2024 Chinese-Japanese Symposium on Natural Product Biosynthesis

Program and Abstracts

25-27 November 2024, Guangzhou, China

Organizers:

Jinan University

Guangdong Association for the Promotion of

Biomedicine and Health

International Cooperative Laboratory of Traditional
Chinese Medicine Modernization and Innovative Drug
Development of Ministry of Education of China

Overall Meeting Schedule

Time Date	9:00-12:00	12:00-14:00	14:00-18:00	18:30-21:00
November 25 th	Reg	istration & check in	1	Dinner (Floor 5 V10)
November 26 th	Opening Remarks &Thematic reports (Floor 7 Room 2)	Lunch (Floor 2 Western Restaurant)	Thematic reports (Floor 7 Room 2)	Dinner (Floor 7 Room15)
November 27 th	Visit Jinan University (A bus was taken from the hotel to campus at 9:00)		Departure	

Meeting Schedule of November 26

Nov. 26 th	Opening Remarks	Chair		
9:00-9:30	Prof. Ronghua Zhang (Jinan University)	Prof. Hao Gao		
	Prof. Xinsheng Yao (Jinan University)	(Jinan		
	Prof. Ikuro Abe (The University of Tokyo)	University)		
9:30-10:00 Group Photo、Coffee Break				
	Unnatural thiopeptide production using lactazole,			
10:00-10:20	a RIPP biosynthetic machinery			
	Prof. Hiroyasu Onaka (Gakushuin University)	Prof. Ikuro Abe		
10:20-10:40	Characterization of an α-ketoglutarate-dependent	(The University		
	oxygenase converting 2-(2-phenylethyl) chromones into 2-	of Tokyo)		
	styrylchromones in agarwood			
	Prof. Shepo Shi (Beijing University of Chinese Medicine)			
10:40-11:00	β-NAD as a building block in natural product			
	biosynthesis	Prof. Yuewei		
	Prof. Takayoshi Awakawa (RIKEN)	Guo (Shanghai		
11:00-11:20	Biocatalytic synthesis of chiral drugs and (pseudo)	University)		

	natural products					
	Prof. Bin Qin (Shenyang Pharmaceutical University)					
	Global genome mining-guided discovery of unexploited					
11:20-11:40	natural products in fungi					
	Prof. Yudai Matsuda (City University of Hong Kong)					
11:40-12:00	Biosynthesis of fungal emfumafungin-type triterpenoid					
	antibiotics					
	Prof. Dan Hu (Jinan University)					
12:00-14:00 Lunch (Hotel 2nd Floor, buffet)						
	Chemoenzymatic synthesis of cyclic peptides by non-					
14:00-14:20	ribosomal peptide cyclases					
	Prof. Toshiyuki Wakimoto (Hokkaido University)					
	Discovery and biosynthesis of novel natural products	Prof Winavaga				
14:20-14:40	from the endophytic fungi	Prof. Hiroyasu Onaka				
	Prof. Xiao-Long Yang (Anhui University of Chinese					
	Medicine)	(Gakushuin University)				
	X-ray crystallographic analysis of MurL:	Omversity)				
14:40-15:00	A novel peptide epimerase involved in peptidoglycan					
14:40-15:00	biosynthesis					
	Prof. Yu Nakashima (University of Toyama)	Prof. Song You				
	Discovering enzymes that catalyze cyclization reactions	(Shenyang				
15:00-15:20	for natural product biosynthesis	Pharmaceutical				
	Prof. Hui Tao (Wuhan University)	University)				
	Molecular basis for the diversification of lincosamide					
15:20-15:40	biosynthesis by pyridoxal phosphate-dependent enzymes					
	Prof. Takahiro Mori (The University of Tokyo)					
	15:40-16:00 Coffee Break					
16:00-16:20	Plug-and-play construction of hybrid PKS pathways					
10,000 10,20	Prof. Lihan Zhang (Westlake University)	Prof.				
16:20-16:40	Analysis of terpene synthase from giant virus	Toshiyuki				
10.20-10.40	Prof. Takaaki Mitsuhashi (Institute for Molecular Science)	Wakimoto				
16:40-17:00	Biochemical properties of a novel cold-adapted GH19	(Hokkaido				
	chitinase with three chitin-binding domains from	University)				
	Chitinilyticum aquatile CSC-1 and its potential in					
	biocontrol of plant pathogenic fungi					

	Prof. Dengfeng Yang (Guangxi Academy of Marine Sciences			
	Guangxi Academy of Sciences)	Prof. Fei HE		
17:00-17:20	Identifying Sulfur/Nitrogen-containing natural products	(Southern		
	from marine fungi and their biosynthesis	Medical		
	Prof. Linghong Meng (Institute of Oceanology, Chinese	University)		
	Academy of Sciences)			
17:20-18:00 Closing Remarks				
18:30-21:00 Dinner				

Abstracts & Resumes



Prof. Xinsheng Yao Jinan University, Guangzhou, China tyaoxs@jnu.edu.cn

Prof. Xinsheng Yao, is an academician of the Chinese Academy of Engineering, also a member of the Division of Academic Affairs at both the Chinese Academy of Medicine and the Chinese Academy of Chinese Medicine. He serves as the founding director of Institute of Traditional Chinese Medicine & Natural Products of Jinan University and the honorary dean of the Pharmacy College at Jinan University. With nearly seven decades dedicated to pharmaceutical education, he has mentored over 120 PhD students, published over 680 research articles. Additionally, he has filed 131 patent applications resulting in 117 granted patents; developed four new drugs; received nine national and provincial/ministerial-level scientific research achievement awards; and was honored with the Special Contribution Award from the Chinese Pharmaceutical Association.