2024 RiPPs Conference Schedule

Oct 7 – Oct 9, 2024: Seoul National University, Seoul, South Korea

Venue: Mugunghwa Hall, the 2nd floor of building #125-1 in Hoam Faculty House

Conference Agenda		
Date	**Time**	**Session**
MONDAY, October 7	7:30–8:45	Registration
	8:45–9:00	Introductory Remarks
	9:00–12:00	Morning Session and Poster Session 1
	12:00–13:30	Lunch Break
	13:30–18:00	Afternoon Session and Poster Session 2
	18:00–20:00	Dinner Break
	20:00–21:00	Evening Session
TUESDAY, October 8	8:30–12:30	Morning Session and Poster Session 3
	12:30–13:30	Lunch Break
	Afternoon and evening	Afternoon Excursion (central Seoul) and Conference Banquet
WEDNESDAY, October 9	8:30–12:00	Morning Session
	12:00–13:30	Lunch Break
	13:30–18:00	Afternoon Session
	18:00–20:00	Dinner Break
	20:00–21:00	Evening Session

MONDAY, October 7

Time	Registration and opening ceremony		
7:30–8:45	Registration		
8:45–9:00	Introductory Remarks: Douglas Mitchell		
Morning Session Chair: Douglas Mitchell			
Time	**Presenter**	**Institution**	**Title**
9:00–9:25	Wilfred van der Donk	University of Illinois at Urbana-Champaign	PEARLs and MNIOs in RiPP biosynthesis
Morning Session (Lightning Talks) Chair: Douglas Mitchell			
9:30–9:35	Zhengan Zhang	Shandong University	*De novo* design of RiPPs
9:35–9:40	Fernanda P. Claverías	Universidad Técnica Federico Santa María	BGC similarity networks in *Spiractinospora alimapuensis* and the family Nocardiopsaceae to assess novelty of potential RiPPs
9:40–9:45	Dmitrii Y. Travin	University of Illinois at Chicago	Lariocidin – a lasso peptide acting on the bacterial ribosome
9:45–9:50	Thomas Tørring	Aarhus University	A widespread, but unusual lasso peptide
9:50–9:55	Dipti Sareen	Panjab University, Chandigarh	Nature-inspired Bioengineered variants of roseocin
Poster Session 1 and Coffee Break 10:00–11:00: Odd numbered posters (please stay near your posters)			
Morning Session (Mini Talks) Chair: Douglas Mitchell			
11:00–11:12	Shinya Kodani	Shizuoka University	Heterologous biosynthesis of lanthipeptides based on genome mining

11:15–11:27	Brandon I Morinaka	National University of Singapore	Recent developments on triceptides
11:30–11:42	Roland Kersten	University of Michigan	Discovery and biosynthesis of burpitides in plants
11:45–11:57	Yong-Xin Li	The University of Hong Kong	Exploring microbiota's biosynthetic potential for antimicrobial discovery

Group Photo 12:00–12:05
Lunch Break 12:05–13:25: Lunch served on the B1 floor of the Main Building.

Afternoon Session Chair: Satish K. Nair			
Time	**Presenter**	**Institution**	**Title**
13:30–13:55	Max J. Cryle	Monash University	Investigating P450s from biarylitide biosynthesis pathways
14:00–14:25	Seokhee Kim	Seoul National University	Discovery of new oxidative enzymes in RiPP biosynthesis
Afternoon Session (Lightning Talks) Chair: Satish K. Nair			
14:30–14:35	Alexander Vinogradov	University of Tokyo	Comprehensive analysis of substrate preferences of RiPP enzymes using mRNA display and deep learning
14:35–14:40	Yanyan Li	CNRS-Muséum National d'Histoire Naturelle (MNHN)	Discovery of a new family of RiPP metallophores involved in bacterial adaptation to metal stress
14:40–14:45	Natalia M. Vior	John Innes Centre	Discovery and characterisation of thiopotensamides, novel thioamitides from *Nocardiopsis potens*
14:45–14:50	Lukas Sonderegger	ETH Zurich	Macrocyclization of omphalotin A is catalyzed by a prolyl oligopeptidase with preference for backbone N-methylated residues
14:50–14:55	Suze Ma	Fudan University	Discovery and biosynthesis of acylphotorhaptins, N-terminal acylated monocyclic daropeptides

