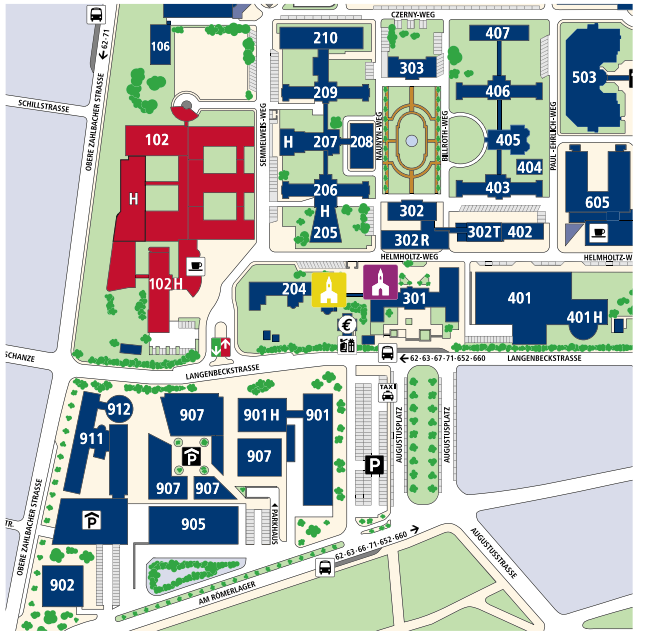
11.00	**Coffee break**
11.30	**Drug development of reversible covalently interacting protease inhibitors by means of QM, QM/MM and QM/MM MD** Bernd Engels, Würzburg
11.55	**Structural studies and inhibition of human furin** Manuel Than, Jena
12.20	**Proteomic analysis of cellular proteolysis: Biomedical applications** Oliver Schilling, Freiburg
12.45	**It's make or break: Meprin metalloproteases induce collagen assembly in fibrosis metalloproteases** Christoph Becker-Pauly, Kiel
13.10	**Lunch**
14.00	**Bioactive natural products from sponge-associated actinomycetes** Usama Ramadan Abdelmohsen, Würzburg
14.25	**Structure elucidation and total synthesis of bioactive natural products** Till Opatz, Mainz
14.50	**Who guards the guardians - New role for (matrix)-metalloproteinases in the context of immunologic regulation** Sven Fridrich, Mainz
15.10	**Taspase1: A protease with still unresolved depth** Désirée Wünsch, Mainz
15.30	**Closing remarks** Tanja Schirmeister & Walter Stöcker

Lageplan

Universitätsmedizin Mainz



Geb. 102/ EG H1-404, großer Hörsaal der HNO-Klinik

Universitätsmedizin
der Johannes Gutenberg-Universität Mainz,
Langenbeckstr. 1, 55131 Mainz

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December 13 & 14, 2013

ChemBioMed III - Disease Relevant Proteases

Ligands from Nature and from Rational Design

Unser Wissen für Ihre Gesundheit

JG|U UNIVERSITÄTSmedizin. MAINZ

December 13 & 14, 2013

ChemBioMed III - Disease Relevant Proteases

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, December 13th

12.00 **Welcome-Lunch**

13.00 **Opening & Welcome**
Otto Boehringer

Introduction
Roland Stauber

13.15 **Systems pharmacology: An integration of cell and computational biology for drug discovery**
Eugenio Fava, Bonn

13.40 **New ways to inhibit enzymes by protein surface binding - A case study with ß-tryptase**
Carsten Schmuck, Duisburg-Essen

14.05 **Azapeptide nitriles as inhibitors of human cathepsins**
Michael Gütschow, Bonn

14.30 **European lead factory: An open innovation approach to drug discovery**
Dimitrios Tzalis, Dortmund

15.00 **Coffee break**

15.30 **Myxobacteria - Natural compounds, mechanisms, enzymes**
Carsten Volz, Saarbrücken

15.55 **Fungal secondary metabolites - Highly diverse compounds as lead structures in pharma and agrochemical research**
Eckardt Thines, Mainz

16.20 **Functional and structural constraints involved in coronavirus 3C-like protease-mediated polyprotein processing**
John Ziebuhr, Gießen

16.45 **Medicinal chemistry of dengue virus protease**
Christian Klein, Heidelberg

17.10 **Phosphinic peptide inhibitors as tools to probe zinc-metalloprotease function: Past and future**
Vincent Dive, Paris

19.00 **Excursion and dinner Kupferbergterrassen**

Saturday, December 14

09.15 **Exploiting nature's rich source of proteasome inhibitors as starting points in drug development**
Michael Groll, München

09.40 **Potent and specific peptide inhibitors of human matriptase by design and evolution**
Harald Kolmar, Darmstadt

10.05 **Regulation of foamy virus protease by viral RNA-Gag p71/p68 cleavage is required for template switch of reverse transcriptase**
Jochen Bodem, Würzburg

10.30 **Argyrin F- A new type of proteasome inhibitor for the treatment of solid tumors**
Nisar Malek, Tübingen