

# **Preliminary Program**9th Austrian Peptide Symposium



5<sup>th</sup> of December 2019 Van Swieten Saal (Van-Swieten-Gasse 1a, 1090 Vienna)



8:00 - 9:00	Registration and mounting of posters (Foyer and Van Swieten Saal)
9:00 - 10:30	Session 1: Peptide Tools
	Chair: Christian Becker (University of Vienna)
9:00 – 9:30	Dorothea Fiedler (FMP Berlin, Germany)
	Inositol pyrophosphate signaling revealed with chemical tools
9:30 - 10:00	Markus Seeger (University of Zurich, Switzerland)
	Flycodes and NestLink – a barcoding peptide library designed for optimal detection by mass spectrometry facilitates novel types of antibody selections
10:00 – 10:30	Andreas Bernkop-Schnürch (University of Innsbruck, Austria) Oral delivery of peptide drugs: Hurdles, challenges and future trends
10:30 - 11:00	Coffee Break (Van Swieten Saal)
11:00 - 12:00	Session 2: Protein Synthesis and Structure
	Chair: Christian Gruber (Medical University of Vienna)
11:00 - 11:20	Eric Schrader (Bachem AG, Switzerland)
	Fluorescently-Labeled Peptides – Choosing the Best Dye and Designing the Best Peptide
11:20 - 11:50	Jeff Bode (ETH Zürich, Switzerland)
	Tailor made proteins by synthesis and conjugation
11:50 – 12:20	Mario Schubert (University of Salzburg, Austria) Identification of protein modifications by NMR spectroscopy
12:20	Group Photo
12:25 – 13:00	Lunch Break
	Lunch buffet - Van Swieten Saal
13:00 - 14:15	Poster Session and Industry Presentations (Fover)





















14:15 – 15:45	Session 3: Hot Topics in Peptide Science - Oral Contributions Selected from Submitted Abstracts
	Chair: Markus Muttenthaler (University of Vienna)
14:15 - 14:30	Friedrich Bialas (University of Vienna, Austria)
	Membrane protein encapsulation using silica-precipitating beta-strand peptides
14:30 – 14:45	Susanne Brunner (Paracelsus Medical University Salzburg, Austria) Intranasal application of a lanthionine-stabilized galanin receptor 2 agonist
14:45 - 15:00	Edin Muratspahic (Medical University of Vienna, Austria)
	Are cyclotides a secret recipe for the treatment of pain?
15:00 – 15:15	Ratmir Derda (University of Alberta, Canada)
	Genetically-Encoded Technology in Chemical Biology in Drug Lead Discovery
15:15 – 15:30	Thomas Kremsmayr (University of Vienna, Austria)
45.00 45.45	Exploring natural scaffolds to engineer gut-stable peptide ligands
15:30 – 15:45	Lisa Schindler (University of Regensburg, Germany)
	Metabolically stabilized neurotensin(8-13) derivatives: 68Ga-labeling via carbamoylated arginines give NTS1R PET ligands with high receptor affinity
15:45 – 16:15	Coffee Break (Van Swieten Saal)
16:15 – 18:00	Session 4: Chromatin Structure and Bioanalytics
	Chair: Chiara Cabrele (University of Salzburg)
16:15 – 16:45	Champak Chatterjee (University of Washington, USA)
	Clarifying the complexity of chromatin regulation with peptide chemistry
16:45 – 17:15	Beat Fierz (EPFL, Lausanne, Switzerland)
10.45 17.15	· · · · · · · · · · · · · · · · · · ·
	A synthetic and single-molecule exploration of the dynamic chromatin landscape
17:15 – 17:35	· · · · · · · · · · · · · · · · · · ·
17:15 – 17:35	A synthetic and single-molecule exploration of the dynamic chromatin landscape  Monika Swiontek (CEM GmbH):  An improved green one-pot process for Fmoc SPPS
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Buffet dinner provided

The meeting is held under the auspices of the European Peptide Society
We would like to thank our sponsors for this event:























# **Poster Presentations**

# 1. Adam Konieczny, University of Regensburg

N-terminus to side-chain cyclization of linear peptidic neuropeptide Y Y4 receptor ligands results in picomolar receptor affinities

# 2. Roland Hellinger, Medical University of Vienna

A structure activity study for the antiproliferative peptide T20K

## 3. Jannis Beutel, Friedrich-Alexander Universität Erlangen-Nürnberg

Stability analysis of a heterodimeric E3/K3 coiled coil

# 4. Christof Mitterer, PharmaFluidics, Belgium

Micro Pillar Array Columns (μPAC™): A novel robust chromatography platform for deep and reproducible proteome Coverage