14:55–15:00	Sangeetha Ramesh	University of California, Davis	Sulfatyrotides associated with plant-pathogen interactions
Poster Session 2 and Coffee Break 15:00–16:00: Even numbered posters (please stay near your posters)			
Afternoon Session Chair: Andrew Truman			
16:00–16:25	Jesko Köhnke	Leibniz Universität Hannover	Thioholgamides: linking biosynthesis to function
16:30–16:55	Douglas Mitchell	University of Illinois at Urbana-Champaign	Genomics-enabled discovery of new molecules & enzymes
Afternoon Session (Mini Talks) Chair: Andrew Truman			
17:00–17:12	Huan Wang	Nanjing University	Class III Lanthipeptide Synthetases and Proteases
17:15–17:27	Anna L. Vagstad	ETH Zurich	Sidechain N-acylated lipopeptides
17:30–17:42	Yasushi Ogasawara	Hokkaido University	Novel Peptide Epimerases Involved in the Biosynthesis of RiPPs
17:45–17:57	Jin Zhong	Institute of Microbiology, Chinese Academy of Sciences	Discovery of bioactive RiPPs and their producers by a metagenomic mining of isolates population (MMIP) strategy

Dinner Break 18:00–19:55: Dinner served on the B1 floor of the Main Building.

Evening Session Chair: Wilfred van der Donk			
Time	**Presenter**	**Institution**	**Title**
20:00–20:25	David Craik	The University of Queensland	Novel cyclotides and biosynthetic enzymes from the genome of cyclotide-producing plant *Clitoria ternatea* (Butterfly pea)
20:30–20:55	Jörn Piel	ETH Zurich	Complex RiPPs from well-known bacteria

TUESDAY, October 8

Time	Presenter	Institution	Title
Morning Session Chair: Huan Wang			
8:30–8:55	A. James Link	Princeton University	Mechanisms of action of antimicrobial lasso peptides
9:00–9:25	Eric W. Schmidt	University of Utah	RiPPs from the animal kingdom
Morning Session (Lightning Talks) Chair: Huan Wang			
9:30–9:35	Maiko Umemura	NAIST	Fungal RiPPs are widely conserved in Fungi kingdom with high diversity
9:35–9:40	JunGu Kim	University of Utah	Discovery of macrocyclase from the marine sponge genome
9:40–9:45	Nataliia Machushynets	Leiden University	Discovering new RiPPs from plant associated *Paenibacillus*
9:45–9:50	Yuqing Li	University of Illinois at Urbana-Champaign	Screening of lanthipeptides for combatting influenza virus
9:50–9:55	Javier Santos-Aberturas	John Innes Centre	Quick *in vitro* refactoring and cluster number expansion via in vivo backbone exchange for the discovery and overproduction of thioamitides
Poster Session 3 and Coffee Break 10:00–11:00: All posters are available for viewing at leisure.			
Morning Session (Mini Talks) Chair: Huan Wang			
11:00–11:12	Vinayak Agarwal	Georgia Institute of Technology	Proteusin peptides: unknown structures and unknown binding modes for RiPP biosynthesis
11:15–11:27	Yousong Ding	University of Florida	Macrocyclization of graspetides by ATP-grasp enzymes
11:30–11:42	Christopher J. Thibodeaux	McGill University	Correlating conformational dynamics to function in lanthipeptide synthetases using mass spectrometry

11:45–11:57	Kenichi Yokoyama	Duke University	The origin of O_2-dependent radical SAM enzyme in the anti-Gram negative RiPPs biosynthesis
12:00–12:12	Lutz Schmitt	Heinrich Heine University Düsseldorf	Structural and functional insights into the maturation process of a class I lantibiotic
12:15–12:27	Andrew Truman	John Innes Centre	RiPP biosynthesis from large precursor proteins

