

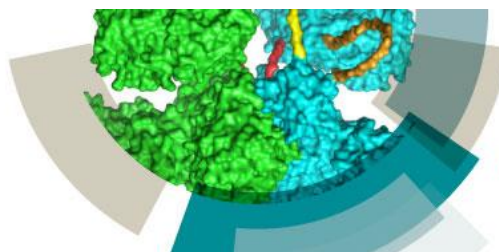
PROGRAMME


All oral sessions will take place in the Lecture Theatre

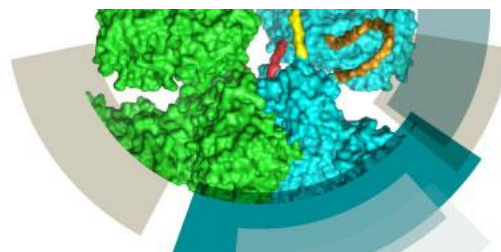
Poster presentations will be displayed in the Conference Centre Foyer & Gallery

Wednesday 25 March

09:00	Registration
09:45	Welcome and introduction Barrie Wilkinson, John Innes Centre, Conference Chair
Session 1A	Session: Natural Product Perspectives Chair: Barrie Wilkinson
10:00 K01	Keynote: Brian Kennedy, <i>Buck Institute for Research on Aging, USA</i> From Natural Products to Drugs – Targeting Aging to Extend Healthspan
10:45 K02	Keynote: Fernando De La Calle, <i>PharmaMar, Spain</i> Trabectedin - marine hit to oncology medicine using a bacterial natural product
11:30 K03	Keynote: Jared Silverman, <i>Cubist Pharmaceuticals, USA</i> The Future of Natural Products in Anti-Infective Drug Discovery: Treasure Hunt or Industrial Engine?
12:15	Lunch
Session 1B	Session: Discovery & Diversity Chair: Russell Cox
13:15 K04	Keynote: Wen Liu, <i>SIOC, China</i> Diversity-Oriented Biosynthesis of Natural Products: Chemical and Biological Basis for Expansion of the Molecular Utility
14:00 O01	Offered lecture 1: In vitro studies on the unusual enzymology in the ambruticin and jerangolid biosynthetic pathways Frank Hahn*, Steffen Friedrich, Nadine Kandziora, Gesche Berkhan, Franziska Hemmerling, Hendrik Geise, Frederick Lindner and Claudia Holec, <i>University of Hannover</i>
14:20 O02	Offered lecture 2: A unique combination of polyunsaturated fatty acid, nonribosomal peptide and polyketide biosynthetic machinery is used to assemble the zeamine antibiotics Joleen Masschelein*, Charlien Clauwers, Ufedo R. Awodi, Karen Stalmans, Wesley Vermaelen, Eveline Lescrinier, Abram Aertsen, Chris Michiels, Gregory L. Challis and Rob Lavigne, <i>KU Leuven</i>
14:40 K05	Keynote: Rolf Müller, <i>Saarbrücken University, Germany</i> Griselimycins - magic bullets against <i>Mycobacterium tuberculosis</i> ?

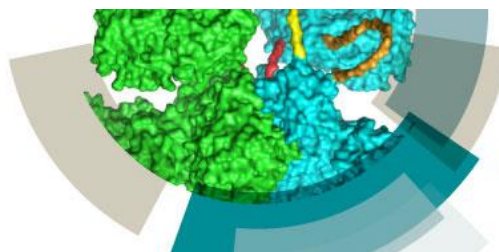


15:25	Afternoon tea
Session 1C	Session: Discovery & Diversity Chair: Guy Carter
15:55 K06	Keynote: Eric Schmidt, <i>University of Utah, USA</i> Understanding Broad Substrate Biosynthetic Pathways
16:40 O03	Offered lecture 3: Discovery and Evolution of A New Family of Nonheme Iron Halogenases that Act on Free Substrates Independent of Carrier Protein Xinyu Liu*, <i>University of Pittsburgh</i>
17:00 O04	Offered lecture 4: Cyclodipeptide Synthases: recent breakthroughs and perspectives Mireille Moutiez, Isabelle B. Jacques, Jérôme Seguin, Emmanuel Favry, Emmanuelle Schmitt, Yves Mechulam, Jean-Luc Pernodet, Pascal Belin and Muriel Gondry* <i>Commissariat à l'Energie Atomique et aux Energies Alternatives (CEA)</i>
17:20 K07	Keynote: Hideaki Oikawa, <i>Hokkaido University, Japan</i> Total biosynthesis of Fungal Bioactive Natural Products
18.05	Poster session, standing buffet and wine reception <i>Sponsored by NPRONET</i> – Natural products discovery and bioengineering network, a BBSRC NIBB  <small>Natural products discovery and bioengineering network, a BBSRC NIBB</small>
19:30	Free evening

