## 16th German Peptide Symposium Jena

Address: Friedrich Schiller University, Central Campus, Ernst-Abbe-Platz 3, Hörsaal 2

Conference bureau and exhibition area are located in the foyer, in front of the lecture hall

All information available until Aug 23, 12:00h is included in this program.

## Program Day 1 (Aug 28, 2023)

Time	
12:00-13:30h	Arrival, registration, coffee
13:30h	Prof. Dr. Hans-Dieter Arndt, FSU Jena
	Official opening of the conference
13:35h	Prof. Dr. Georg Pohnert, vice president for research, FSU Jena
	Welcome address
13:40-13:55h	em. Prof. Dr. Siegmund Reißmann, FSU Jena
	Peptide Science in Germany: From Emil Fischer & Theodor Curtius to the Recent Generation
	short break
14:00h-14:55h	Plenary Lecture: Prof. Dr. Hiroaki Suga, U Tokyo
	De novo discovery of pseudo-natural peptides, products, and beyond
	short break
	Topic Area 1: Peptides and Organisms (Chair: Hans-Dieter Arndt, FSU Jena)
15:00h-15:40h	Keynote Lecture: Prof. Dr. Helena Safavi, U Utah
	Venom-inspired design of novel insulin therapeutics
15:40-16:00h	Prof. Dr. Oliver Zerbe, U Zurich
	Peptidomimetic Antibiotics Disrupt the Lipopolysaccharide Transport Bridge of Drug-Resistant
	Enterobacteriaceae
16:00-16:20h	Prof. Dr. Pierre Stallforth, FSU Jena
	Natural Products From Interacting Microorganisms and Ancient Microbiomes
16:20-16:40h	Coffee, refreshments
16:40-17:00h	Prof. Dr. Florian Seebeck, U Basel
	Methyltransferases as emerging tools in the synthesis of complex biomolecules
17:00-17:20h	Prof. Dr. Markus Kaiser, U Duisburg-Essen
	The anti-tubercular callyaerins target the membrane protein Rv2113 in M. tuberculosis
17:20-18:00h	Keynote Lecture: Prof. Dr. Helge Bode, MPI-TM, Marburg
	Peptide production in high-throughput via engineering of non-ribosomal peptide synthetases
18:00h	Short talk 1: Dr. Christian Behn, CEM GmbH, Kamplintfort
18:05h	Short talk 2: M. Sc. Silan Toy, GAU Göttingen
18:10h	Short talk 3: M. Sc. Lucas Weissenborn, FAU Erlangen-Nürnberg
18:15h	Short talk 4: Prof. Dr. Stefan Schuster, FSU Jena
18:20h	Short talk 5: M. Sc. Nina Schmidt, PU Marburg
18:25h	Short talk 6: Dr. Markus Lakemeyer, FSU Jena
18:30-20:00h	Poster Session A (with refreshments)
from 20:00h	Barbecue (directly at the Campus, in front of lecture hall)

