

Saturday, November 28th (continued)

- 12.00 **In the quest for novel antivirals:  
From HIV-1 to HTLV-1 protease  
inhibitors**  
Wiebke Diederich, Marburg
- 12.35 **Pharmacological Inhibition of  
Cathepsin A is Cardioprotective in  
Myocardial Infarction-Induced  
Heart Failure**  
Oliver Schilling, Freiburg
- 13.05 **Lunch**
- Chair: **Bernd Engels**
- 14.00 **Production of bioactive  
substances: New reactor systems  
for the cultivation of cyano  
bacteria**  
Dorina Strieth, Kaiserslautern
- 14.25 **Vinylsulfone-based inhibitors of  
rhodesain**  
Sascha Jung, Mainz
- 14.50 **Ovastacin - fertility regulated by a  
cortical granule protease**  
Hagen Westphal, Mainz

**Concluding remarks &  
end of meeting**

Tanja Schirmeister / Walter Stöcker /  
Roland Stauber



Geb. 102, Hörsaal der HNO Klinik (H)

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November 27 & 28, 2015

**ChemBioMed V -  
Molecular Switches in  
Disease & Development**

**Symposium 2015  
Program**

Unser Wissen für Ihre Gesundheit



**UNIVERSITÄT**medizin.  
MAINZ

November 27 & 28, 2015

# ChemBioMed V - Molecular Switches in Disease & Development

Dear colleagues,

proteases play critical roles in numerous physiological and pathological conditions, including inflammation, viral infections, blood clotting disorders, neurological diseases, and cancer. Therefore, proteases are not only of academic and clinical interest, but also important drug targets for the pharmaceutical industry.

In this respect, natural products have been a source for important drugs for many years. Albeit their chemical complexity poses significant challenges regarding synthesis, it is this complexity, which also confers unique biological properties. To more successfully exploit this reservoir in the future interdisciplinary collaborations are needed.

Consequently, we invited a number of excellent speakers who will present lectures covering innovative targets, assay development and screening technologies and new compounds with activity in pre-clinical models or early clinical trials. The meeting addresses researchers from different scientific areas - medicine, chemistry, pharmacology, biology, chemoinformatics - sharing an interest in the interdisciplinary field of protease research and "Chemical BioMedicine".

We hope that as in our past symposiums, we will be able to bridge the gap between basic research and clinical application.

We are very happy to invite you to join us in Mainz for our transdisciplinary symposium.

With best regards,  
Tanja Schirmeister, Roland Stauber, Walter Stöcker

## Friday, November 27th

12.00 **Welcome-Lunch**

13.20 **Introduction**  
Roland Stauber, Mainz

**Chair: Tanja Schirmeister**

13.30 **ADAM17 in the Regulation of Inflammation and Cancer**  
Stephan Rose-John, Kiel

14.15 **Case studies in Covalent Docking and Virtual Screening using "Docktite"**  
Boris Schmidt, Darmstadt

14.50 **Novel Cathepsin B Inhibitors with Inversely Oriented Warheads**  
Michael Gütschow, Bonn

15.25 **Coffee Break**

**Chair: Hans Brandstetter**

16.15 **The search for ligand sensing cores: Using secondary structure element information in drug design**  
Oliver Koch, Dortmund

16.50 **Should I stay or should I go: Proton transfer revisited**  
Paul Czodrowsky, Merck

17.25 **ADAM8, a metalloprotease-disintegrin, as a versatile regulator of cellular invasion in inflammatory and neoplastic diseases**  
Jörg Bartsch, Marburg

18.45 **Science & Beer (Eisgrubbräu)**

## Saturday, November 28th

**Chair: Walter Stöcker**

09.20 **Targeting the Immunoproteasome by Bioactive Peptides**  
Michael Groll, München

09.55 **Covalent and non-covalent inhibitors of flaviviral proteases with affinity in nanomolar range**  
Christian Klein, Heidelberg

10.30 **Distinct legumain activities: mechanism of action, inhibition strategies and significance in neurodegeneration**  
Hans Brandstetter, Salzburg

11.05 **Coffee Break**

**Chair: Michael Groll**

11.25 **Lysosomes and lysosomal proteases shape the tumor microenvironment**  
Thomas Reinheckel, Freiburg