

# Program

**Wednesday (May, 26<sup>th</sup>)**

**Location Moritzburg Castle**

17.00 to 19.00      **Reception Desk open**

**Reception**

19.00                      Opening Remarks by Prof. Dr. Hans-Ulrich Demuth

19.00 to 22.00      **Welcome Reception at Moritzburg Castle**  
Guided tour through art exhibition possible  
(see <http://stiftung-moritzburg.de>)

**Thursday (May, 27<sup>th</sup>)**

**Location K&K Congress Centre and Dormero Hotel (former Kempinski Hotel)**

08.00           **Reception Desk open**

**Dipeptidyl peptidases 4 and related proteins**

*Substrates and Physiological Functions (Garden saloon – Gartensaal)*

*Chair:*           **Dirk Reinhold**

- 08.30           Siegfried Ansorge, IMTM, Magdeburg  
                   Novel aspects of cellular action of dipeptidyl peptidase IV/CD26
- 09.10           Eric Grouzman, University of Lausanne  
                   Novel evidences that physiological functions of peptides are  
                   regulated by dipeptidyl peptidase 4
- 09.40           Leona Wagner, Probiobdrug AG, Halle  
                   Dipeptidyl peptidase 4 (DP 4) and neuropeptide Y (NPY): A novel  
                   pharmaceutical target against stress?
- 10.00           Ute Bank, IMTM, Magdeburg  
                   Outside or inside - that is the question! DASH enzymes in  
                   immune cell function

10.20 to 10.50   **Coffee Break and Poster Viewing (Main hall - Festsaal)**

*Role in Diseases (Garden saloon - Gartensaal)*

*Chair:*           **Ute Bank**

- 10.50           Brigitte Huber, Tufts University Boston  
                   The role of DPP2 in controlling glucose metabolism and obesity
- 11.20           Dirk Reinhold, Otto-von Guericke, University of Magdeburg  
                   On the immune modulatory function of dipeptidyl peptidase IV-  
                   like peptidases in T lymphocyte activation
- 11.50           Ernst-Joachim Freyse, IDK, Karlsburg  
                   DPP-4 inhibition reveals different actions of GIP and GLP-1  
                   during IVGTT in a Wistar rat model
- 12.10           Stephan von Hörsten, Franz-Petzoldt-Center, University of Erlangen  
                   DP4 in allergic-like immune regulation

12.30 to 13.30   **Lunch Buffet (Main hall - Festsaal)**

13.30 to 14.30   **Poster Discussion - Dipeptidyl Peptidase 4 and Related  
 Enzymes (Main hall - Festsaal)**

*Structures and Inhibitors of Proline Specific Peptidases (Garden saloon - Gartensaal)*

**Chair: Vilmos Fülöp, Ulrich Heiser**

- 14.30 Vilmos Fülöp, University of Warwick  
 Oligopeptidases in peptide processing memory disorders and pathogen virulence
- 15.00 Ulrich Heiser, Probiodrug AG, Halle  
 Different approaches leading to new inhibitors of DP4
- 15.30 André J. Niestroj, Probiodrug AG, Halle  
 Design of a new class of inhibitors for PEP
- 15.50 Alex Bunker, University of Helsinki  
 Extensive simulation of prolyl oligopeptidase with ZPP inhibitor
- 16.10 David Ruiz Carrillo, Martin-Luther-University of Halle  
 2.3 Å X-ray structure of dipeptidyl peptidase 2

16.30 to 17.00 **Coffee Break and Poster Viewing (Main hall - Festsaal)**

*Physiological function of the DP4-like enzymes DP9 and FAP- $\alpha$  (Garden saloon - Gartensaal)*

**Chair: Ingrid de Meester**

- 17.00 Ingrid de Meester, University of Antwerpen  
 Dipeptidyl peptidase 9 (DPP9): a few answers and many questions
- 17:30 Ruth Geiss-Friedländer, University of Göttingen  
 The cytoplasmic peptidase DPP9 is rate-limiting for degradation of proline-containing peptides
- 17.50 Rolf Mentlein, University of Kiel  
 Expression and role of the cell surface protease seprase / fibroblast activation protein- $\alpha$  (FAP- $\alpha$ ) in astroglial tumors
- 18.10 Fiona M. Keane, University of Sidney  
 Detecting fibroblast activation protein (FAP) enzyme activity
- 18.50 End of session
- 20.00 **Conference Dinner at Dormero Hotel (Main hall - Festsaal)**

**Friday (May, 28<sup>th</sup>)**

**Location K&K Congress Centre and Dormero Hotel**

08.00           **Reception Desk open**

**Prolyl- and related Endopeptidases**

*Structures / Substrates / Inhibitors (Garden saloon - Gartensaal)*

*Chairs:*           **John Creemers, Arturo Garcia-Horsman**

08.30           John Creemers, K.U. Leuven  
                   The role of prolyl oligopeptidase and related enzymes in brain  
                   function and dysfunction