# 16th German Peptide Symposium Program, Day 2 (Aug 29, 2023)

Time	
8:15h	Gettogether, registration, coffee
	Topic Area 2: Design and Methods (Chair: Olalla Vázquez, PU Marburg)
8:40-9:20h	Keynote Lecture: Prof. Dr. Oliver Seitz, HU Berlin
	Native Chemical Ligation Chemistry for the Synthesis of Multiglyco- and -phosphopeptides
9:20-9:40h	Dr. Wolfgang Rapp, Rapp Polymere GmbH, Tübingen
	Circumventing peptide aggregation in SPPS: high swelling vs standard resins. A comparison
9:40-10:00h	Prof. Dr. Thorsten Steinmetzer, PU Marburg
	Structure-based design, synthesis, and characterization of macrocyclic plasmin inhibitors
10:00-10:20h	Prof. Dr. Sereina Riniker, ETH Zurich
	What computer simulations can tell about structure-permeability relations of cyclic peptides
10:20-10:40h	Coffee, refreshments
10:40-11:00h	Prof. Dr. Armin Geyer, PU Marburg
	Natural and designed peptides with extra side-chain functional groups
11:00-11:20h	Prof. Dr. Jörg Rademann, FU Berlin
	Pentafluorophosphates: Amphiphilic Biomimetics of Phosphopeptides and Phosphoproteins?
11:20-11:40h	Dr. Peter 't Hart, MPI-MP, Dortmund
	Photochemical late-stage functionalization of peptides on solid phase
11:40-12:20h	Keynote Lecture: Prof. Dr. Juan Granja, U Santiago de Compostela
	Light-induced dynamic cyclic peptide nanotubes
12:20-13:40h	Lunch break (individually)
	Topic Area 3: Structure and Function (Chair: Ute Hellmich, FSU Jena)
13:40-14:20h	Keynote Lecture: Prof. Dr. Stefan Raunser, MPI-MP, Dortmund
	In situ structures of muscle sarcomere and sarcomeric proteins
14:20-14:40h	Prof. Dr. Ines Neundorf, U Cologne
44 40 45 001	Tailoring membrane-active peptides to exert their efficacy at the right spot
14:40-15:00h	Dr. Daniel Tietze, U Gothenburg
15:00-15:20h	Substrate-Derived Sortase A Inhibitors: Targeting Antimicrobial Resistance Coffee, refreshments
15:20-15:40h	LIFE guest lecture: Prof. Dr. Arun Shukla, IIT Kanpur
15.20-15.4011	Structural and functional insights into complement receptor activation and signaling by
	peptide agonists
15:40-16:00h	Jun. Prof. Dr. Franziska Thomas, RKU Heidelberg
15.40 10.0011	Design of organophosphate-binding mini-proteins from WW domains
16:00-16:40h	Keynote lecture: Prof. Dr. Markus Weingarth, U Utrecht
20100 2011011	The Mechanisms of Lipid-targeting Antibiotics
16:40h	Short talk 7: Dr. Robert Zitterbart, Gyros Protein Technologies, Berlin
16:45h	Short talk 8: Dr. Marta Barniol-Xicota, PFU Barcelona
16:50h	Short talk 9: M. Sc. Truc Lam Pham, RKU Heidelberg
16:55h	Short talk 10: M. Sc. Van Tuan Trinh, PU Marburg
17:00h	Short talk 11: Dr. Tam Dang, TU Berlin
17:05h	Short talk 12: Dr. Erik Strandberg, KIT, Karlsruhe
	Short break
17:15-18:15h	LIFE Panel Discussion (Chair: Markus Lakemeyer, FSU Jena)
18:15-19:15h	Poster Session B (with refreshments)
19:20h	Transfer to Busbahnhof (5 min walk eastbound)
19:30h	Bus departure at Busbahnhof to Fuchsturm ("Weimar Tours")
20:00h	Conference Dinner (Fuchsturm, Jena; 5 min walk from/to bus parking!)
22:30, 23:00h	Bus return to Jena Busbahnhof (return times: 22:45, 23:15)

#### 16th German Peptide Symposium Program, Day 3 (Aug 30, 2023)

Time	
8:30h	Gettogether, registration, coffee
	Topic Area 4: Drugs and Biomedicine (Chair: Nicole Biber, Wuppertal)
9:00-9:40h	Keynote lecture: Prof. Dr. Luc Brunsveld, TU Eindhoven
	Stabilization of Protein-Protein Interactions; from chemical biology to drug discovery
9:40-10:00h	Ms. Lena Stillger, UASM Gießen
	Screening of Novel Antimicrobial Peptides as a New Strategy against Anaerobic Biocorrosive
	Bacteria and their Biofilm
10:00-10:20h	Prof. Dr. Diana Imhof, U Bonn
	COVID-19 and heme-driven pathologies: Combining peptide-based studies with bioinformatics
10:20-10:40h	Dr. Nils Vrang, Gubra, Kopenhagen
	StreaMLine: Rethinking peptide drug discovery
10:40-11:00h	Coffee, refreshments
11:00-11:20h	Dr. Phillip Ochtrop, Tubulis GmbH, Planegg
	Unsaturated Phosphonamidate Electrophiles as Versatile Reagents for the Construction of
	Next Generation Cancer Therapeutics
11:20-11:40h	Ms. Eva-Maria Jülke, U Leipzig
	Uptake of peptide therapeutics after nasal application in a nasal mucosa model system
11:40-12:00h	Dr. Cornelia Koy, U Rostock
	Mass Spectrometric ITEM-TWO Investigations and Bio-Computational Analyses of
	Phosphorylation-Dependent Antibody Binding to Cancer-Mutated Linkers of Zinc Fingers
12:00-12:40h	Keynote Lecture: Prof. Dr. Akane Kawamura, U Newcastle
	Peptide probes for studying epigenetic proteins
12:40-13:00h	Poster Awards & Farewell (Chair: Hans-Dieter Arndt, FSU Jena)
13:00h	Lunch and departure (individually)