# 5. Bernhard Retzl, Medical University of Vienna

Isolation and characterization of a knotted trypsin inhibitor from beetroot

# 6. Iraj Behroz, Technical University of Berlin

Extensive Structure-Activity Relationship Study of Albicidin's C-Terminal Dipeptidic p-Aminobenzoic Acid Moiety

## 7. Kirtikumar B. Jadhav, University of Vienna

Recombinant and chemical synthesis of hTFF2 protein: Status and prospects"

## 8. Claudia Cobos Caceres, University of Vienna

Development of Peptides as Potential Drug Leads for the Treatment of Inflammatory Bowel Diseases

## 9. Leopold Dürrauer, University of Vienna

18-Arachnotocin – a biased ligand to study beta-arrestin-2 function at the human vasopressin V2 receptor

## Xabier Guarrochena, Ludwig Boltzmann Institute Applied Diagnostics, Vienna

Enhancing the Metabolic Stability of Peptide-Based Radiotracers by Amide-to-Triazole Substitutions

# 11. Jasmin Gattringer, Medical University of Vienna

Discovery of nature-derived oxytocin and vasopressin peptides

## 12. Carolina Giammei, Ludwig Boltzmann Institute Applied Diagnostics, Vienna

Glycated [99mTc]Tc-Labeled Bombesin Conjugate for Improved Pharmacokinetics in Tumor Diagnosis

## 13. Kay Hommernick, Leonardo Kleebauer, Technical University of Berlin

Structure optimization of Albicidin, a new antibacterial lead structure

# 14. Estelle Juere, University of Vienna

Toward oral delivery of insulin using protein-based formulation of porous silica nanoparticles

# 15. Nedra Jouini, Ludwig Boltzmann Institute Applied Diagnostics, Vienna

Unexpected Fragmentation of an Oligopeptide Containing N-Methylated Amino Acids

## 16. Caroline Knittel, Technical University of Berlin

Enantioselective synthesis of the non-proteinogenic amino acid (3R,4R)-L-4,5-dihydroxyisoleucine

# 17. Roman Lichtenecker, University of Vienna

New aspects and applications of protein isotope labeling

## 18. Arthur Hinterholzer, University of Salzburg

Detection and quantification of post translational modifications in biopharmaceuticals with NMR-spectroscopy





















# **Poster Presentations**

# 19. Lukas Kerul, University of Vienna

Synthesis of Granulocyte Colony-Stimulating Factor

# 20. Lisa-Maria Recnik, Ludwig Boltzmann Institute of Applied Diagnostics, Vienna

A Brief Summary of Triazolopeptides as Stabilised Radiotracers

# 21. Mary-Ann Siegert, Technical University of Berlin

Enantioselective synthesis of the amino acid L-6-hydroxytryptophan

# 22. Vesna Stanojlovic, University of Salzburg

Application of beta-hairpin scaffolds for the development of agonists of bone morphogenic protein 2

## 23. Maximilian Schrems, University of Vienna

A photocleavable linker for peptide solubilization or drug delivery

# 24. Thomas Schlatzer, Technical University of Graz

Site-Selective Bioconjugation via Palladium-Mediated Allylation of Cysteine

# 25. Olalla Vazquez, University of Marburg

Photoswitchable Peptides as Tools for Controlling Epigenetic States

## 26. Julia Kriegesmann, University of Vienna

Pd-mediated modification of cysteine-containing peptides and proteins

# 27. Somnath Mukherjee, University of Vienna

Impact of site-specific non-enzymatic posttranslational modification on the structure-activity attributes of human Heat Shock Protein 27 (Hsp27)

## 28. Daniela Reichinger, University of Vienna

Silica encapsulated RRIL peptide-antigen conjugates as vaccine delivery vehicles"

## 29. Alanca Schmid, University of Vienna

Synthesis of Homogeneously Glycosylated Soluble Fas Ligand Variants

## 30. Dominik Vogl, University of Vienna

Zooming in on the Central Repeat Domain of Tau4 by Protein Semisynthesis

#### 31. Colin Dunsmore, Almac Sciences, UK

Solid Phase Peptide Synthesis of Full Length Modified Histones

# 32. Andrew Kennedy, GyrosProtein Technologies

Fast Solid Phase Peptide Synthesis Method Development for the Synthesis of Sterically hindered Peptides

# 33. Edin Muratspahic, Medical University of Vienna

Are cyclotides a secret recipe for the treatment of pain?

## 34. Abhishek Iyer, EnzyTag

Peptiligase, a versatile enzyme for peptide and protein synthesis













