

SCIENTIFIC PROGRAM

SESSION LECTURE

No.4

Plant Resources and Human Health
Room: Swan Room 4

Co-Chairs:
Ren Xiang Tan



Jeroen S. Dickschat



Day 2 October 20th (Sunday) 14:00 – 17:30

Time	Speaker	Title
14:00-14:30	Jeroen S. Dickschat University of Bonn, Germany	The Myserious Case of Sodorifen and Beyond: Mechanistic Investigations on Terpene Synthases
14:30-15:00	Giovanni Appendino University of Eastern Piedmont, Italy	Bridging the gap between the discovery of bioactive plant natural products and their pharmaceutical development. A personal account
15:00-15:30	Junbiao Dai Agricultural Genomes Institute at Shenzhen, Chinese Academy of Agricultural Sciences, China	SynMoss: Design and Synthesize a plant genome
15:30-16:00	Tea Break	
16:00-16:30	Ren Xiang Tan Nanjing University, China	Plant gene-independent regeneration of phytochemicals
16:30-17:00	Evangelos Tatsis CAS Center for Excellence in Molecular Plant Sciences, China	Single-cell RNA-seq based elucidation of hyperforin total biosynthesis in St. John's wort
17:00-17:30	Huifeng Jiang Tianjin Institute of Industrial Biotechnology, Chinese Academy of Sciences, China	Biosynthesis of plant natural products in yeasts



Ren Xiang Tan

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PhD, Chair Professor and Director of the State Key Laboratory of Pharmaceutical Biotechnology, Nanjing University, China. His on-going research activities include structural characterization, biological evaluation, biosynthetic pathway, and synthetic biology-based regeneration of high-value natural products originated from plants and their associated microbes.



Jeroen S. Dickschat

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Jeroen Dickschat is a professor of organic chemistry and biochemistry at the Kekulé Institute, University of Bonn. He also serves as an associate editor for Organic and Biomolecular Chemistry. His research focusses on the biosynthesis of natural products, with a special emphasis on the complex mechanisms of terpene formation. For this purpose, Professor Dickschat's laboratory has developed and widely applied novel state-of-the-art isotopic labelling strategies. This work lays the foundation for future AI based engineering of terpene synthases.



Giovanni Appendino

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The research activity of Giovanni Appendino takes inspiration from plant natural products to address problems of relevance in various realms of bio- and organic chemistry (exploration of the natural products chemical and biological space, reaction mechanisms, new synthetic methods), interfacing natural products and biomedical research in three main research areas, namely pharmacology and herbal medicine (new drug leads, new extracts), physiology (chemosensation *sensu lato*), and cell biology (novel mechanisms of activity).



Junbiao Dai

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Junbiao Dai, Ph.D. Professor at Agricultural Genomes Institute at Shenzhen, Chinese Academy of Agricultural Sciences. Research in the Dai lab focuses on synthetic biology. He is particularly interested in development of new technologies for gene synthesis and assembly, as well as their application in designing and building synthetic genomics.



Evangelos Tatsis

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Evangelos Tatsis earned his Chemistry Degree from the University of Ioannina, Greece, and completed a PhD in Natural Products Chemistry in 2006. In 2008, he moved to Jena as a Marie Curie Fellow at the Max Planck Institute for Chemical Ecology. In 2013, he joined Prof. Sarah O'Connor's group at the John Innes Centre, Norwich, as a postdoctoral researcher. Since 2017, Evangelos has been a Group Leader at the Chinese Academy of Sciences in Shanghai (CEMPS), focusing on elucidation and engineering of specialized metabolites biosynthetic pathways from medicinal plants using genomics, single-cell resources, bioinformatics, molecular biology, and synthetic biology.



Huifeng Jiang

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Huifeng Jiang, Ph.D. Professor at Tianjin institute of industrial biotechnology, Chinese Academy of Sciences. Research in the Jiang's lab focuses on new enzyme design. By combining biological big data and artificial intelligence, he develops new platforms to dig and design new genes for producing plant natural compounds.