09.10           Arturo Garcia-Horsman, University of Helsinki  
                   Prolyl oligopeptidase in the neuron biology

09.40           Theresa Tarrago, Institute for Research in Biomedicine, Barcelona  
                   Labeling strategies to study POP-ligand interactions by NMR

10.05           Zoltan Szeltner, Hungarian Academy of Sciences, Budapest  
                   GAP43 shows partial co-localisation but no strong physical  
                   interaction with prolyl oligopeptidase

10.30 to 11.00       **Coffee Break and Poster Viewing (Main hall - Festsaal)**

*Health / Disease / Animal models (Garden saloon - Gartensaal)*

*Chairs:*           **Steffen Rossner, Markus Forsberg**

11.00           Markus Forsberg, University of Kuopio  
                   Pharmacology of prolyl oligopeptidase inhibitors in the rat

11.30           Anne Mudge, MRC Laboratory for Cell Biology, London  
                   Prolyl oligopeptidase functions in neurons without its peptidase  
                   activity

12.00           Timo Myöhänen, University of Antwerp  
                   The inhibition of prolyl oligopeptidase reduces  $\alpha$ -synuclein in  
                   A30P mutated cells

12.20           Markus Morawski  
                   Subcellular localization of PREP and PREPL in neuronal cells  
                   suggests functions in intracellular transport and protein secretion

12.40 to 13.30       **Lunch Buffet (Main hall - Festsaal)**

13.30 to 14.30       **Poster Discussion – Prolylendopeptidases and  
 Glutaminylcyclases (Main hall - Festsaal)**

## Glutaminyl Cyclase and Oxoprolinyl (Pyroglutamate) Formation

*N-truncated and Pyroglutamate-modified peptides in Alzheimer's Disease (Garden Saloon - Gartensaal)*

**Chairs: Cynthia Lemere, Makoto Higuchi**

- 14.30 Takaomi Saido, Riken Brain Science Institute, Wako-shi, Saitama  
N-terminal structure of amyloid- $\beta$  peptide, A $\beta$ X-42, determines its metabolic fate in brain
- 14.50 Hans-Ulrich Demuth, Probiodrug AG, Halle  
Inhibition of Glutaminyl Cyclase(s) - new drug targets of Alzheimer's therapy
- 15.10 Steffen Rossner, University of Leipzig  
Distinct glutaminyl cyclase expression in Edinger-Westphal nucleus, locus coeruleus and nucleus basalis Meynert contributes to pGlu-A $\beta$  pathology in Alzheimer's disease
- 15.30 Thomas Bayer, University of Göttingen  
Intraneuronal A $\beta$  accumulation a new concept for a modified amyloid hypothesis – can this be translated into human Alzheimer pathology?
- 15.50 Frédéric Checler, Institut de Pharmacologie Moléculaire et Cellulaire, Valbonne  
Amyloid  $\beta$ -peptides truncation: enzymes and functional consequences
- 16.10 Roland Brandt, University of Osnabrück  
Live cell imaging to study the amyloid cascade hypothesis
- 16.30 to 17.00 **Coffee Break and Poster Viewing (Main hall - Festsaal)**
- 17.00 Dagmar Schlenzig, Probiodrug AG, Halle  
Formation of pyroglutamic acid in amyloid peptides – Influence on biophysical and biochemical properties
- 17.20 Cynthia Lemere, BWH, Harvard Medical School, Boston  
pyroGlu-3 Abeta immunoreactivity and immunotherapy

*Pyroglutamate-modified Peptides in Physiology and (Neuro) Inflammation (Garden saloon - Gartensaal)*

**Chairs: Takaomi Saido, Hans-Ulrich Demuth**

- 17.40 Makoto Higuchi, National Institute of Radiological Sciences, Chiba  
Molecular interlinks between neurotoxic amyloidosis and neuroinflammation revealed by in vivo imaging of animals modeling Alzheimer's disease
- 18.00 Stephan Schilling, Probiodrug AG, Halle  
Glutaminyl cyclase (QC) knock-out mice are physiologically and cognitively Normal: Implications for drug development

- 18.20 Holger Cynis, Probiodrug AG, Halle  
Role of glutaminyl cyclases in inflammation
- 18.40 Walter Halangk, University of Magdeburg  
Inhibition of glutaminyl cyclase (QC) attenuates taurocholate-  
induced pancreatitis in mice
- 19.00 End of session

**Internal NEUROPRO MEETING (Halorensaal)**

14.30 – 19.00

- 20.00 **Farewell party at G. F. Händel's Birthplace (Händelhaus)**

**Saturday (May, 29<sup>th</sup>)**

End of Meeting, Departure