

Program 11th Austrian Peptide Symposium



1st of December 2022



8:00 - 9:00	Registration and	mounting of	posters (Fo	yer)
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9:00 - 10:15	Session 1: Peptide chemistry and chemical biology
	Chair: Christian Becker (University of Vienna)
9:00 - 9:30	Pedro Gois (University of Lisbon, Portugal):
	"N-Terminal Cysteine: A Hot-Spot for Bioconjugation"
9:30 - 10:00	Luc Brunsveld (University of Eindhoven, The Netherlands):
	"Cooperativity in protein-protein interaction stabilization; a guiding
	principle in molecular glue development"
10:00 - 10:15	Monika Swiontek (CEM, Germany):

"Ultra-Efficient Solid Phase Peptide Synthesis (UE-SPPS)"

10:15 – 10:45 Coffee break (Foyer and Hall)

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Chair: Christian Gruber (Medical University of Vienna)
Helena Safavi (University of Copenhagen, Denmark):
"Evolutionary-optimized peptide ligands from cone snail venoms"
Meritxell Canals (University of Nottingham, UK):
"Ligand-dependent regulation of mu-opioid receptors"

Manuela Schmidt (University of Vienna, Austria):

10:45 - 12:15 Session 2: Peptide physiology and pharmacology

"The protein landscape of chronic pain"

12:15 Group photo

12:15 – 12:45 Lunch break

11:45 - 12:15

Lunch buffet in the Van Swieten Hall

12:45 – 14:00 Poster session and industry presentations (Foyer and Hall)



The European Peptide Society

















14:00 – 15:30	Session 3: Hot topics in peptide science - Oral contributions
	selected from submitted abstracts

Chair: Anne Conibear (TU Vienna, Austria)

14:00 – 14:15 **Mirja Harms** (University of Ulm, Germany):

"Preclinical development of the endogenous CXCR4 antagonist EPI-X4"

14:15 – 14:30 Andrea Tagliani (University of Milan, Italy):

"Leveraging the biotechnological potential of combinatorial libraries of

cyclic peptides"

14:30 – 14:45 Roman Lichtenecker (University of Vienna, Austria):

"The prolific synergy of selective protein labeling and biomolecular NMR

spectroscopy"

14:45 – 15:00 **Monika Perisic** (University of Vienna, Austria):

"Fluorescent peptide tracers for oxytocin receptor visualization"

15:00 – 15:15 **Kevin Neumann** (Radboud University, The Netherlands):

"Cyanoylides: A new class of protecting groups in peptide chemistry"

15:15 – 15:30 Natasa Tomasevic (Medical University of Vienna, Austria):

"Circular peptides as new class of cannabinoid type 2 receptor ligands"

15:30 – 16:00 Coffee break (Foyer and Hall)

16:00 - 18:00 Session 4: Peptide synthesis

Chair: Sandro Keller (University of Graz)

16:00 – 16:30 **Andrei Yudin** (University Toronto, Canada):

"Development of synthetic methods to access peptide macrocycles"

16:30 – 16:45 Mariana Damian (Biotage):

"Biotage solutions to speed up the peptide synthesis workflow"

16:45 – 17:00 **Victoire Laude** (Vapourtec):

"Synthesis of peptide in continuous flow: from optimisation to scale-up"

17:00 – 17:30 **Thomas Mindt** (University of Vienna, Austria):

"Metabolically stabilized triazolo-peptidomimetics for tumor targeting"

17:30 – 18:00 **BACHEM AWARD: Charalampos Pappas** (University of Freiburg):

"A Systems Chemistry Approach Towards Life-like Peptide Assemblies"

18:00 – 18:15 Poster prizes and closing remarks

18:15 - 22:00 Dinner, wine tasting and networking party

Buffet provided in the Van-Swieten Hall Wine tasting by Michaela Jöbstl (Langenlois)

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























Poster Presentations:

	#	Presenter	Affiliation	Titel
	1	Marko Bak	Üniversity of Rijeka	Esterase sequence composition patterns as inspiration for the design of short catalytic peptides
	2	Xabier Guarrochena	University of Vienna	Amide-to-triazole switch for the stabilization of somatostatin-based radiotracers
	3	Nermina	University of Graz	Activity profiles as preliminary mode of action
		Malanovic		screening for novel antimicrobial peptides
	4	Ludovica Martina Epasto	University of Vienna	Elucidation of the MYC:MAX:DNA transcriptional complex formation through real-time NMR
				spectroscopy
	5	Somnath Mukherjee	University of Vienna	Site-specific glycation of human Heat Shock Protein (Hsp27) enhances its chaperone activity
	6	Toluwanimi	Medical University of	Identification of cyclotides from Spigelia anthelmia
		Akinleye	Vienna	(Loganiaceae)
	7	Maria-Cora Tulban	Medical University of	Pharmacological characterization of signaling links
			Vienna	between the oxytocin receptor and
				calcium/calmodulin kinase II
	8	Fanny Kozak	University of Vienna	Silaffin 1A ₁ and Silicifying Peptide R5: Insights to the
				Processes of Tailored Silica Precipitation
	9	Marko Njirjak	University of Rijeka	Genetic algorithm-enhanced parallel chemical space exploration utilising multiple peptide libraries
	10	Bernhard Jandl	University of Vienna	Chemical strategies to target mucosal biofilms in patients with gastrointestinal disorders
	11	Sarah Kratzwald	Mag-Lab	Novel isotopologues of amino acids and amino acid
		Sarair Kratzwaia	Mag Lab	precursors for protein NMR applications
	12	Barbara Kofler	Paracelsus Medical	Dysregulation of the galanin system in patients with
			University Salzburg	cholangitis and cholangiocarcinoma
	13	Dominik Vogl	University of Vienna	Exploring semisynthetic, segmentally isotope labelled Tau4 at atomic resolution
	14	Dörte Brandis	University of Vienna	NMR method to access the dynamic structure of
				hybrid peptide/inorganic pre-nucleation species
	15	Paula Schwarz	Medical University of Vienna	Nature-derived peptide inhibitors of prolyl oligopeptidase modulate T-cell proliferation
	16	Jasmin Gattringer	Medical University of	Cyclic peptides as modulators of transendothelial
	10	Jasiiiii Gattiiigei	Vienna	immune cell migration
	17	Roland Hellinger	Medical University of	Multiplexed neuropeptide mapping in ant brains:
	Δ,	notatio reminger	Vienna	Microtomography and 3D mass spectrometry
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Poster Presentations (continued):

#	Presenter	Affiliation	Titel
18	Maria Elisabetta D'Angelo	University of Milan	Leveraging the biotechnological potential of combinatorial libraries of cyclic peptides
19	Monica Alexander Sylvester	Dr Sulaiman Al Habib Hospital	Upconversion nanoparticle-mediated optogenetics as a potential
			therapy for epilepsy
20	Oliver Belleza	Medical University of	Cone snail venom peptides as selective allosteric
		Vienna	modulators of the
			noroninonhrino transportor
21	Maximilian	University of Vienna	norepinephrine transporter
21	Schrems	University of Vienna	A selenium-based ligation-auxiliary for traceless peptide ligations
22	Konstantin Raabe	University of Vienna	Photoactivatable probes to study long-term memory
22	KONStantin Naabe	Offiversity of Vietina	formation
23	Oliver Gajsek	University of Vienna	The impact of posttranslational modification on
23	Onver Gujsek	oniversity of vicinia	function and structure of heat shock protein 90
24	Leopold Duerrauer	University of Vienna	Investigating IgM Assembly on the molecular level
25	Hannah Back	University of Vienna	Investigation of novel immune system engagers
		,	(ISErs)
26	Fabian Ertl	University of	Synthesis and characterization of fluorescently
		Regensburg	labelled NT ₍₈₋₁₃₎ derivatives
27	Jakob Gleixner	University of	UR-JG114 - a new fluorescent oligopeptidic Y4R
		Regensburg	ligand with high binding affinity
28	Rita Fürst	Graz University of	Development of selective MMP-13 inhibitors based
		Technology	on a triple helical peptide FRET assay
29	Sara Huber	Paracelsus Medical	Galanin receptor 2/3 knockout mice shown an
		University Salzburg	altered immune response in peritonitis
30	Patrizia	Unawenrsktyoof√Rijeka	Esterase-inspired short catalytic peptides with tunable activity
31	Christoph Jung	Karlsruhe Institute of	Generating improved VIRIP-based HIV-1 gp41 FP
	1 0	Technology	inhibitors utilizing high precision atomistic modeling
32	Terézia Morávková	University of Vienna	Triggering the function of yeasts by light
33	Erik Otov	University of Rijeka	Transfer learning for improved peptide activity
			prediction on small dataset
34	Mario Schubert	University of Salzburg	A conformationally stable acyclic hairpin scaffold
			that tolerates the incorporation of poorly -sheet- prone amino acids