#### The 16th German Peptide Symposium is supported by (as of August 23, 2023):

Abbe Foundation, Jena (DE) Bayer AG, Wuppertal (DE) Biotage GB Ltd., Ystrad Mynach (UK) CEM GmbH, Kamplintfort (DE) Bruker Daltonics GmbH & Co. KG, Bremen (DE) IRIS Biotech GmbH, Marktredwitz (DE) Jena Bioscience GmbH, Jena (DE) Bachem AG, Bubendorf (CH) Rapp Polymere GmbH, Tübingen (DE) Gyros, Protein Technologies Inc., Tucson/AZ (USA) SFB 1127 ChemBioSys, Jena (DE) EXC 2051 Balance of the Microverse, Jena (DE) Profile Line LIFE, FSU Jena (DE)

## 16th German Peptide Symposium Poster Program

Presentation of uneven numbered Posters: Session A - Even Numbered Posters: Session B

## \*Short Talk on Monday; \*\*Short Talk on Tuesday

No.	Author and Poster Title
1	Divine-Wisdom Adewumi, Leipzig University
-	Bioinformatically-sourced Antimicrobial Peptide for Recombinant Expression in a Yeast-based System
2	Marvin Albers, Vrije Universiteit Amsterdam
-	Environment-Responsive Peptide Dimers Bind and Stabilize Double-Stranded RNA
3	Dr. Sewar Alkhashrom, Friedrich Alexander University (FAU) Erlangen-Nürnberg
Ū	Molecular characterization and modulation of the HCMV core NEC as a novel antiviral drug target
4	withdrawn
5	Dr. Maria Julia Amundarain, Bielefeld University
•	Cis/Trans isomerization of proline in model tripeptides fragments from $\alpha$ -2 gliadin
6	Yuko Bando, Friedrich Schiller University Jena
Ū	Synthesis and Biological Profiling of a Focused Orfamide A Library in the Green Alga Chlamydomonas r.
**7	Dr. Marta Barniol-Xicota, Pompeu Fabra University, Barcelona
-	Selective Substrate Identification Using Chemically Modified Phage Display
8	Carmen Bäuerlein, Philipps University Marburg
Ŭ	Synthesis and Structure of Fusahexin
9	Friederike Biermann, Goethe-University Frankfurt
-	Peptides with Ambiguous Molecular Shapes: Atropo-Selective Biosynthesis of a New Family of Complex
	Peptide Natural Products
10	Ingo Bork, TU Darmstadt
	Generation of orthogonal bifunctional linker peptides for the site- and spatioselective coupling of
	biomolecules to cellulose based papers
11	Inna Brod, Bielefeld University
	Synthesis and analysis of quinoxaline-based, photoswitchable DNA bisintercalators
12	Laura Brüchle, Heidelberg University
	Self-Assembling Peptides Decorated with pi-Expanded Electron Donors
13	Steffen Anton Busche, Humboldt University of Berlin
	Peptide-based Organocatalysts on Stage: Ligating Peptides onto Porous Materials by
	Tetrazine/Norbornene-Chemistry
14	Laura Cerveson, Bielefeld University
	Late-stage alkylation of Trp and Phe derivatives by transition-metal catalyzed cross-couplings
15	Jen-Yao Chang, Max Planck Institute of Molecular Physiology, Dortmund
	Targeting IncRNA-WDR5 interactions by mimicking a protein-WDR5 interaction
16	Sveva Colombo, Bielefeld University
	Novel folate receptor-targeted prodrugs of thiolate histone deacetylase inhibitors
17	Marcos Rafael Conde Gonzalez, Heidelberg University
	Metal-binding $eta$ -hairpin sandwiches with nitrite reductase activity
18	Elena Rebecca Cotroneo, Göttingen University
	Light Mediated Ca <sup>2+</sup> -Induced Self-Assembly of Peptide Helices
19	Emilia Cupioli, Friedrich Schiller University Jena
	Templated Total Synthesis of Cu(I)-Methanobactin OB3b
**20	Dr. Tam Dang, Technische Universität Berlin
	Resistance and target of aminopolyol peptide antibiotic paenilamicin
21	William Darling, University College London
	Structural Analysis of Non-Reducible Cyclic Peptides: Insights into Ring Expansion and Contraction
22	Shitanshu Devrani, University of Gothenburg
	Title t.b.a.