Lunch Break 12:30–13:25: Lunch served on the B1 floor of the Main Building.		
Afternoon Excursion (central Seoul) and Conference Banquet		
13:30–18:00	Excursion	Chandeokgung Palace & Insadong Cultural Street (Three buses will leave from the entrance of the Hoam main building at 1:30 pm)
18:00–20:00	Conference Banquet	The Plaza Hotel Seoul

WEDNESDAY, October 9

Morning Session
Chair: Jesko Köhnke

Time	Presenter	Institution	Title
8:30–8:55	Elke Dittmann	University of Potsdam	Graspetides of the microviridin family: From biosynthesis to exploitation
9:00–9:25	Vahe Bandarian	University of Utah	Leveraging a RiPP maturase towards synthesis of novel cyclic peptide scaffolds
9:30–9:55	Amy C. Rosenzweig	Northwestern University	Biosynthesis of methanobactin

Coffee Break and Collaborative Discussion Time
10:00–11:00: All posters are available for viewing at leisure.

Morning Session (Mini Talks)
Chair: Jesko Köhnke

11:00–11:12	Jonathan Chekan	University of North Carolina at Greensboro	Copper-dependent cyclases in plant peptide biosynthesis
11:15–11:27	Jing-Ke Weng	Northeastern University	Elucidating the biosynthesis, diversity, and applications of plant cyclic peptides
11:30–11:42	Michael Freeman	University of Minnesota-Twin Cities	Biosynthetic insights into α-N-methylated peptide natural products
11:45–11:57	Svetlana Dubiley	Toulouse Biotechnology Institute	A new family of Trojan horse antibiotics targeting tRNA synthetases

Lunch Break
12:00–13:25: Lunch served on the B1 floor of the Main Building.

Afternoon Session Chair: Wilfred van der Donk			
Time	**Presenter**	**Institution**	**Title**
13:30–13:55	Satish K. Nair	University of Illinois at Urbana-Champaign	New Enzymology in the YcaO Superfamily
14:00–14:25	Yi Tang	University of California, Los Angeles	Discovery and characterization of a fungal RiPPs PTM enzyme
14:30–14:55	Gilles van Wezel	Leiden University	Priotizing new RiPP chemical space via regulatory network prediction and machine learning
Coffee Break and Collaborative Discussion Time 15:00–16:30: All posters are available for viewing at leisure.			

Afternoon Session (Mini Talks) Chair: Satish K. Nair			
16:30–16:42	Qi Zhang	Jiangxi Normal University	Cyclic RiPPs Biosynthesized by Radical SAM enzymes
16:45–16:57	Till Schäberle	Justus-Liebig-University Giessen	Acceleration of Hit-to-Lead Drug Development by Nanoliter-scale Screening of Mutasynthetic RiPP Libraries
17:00–17:12	Olga Genilloud	Fundacion Medina	Exploring MEDINA strain genomes as sources of new RiPPS
17:15–17:27	Weixin Tang	University of Chicago	Genetically Encoded Dehydroalanine for High-Throughput Covalent Inhibitor Discovery
17:30–17:42	Yuki Goto	University of Tokyo	Artificial in vitro biosynthesis for RiPP-inspired designer peptides
17:45–17:57	Carole Bewley	National Institutes of Health	Structural studies for maturation of RiPP natural products of the graspetide family

Dinner Break 18:00–19:45: Dinner served on the B1 floor of the Main Building.

Evening Session Chair: Andrew Truman			
Poster Award Ceremony 19:50–20:00			
Time	**Presenter**	**Institution**	**Title**
20:00–20:25	Mohammad R. Seyedsayamdost	Princeton University	Radical SAM-RiPPs from the Human Microbiome
20:30–20:55	Wen Liu	Shanghai Inst. of Organic Chemistry, Chinese Acad. of Sciences	Biosynthesis of 2-aminovinyl-cysteine residue-containing RiPPs