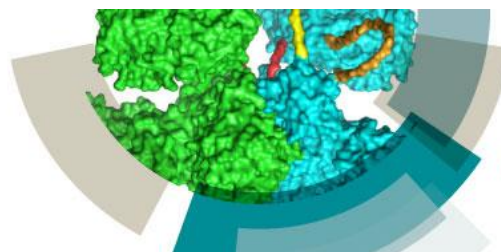


Thursday 26 March

Session 2A	Session: Tools & Technology Chair: Brad Moore Sponsored by: 
08:30 K08	Keynote: Maggie Smith, University of York, UK Metabolic pathway assembly using serine integrases
09:15 O04	Offered lecture 5: A Mass Spectrometry Assay for Acyl Chain Elongation Reveals that Acyl Chain Elongation Drives Ketosynthase Substrate Specificity in Polyketide Biosynthesis Neil J. Oldham*, Matthew Jenner, José P. C. Afonso and Jörn Piel, <i>University of Nottingham</i> ,
09:35 O06	Offered lecture 6: Amino acid epimerases, expanding the repertoire of radical SAM enzymes in ribosomally synthesized peptide natural products Anna L. Vagstad*, Brandon Morinaka, Maximillian Helf, Michael Freeman and Jörn Piel <i>Institute of Microbiology, ETH Zurich</i>
09:55 K09	2014 Natural Products Reports Emerging Investigator Lectureship: Emily Balskus, Harvard University, USA Chemical Discovery in the Microbial World
10:40	Morning coffee
Session 2B	Session: Tools & Technology Chair: Sarah O'Connor Sponsored by: 
11:10 K10	Keynote: Sean Brady, Rockefeller University, USA Culture independent approaches for the discovery of new bacterial metabolites
11:55 O07	Offered lecture 7: Visualizing and Harnessing Polyketide Assembly Lines Jianting Zheng, Amanda J. Hughes, Shawn K. Piasecki, Constance B. Bailey, Darren C. Gay and Adrian T. Keatinge-Clay* <i>Department of Molecular Biosciences, The University of Texas at Austin</i>
12:15 K11	Keynote: Rainer Breitling, University of Manchester, UK Computational tools for the synthetic biology of natural products
13:00	Lunch
Session 3A	Session: Perspective: Thiotemplate Assembly Line Biosynthesis Chair: Greg Challis Sponsored by: 
14:00 K12	Keynote: David Cane, Brown University, USA Stereochemistry as Biosynthetic History



14:45 K13	Keynote: Chris Walsh, <i>Stanford University, USA</i> The Phosphopantetheinyl Transferases: Prime Time Players in NRPS and PKS Assembly Lines
15:30	Afternoon tea
Session 3B	Session: Perspective: Thiotemplate Assembly Line Biosynthesis Chair: Shiou-Chuan Tsai Sponsored by: 
16:00 K14	Keynote: Mohamad Marahiel, <i>Philipps-Universität Marburg, Germany</i> The NRPS assembly line machinery
16:45 K15	Keynote: Peter Leadlay, <i>University of Cambridge, UK</i> Timing of events in assembly-line natural product biosynthesis
17:30	Close of session & coaches to hotels
19.00	Coach transfer to conference dinner venue
19:30	Pre-dinner drinks
20:00	Conference Banquet



Friday 27 March

Session 4A	Session: Synthetic Biology & Bioengineering Chair: Andrew Truman
09:00	Introductory Remarks: David Hopwood
09:15 K16	Keynote: Sarah O'Connor, John Innes Centre, UK Understanding and Engineering Alkaloid Biosynthesis
10:00 O08	Offered lecture 8: Investigating Aglycone Maturation in Glycopeptide Antibiotic Biosynthesis Madeleine Peschke, Kristina Haslinger, Clara Brieke and Max J. Cryle* <i>Max Planck Institute for Medical Research</i>
10:20 O09	Offered lecture 9: Investigating Fungal Natural Product Pathways Katherine Williams*, Agnieszka J. Wozniak, Khomaizon A. K. Pahirulzaman, Zahida Wasil, Nick Mulholland, Jason Vincent, Andy M. Bailey, Colin M. Lazarus, Christine L. Willis, Thomas J. Simpson and Russell J. Cox, <i>University of Bristol</i>
10:40 O10	Offered lecture 10: Exploration of Salinamide Biosynthesis Unveils a New Intermolecular Acting Thioesterase Lauren Ray*, Kazuya Yamanaka, Vinayak Agarwal and Bradley S. Moore <i>University of California San Diego</i>
11:00	Morning coffee
Session 4B	Session: Synthetic Biology & Bioengineering (open to JIC for Friday Lecture) Chair: Jason Micklefield
11:30 K17	Keynote & JIC Friday Lecture: Jay Keasling, Berkeley, USA Engineering Microbes for Production of Chemicals and Fuels
12:15 O11	Offered lecture 11: Redesigning the specificity of nonribosomal peptide synthetases Hajo Kries*, David Niquille, Rudolf Wachtel, Anja Pabst, Benedikt Wanner and Donald Hilvert, <i>John Innes Centre</i>
12:35 O12	Offered lecture 12: Emergence of Terpene Cyclization in <i>Artemisia annua</i> Melissa Salmon, Caroline Laurendon, Maria Vardakou, Jitender Cheema, Marianne Defernez, Sol Green, Juan A. Faraldos, and Paul E. O'Maille* <i>John Innes Centre</i>
12:55 K18	Keynote: Huimin Zhao, University of Illinois, USA Discovery of Novel Natural Products via Synthetic Biology
13:40	Closing remarks Barrie Wilkinson, John Innes Centre
13:55	Lunch and close of conference