

The Chemistry and Biology of Natural Products Symposium XIV

10th – 11th June 2021

ONLINE MEETING

CBNP XIV

Chemistry & Biology
of Natural Products



#CBNP14



Day 1: 10th June

Session 1: Chair – Matthew Jenner (University of Warwick)

10:30 Welcome & Notices

10:40 Abigail Alford (Wilkinson Group, John Innes Centre)

'A heterologous expression platform for the production and diversification of lantipeptide antibiotics'

11:00 Valentin Waschulin (Wellington / Corre Groups, University of Warwick)

'Exploring the biosynthetic potential of uncultured Antarctic bacteria using long-read sequencing'

11:20 Sbusisiwe Mbatha (Willis Group, University of Bristol)

'Synthetic and biosynthetic studies on abyssomicin natural products'

11:40 Dong-Song Tian (Cox Group, Leibniz University Hannover)

'The sporothriolides. A new biosynthetic family of fungal secondary metabolites'

12:00 Break

Session 2: Chair – Liz Skellam (University of North Texas)

14:00 Helen Smith (Lewandowski / Jenner / Challis Groups, University of Warwick)

'Reconstitution of a split C-methylating module from the gladiolin trans-AT polyketide synthase'

14:20 Claudio Greco (Keller Group, University of Wisconsin / Wilkinson Group, John Innes Centre)

'The reader protein SntB is involved in regulating secondary metabolism in Aspergillus flavus'

14:40 Shona Richardson (Campopiano Group, University of Edinburgh)

'Exploring and exploiting the origins of the fatty amine tail of bipyrrrole natural products'

15:00 Candace Ho (Cryle / Tosin Groups, University of Warwick / Monash University)

'Structures of a non-ribosomal peptide synthetase condensation domain suggest the basis of substrate selectivity'

15:20 Break

16.00 Closing Lecture: Hajo Kries (Group Leader, Leibniz-HKI, Jena)

'Engineering DNA-templated nonribosomal peptide synthesis'

Day 2: 11th June

Session 3: Chair – Fabrizio Alberti (University of Warwick)

10:30 Welcome & Notices

10:40 Gustavo Perez Ortiz (Barry Group, Kings College London)

'Cytochrome P450s in the late-stage functionalisation of cyclic peptide antibiotics'

11:00 Matthew Beech (Lewandowski / Challis Groups, University of Warwick)

'Tandem halogenation and condensation in aeruginosin biosynthesis is directed by docking domain-mediated carrier protein recruitment'

11:20 Reito Bunno (Abe Group, University of Tokyo)

'Aziridine formation by a Fe(II) / α -ketoglutarate dependent oxygenase and 2-aminoisobutyrate biosynthesis in fungi'

11:40 Katharina Schmidt (Cox Group, Leibniz University Hannover)

'Biosynthetic studies on tropolone maleic acid anhydride conjugates from Hypoxyon lienhwacheense'

12:00 Break

Session 4: Chair – Rebecca Devine (John Innes Centre).

14:00 Panward Prasongpholchai (Tosin Group, University of Warwick)

'Elucidation of an unusual polyketide biosynthetic pathway from Rhodococcus'

14:20 Darren Scobie (Duncan Group, University of Strathclyde)

'Eliciting novel chemistry through Streptomyces soil microcosm co-culture'

14:40 Duha Alkhdar (Waterfield / Alberti Groups, University of Warwick)

'Dissecting the mechanism of action of 3,5-dihydroxy-4-isopropyl-trans-stilbene'

15:00 Shan Wang (Deng Group, University of Aberdeen)

'Aminoacyl chain translocation catalysed by a type II thioesterase domain in an unusual non-ribosomal peptide synthetase'

15:20 Break

16:00 Closing Lecture: Dan Udway (Computational Biology Group Leader, JGI)

'The genome mining singularity is near'

17:00 Prizes and Closing Remarks