
der Universität Würzburg

October 8-10, 2009

GPCR Dimer Symposium & Dynamic Microscopy 2009, Würzburg

Organizers: Martin Lohse and Gregory Harms

Location: Rudolf Virchow Center, Gebäude D15

Josef-Schneider-Str. 2, 97080 Würzburg

Rudolf Virchow Zentrum

DFG-Forschungszentrum
für Experimentelle Biomedizin
der Universität Würzburg

Thursday, October 8, 2009 Dynamic Microscopy 2009

Organizer: Gregory Harms

9:00 – 16:00 **Vendor exhibition** *(Foyer):*
Leica, Nikon, Perkin Elmer, Visitron Systems, Zeiss

Parallel Vendor Lectures

	Lecture Hall:	**Seminar Room, 1st floor:**
10:30	Zeiss	Perkin-Elmer
11:00	Nikon	Visitron Systems
11:30	Leica	

12:00 – 13:00 *Lunch break (Foyer)*

Workshop Dynamic Microscopy, Special Courses:

October 8, 13:00 – 15:30:
FRET Microscopy (Visitron Systems) - *Foyer*
TIRF Microscopy (Zeiss) - *Foyer*
TIRF and Confocal Microscopy (Nikon) - *Foyer*
Spinning Disc Confocal Microscopy (Perkin Elmer) - *Foyer*
Deep Tissue Imaging (Bio-Imaging) - *Microscopy Lab*

October 9, 13:00 – 15:00:
FLIM and FCS (Leica) - *Microscopy Lab*
STED Microscopy (Leica) - *Microscopy Lab*

17:00 **Inauguration of the new building of the Rudolf-Vichow-Center *(Lecture Hall)***

Welcome:
Alfred Forchel, President of the University of Würzburg

Lectures:
Matthias Kleiner, President of the German Research Foundation, DFG
Wolfgang Heubisch, Bavarian State Minister of Sciences, Research and the Arts
Fritz Melchers, Scientific Advisory Board of the Rudolf-Virchow-Center

Handover of keys:
Dieter Maußner, Director, Building authority of the University of Würzburg

reception

Rudolf Virchow Zentrum

DFG-Forschungszentrum
für Experimentelle Biomedizin
der Universität Würzburg

Friday, October 9, 2009 **GPCR Dimer Symposium**
Organizer: Martin Lohse

Location: Seminar Room, 1st floor

Introduction

9.00 **Martin Lohse**, Rudolf-Virchow-Center, Würzburg
"Why receptor dimers?"

Techniques to study GPCR assemblies

9.30 **Michel Bouvier**, University of 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)*

11.30 **Moritz Bünemann**, University of Würzburg/Marburg
"Stability and extent of receptor oligomerization analyzed by FRAP microscopy"

12.15 **Sergi Ferre**, 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)*

GPCR Dimers – yes or no, how or when?

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

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**, University of Montpellier
"Receptor activation in a GPCR heterodimer"

16.15 – 16:30 *Coffee break (Foyer)*

Rudolf Virchow Zentrum

DFG-Forschungszentrum
für Experimentelle Biomedizin
der Universität Würzburg

Location: Lecture Hall

The advance in microscopy

16:30 High Resolution Microscopy: PALM, Zeiss Microimaging

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

17:30 **Inauguration of STED Microscope**

High Resolution Microscopy: STED, Leica Microsystems

Open House of Leica Microscope Systems – Bioimaging Center

Rudolf Virchow Zentrum

DFG-Forschungszentrum
für Experimentelle Biomedizin
der Universität Würzburg

Saturday, October 10, 2009 **GPCR Dimer Symposium**
Organizer: Martin Lohse

Location: Seminar Room, 1st floor

Functional consequences of GPCR dimerization

9:00	**Jean-Philippe Pin**, INSERM CNRS, Montpellier "Class C GPCR dimers and oligomers: role in G-protein activation"
9.45	**Graeme Milligan**, University of Glasgow "The role of GPCR dimerisation in cell surface delivery and trafficking"
10:30	*Coffee break*
11:00	**Rafael Franco**, Universitat de Barcelona "Heteromer-based pharmacology in drug discovery"
11.45	**Lakshmi A. Devi**, Mount Sinai School of Medicine, NY "G Protein-coupled Receptor Dimerization: Implications in Novel Signaling and Drug Development"
12.30	Concluding discussion: What experiments to do next
13.00	*Lunch*