





Chemistry & Biology of Natural Products









30th June 2022 University of Edinburgh, School of Chemistry





Joseph Black Building, Theatre T250, School of Chemistry, University of Edinburgh

9:30 Registration, Tea / Coffee and Poster Setup

Session 1



10:10 Welcome & Notices

Fabrizio Alberti, Co-Chair of CBNP (University of Warwick, UK)

10:20 Investigation of the Release and Cyclisation Steps from the PKS-NRPS Hybrid During the Biosynthesis of Cytochalasans

Henrike Heinemann, Cox Group (University of Hannover, Germany)

10:40 Development of a Second-Generation ¹³C-NMR Assay to Study β-branch Formation in the Kalimantacin Antibiotics

Angus Weir, Willis / Masschelein Groups (University of Bristol / KU Leuven, UK / Belgium)

11:00 Producing Engineered Lipopeptides via the Ribosomal Route

Nina-Maria Bösch, Piel Group (ETH Zürich, Switzerland)

11:20 Convergent Evolution of Stereodivergent *p*-menthane Gene Clusters in Lamiaceae Samuel Smit, <u>Lichman</u> Group (University of York, UK)

11:40 NAD as a Building Block in Natural Product Biosynthesis

Lena Barra, Abe Group, (University of Tokyo, Japan)

Session 2



- 13:00 A Biomimetic Approach to the Synthesis and Prediction of Ulodione Natural Products
 David Jones, <u>Lawrence</u> Group (University of Edinburgh, UK)
- 13:20 Programming Nonribosomal Peptide Synthetases with DNA Templates Huiyun Peng, Kries Group (HKI Jena, Germany)
- 13:40 Genomic and Transcriptomic Studies on Pleurotin-Producing Fungi for Elucidation of Biosynthesis

Jack Weaver, Alberti Group (University of Warwick, UK)

- **14:00** Cryptic *O*-Acetylation Facilitates Double Bond Formation in Peloruside Biosynthesis Amy Fraley, Piel Group (ETH Zürich, Switzerland)
- **14:20** Chemical and Enzymatic Macrocyclisation of Antibiotic Peptides Yaoyu Ding, Barry Group (Kings College London, UK)



15:40 Exploring Epoxyketone Synthases and their Biosynthetic Potential Marlene Rothe, Challis / Alberti Groups (University of Warwick, UK)

16:00 Elucidation and Engineering a Bacterial Biosynthetic Pathway for the Synthesis of Novel Anticancer Agents

Dries De Ruysscher, Masschelein Group (KU Leuven, Belgium)

16:20 Adenylation Domain Substrate Selectivity in Fungal Nonribosomal Peptide Biosynthesis

Stephanie Heard, Winter Group (University of Utah, USA)

16:40 Broad Utilization of α-Keto-β-Amino Acid-Installing Peptide Chemistry in the Microbial World

Thomas Scott, Piel Group (ETH Zürich, Switzerland)

17:00 Unique Enzyme Chemistry in the Biosynthesis of a Cyanobacterial Neurotoxin April Lukowski, Moore Group (Scripps Institution of Oceanography, USA)

17.20 Drinks Reception

18.00 Prize Announcements