23	Dr. Toni Kühl, University of Bonn
	Edman sequencing as a relaunched tool for the elucidation of the connectivity in multiple disulfide-
	bonded peptides
24	Romy Feldmann, Leibniz-Hans-Knöll-Institute, Jena
	Characterization of the Elusive Structure of a Clostridial Chemical Mediator
25	Javiel Fernandez Marrero, Leibniz Institute of Plant Biochemistry, Halle
	Synthesis and characterization of potential cytotoxic peptide candidates for cancer immunotherapy
26	Jonathan Franke, Leibniz-Forschungsinstitut für Molekulare Pharmakologie, Berlin
	Cytosolic delivery of electrophilic polypeptides for intracellular peptide cyclization
27	Luise Franz, Leibniz-Forschungsinstitut für Molekulare Pharmakologie, Berlin
	Improving cell penetrating peptide mediated cytosolic delivery of functional proteins
28	Dr. Manuel G. Ricardo, Max Planck Institute of Colloids and Interfaces, Golm
	Merging Solid-Phase Peptide and Glycan Synthesis to Prepare Biomolecular Chimeras
29	Arseniy Galashov and Ekaterina Kazakova, Humboldt University, Berlin
	Chemical synthesis of highly GalNAcylated peptides comprising multiple mucin tandem repeats
30	Erich Gebel, Bielefeld University
	Synthesis of New Cyclic Tetrapeptides as HDAC-Inhibitors Based on Ext. Aromatic Surface Interaction
31	Leonardo González Ceballos, Leibniz Institute of Plant Biochemistry, Halle
	Photoinduced site-selective modification of peptides
32	Joshua Grabeck, University of Cologne
	Directing cell-penetrating peptides to the peroxisome for a targeted drug delivery
33	Florian Häge, Heidelberg University
	Design of a Superoxide Dismutase Mimetic Miniprotein
34	Thomas Heim, Heidelberg University
	Peptide Membranes From de novo Designed Helix-Loop-Helix Peptides
35	withdrawn
36	Dr. Jethro Hemmann, Leibniz-Hans-Knöll-Institute, Jena
	Beyond peptides: A RiPP pathway produces an unusual protein complex with post-transl. modifications
37	withdrawn
38	Sarah Hofmann, TU Darmstadt
	An ADEPT concept for the intracellular delivery of cargos via cell penetrating peptides
39	Maurizio Iannuzzi, Freie Universität Berlin
10	Rational design of polyfluorinated peptide-based materials: Self-assembly of an amphiphilic motif
40	withdrawn
41	Dr. Sören Kirchgäßner, University of Tübingen
42	Acetyllysine mimicking amino acid for bromodomains
42	Merlin Klußmann, University of Cologne
42	Investigating the activity of cell-permeable CaaX-peptides derived from the small GTPases Ras
43	Dr. Anna Knörlein, Memorial Sloan Kettering Cancer Center, New York
44	Using novel chemical tools to unravel non-enzymatic epigenetic changes Ilze Lace, University of Göttingen
44	Transmembrane Peptide Models with Photocleavable Staples to Probe SNARE-Induced Membrane
	Fusion
*45	Dr. Markus Lakemeyer, Friedrich Schiller University Jena
45	Functional profiling of microbial proteases that modulate host-bacterial interactions in the gut
46	Hendrik Lepper, Friedrich Alexander University (FAU) Erlangen-Nürnberg
40	Site-selective fusion of synthetic antiviral peptides to the Fc protein using chemo-selective ligation
47	Simon Leukel, Friedrich Alexander University (FAU) Erlangen-Nürnberg
47	Structure-based design of antibody mimetic peptides: HIV-1 antibody PG16
48	Annika Lill, TU Darmstadt
40	Rationally designed peptides as stabilizers of histone deacetylase 4 (HDAC4) variants

49	Qi Lin, King's College London
	A Novel $lpha/\delta$ -Peptidic Foldamer with 13/11 Helical Structure and its Application as a Minimalistic
	Aldolase Mimetic
50	Christina Lindner, Heidelberg University
	A thermostable WW domain basic scaffold for the design of functional $eta$ -sheet miniproteins
51	Dr. Scott Lovell, University of Bath
	Screening Approaches for the Identification of Covalent Peptide Inhibitors
52	Liz Maria Luke, Friedrich Schiller University Jena
	An inventory of small proteins in Vibrio cholerae
53	Tatjana Malycheva, Friedrich Schiller University Jena
	Enumeration of saturated and unsaturated cyclic secondary amino acids in regard to their ring size
54	Calvin Matula, Bielefeld University
	C-Glycosylation of Aromatic Amino Acids through Pd-catalyzed Cross Coupling Reactions
55	withdrawn
56	Stefan Moser, University of Vienna
	Combining Genetic Code Expansion with Protein Semisynthesis
57	Dr. Penthip Muangkaew, Ghent University
	From synthesis to NMR fingerprint matching of Cyclic lipodepsipeptide (CLiPs)
58	Maximilian Müll, Leibniz-Hans-Knöll-Institut, Jena
	Biosynthetic incorporation of fluorinated amino acids into the nonribosomal peptide gramicidin S
59	Beate Nachtigall, University of Bielefeld
	Synthesis of halogenated cyclic RGD-peptides
60	Jessica Nowacki-Hansen and Gulshan Amrahova, Max-Planck-Institute of Molecular Physiology, DO
	Identification of cyclic peptide inhibitors for the splicing factor hnRNPA2B1 using SICLOPPS
61	Janine Otto, Friedrich Schiller University Jena
	A UHPLC-HRMS method to record cyanotoxins and related sec. metabolites: Case study in Lake Stechlin
62	Steven Panek, Bielefeld University
	New Fluorescent Peptide-Based Probes for the Specific Recognition of the A $eta$ 42 Oligomer Species
63	Dr. Jannik Paulus, Vrije Universiteit Amsterdam
	Small Molecular-Drug Conjugates for Selective Targeting $lpha_{ m V}eta_3$ -Expressing Melanoma Cells
64	Artem Pavlov, Freie Universität Berlin
	Impact of Phe <sup>23</sup> -electron-density tuning on the amyloid formation of full-length Amylin
65	Anna Pepanian, University of Bonn
	Nucleotide exchange modulation of $G_{\alpha}$ i/s proteins with linear and macrocyclic peptides
**66	Truc Lam Pham, Heidelberg University
	Designed metal binding globular $eta$ -sheet peptides as mini-receptors for bioactive molecules
67	Emanuele Piemontese and Alina Herfort, Humboldt University, Berlin
	Multiphosphorylated peptides to probe binders of the RNA-Polymerase II C-terminal domain
68	David Podlesainski, University Duisburg-Essen
	The membrane protein Rv2113 is crucial for the anti-tubercular activity of Callyaerins
69	Jonas Proksch, Freie Universität Berlin
	Rationally designed mucin-like peptide hydrogels
70	Johannes Rassbach, Friedrich Schiller University Jena
	Convergently evolved catalytic mechanisms for amide formation in early diverging fungi
71	Lorenz Rau, Philipps University Marburg
	Synthesis of Fluorescent $lpha$ -Amino Acids and Peptides by Palladium-Catalyzed Coupling Methods
72	David Reiter, Freie Universität Berlin
	Determining the Impact of Fluorine-specific Interactions on the Folding of Small Proteins
*73	Nina Schmidt, Philipps University Marburg
	Development of mirror-image D-monobodies as targeted cancer therapeutics

74	Nicolas Schnatmann, Bielefeld University
	New Tryptophan-based fluorescent dyes
*75	Prof. Dr. Stefan Schuster, Friedrich Schiller University Jena
	Enumeration and classification of proteinogenic and non-proteinogenic amino acids
76	Niklas Schwegler, Heidelberg University
	Two-photon laser printing of peptide-functionalized hydrogels
77	Dr. Julian Seidel, Friedrich Schiller University Jena
	Interactome-profiling of a lysine deacetylase-trapping peptide library uncovers crosstalk between
	HDAC6 and NF-κB signaling
78	Showmika Srirangan, Friedrich-Alexander-University (FAU) Erlangen-Nürnberg
	Exploring the potential of CXCR4 mimetic peptides to target cancer cells
79	Katharina Stillger, University of Cologne
	Targeting protein S-palmitoylation dynamics using cell-permeable peptides
**80	Dr. Erik Strandberg, Karlsruhe Institute of Technology (KIT)
	Design principles of amphipathic $lpha$ -helical antimicrobial peptides
81	Werner Tabak, University Duisburg-Essen
	Ahp-Cyclodepsipeptide HTRA1 Inhibitors as Potential Drugs Against Age-related Macula Degeneration
82	Tobias Theiss, University of Leipzig
	Exploring the solid-state-photo-CIDNP effect in artificial poly-L-proline based, flavin-aminoacid diads
83	Dr. Atiruj Theppawong, Ghent University
	Exploring peptide cyclization strategies: Tools for improving drug-like properties of peptide-based
*0.4	therapeutics
*84	Silan Toy, University of Göttingen
**85	HAV-Peptides Attached to Colloidal Probes Faithfully Detect E-Cadherins Displayed on Living Cells Van Tuan Trinh, Philipps University Marburg
60	Peptide Inhibitor for Elongin BC Induces Apoptosis in Cancer Cells
86	Sebastian Trunschke, Humboldt University, Berlin
80	New Scaffolds for Ligation Auxiliaries Capable of Base Catalysis
87	Sonali Vaidya, University of Bonn
0/	Insights into transient heme binding of select plasma proteins
88	Theresa Vaupel, Philipps University Marburg
	Synthesis of $\beta$ -Hydroxy- $\alpha$ -Amino Acids by C- $\beta$ -Arylation of Serine
89	Dr. Parvesh Wadhwani, Karlsruhe Institute of Technology (KIT)
	Antimicrobial and cell-penetrating peptides from spider venom
90	withdrawn
*91	Lucas Weißenborn, Friedrich-Alexander-University (FAU) Erlangen-Nürnberg
	Novel Peptide Inhibitors of SARS-CoV-2 Infection
92	Marius Werner, Heidelberg University
	Late-Stage Functionalization of Peptides on the Solid Phase by an Iodination-Substitution Approach
93	Zhou Zhao, Max Planck Institute of Molecular Physiology, Dortmund
	Native Semi-synthesis of Isopeptide-linked Substrates for Specificity Analysis of Deubiquitinases and
	Ubiquitin-like Proteases
94	Timo Zimmer, Philipps University Marburg
	Synthesis and Conformational Analysis of $eta,eta$ -Diaryl- $lpha$ -Amino Acids: on the Way to Molecular Gearing
**95	Dr. Robert Zitterbart, Gyros Protein Technologies, München
	Unleashing Automated High-Throughput Peptide Purification by a Traceless First-in-Class Reductively
	Cleavable Linker System