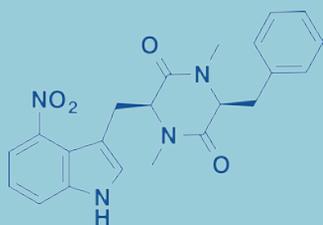
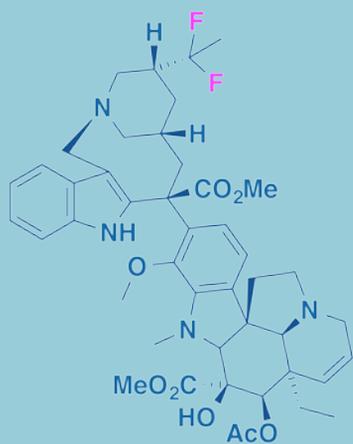
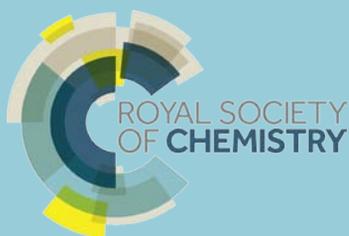


Bioactive Natural Products: Translating Promise into Practice



Biotechnology
Group



St. Catherine's College
University of Oxford, UK
11-13 July 2016



Second Circular and Call for Papers

Programme

Monday 11 July

Session 1 Chair: Dr Colin Bedford

- 08:15 Registration opens
08:55 Welcome
Prof Joe Sweeney, Conference Chairman
09:00 *How natural products can inspire chemical biology and drug discovery*
Prof Herbert Waldmann, Max Planck Institute of Molecular Physiology, Dortmund, Germany
09:50 *Diversity and diversification: microbial chemistry for discovery and development*
Dr Stephen Wrigley, Hypha Discovery, UK

10:40 Refreshment break

- 11:05 *The bio-origin of bioactive bacterial pyrrolizidine alkaloids*
Dr Hai Deng, University of Aberdeen, UK
11:55 *Mining the genomes of Burkholderia bacteria for novel antibiotics*
Dr Cerith Jones, Cardiff University, UK

12:45 Lunch

Session 2 Chair: Prof Joe Sweeney

- 14:00 *Harnessing natural product biosynthesis*
Prof Sarah O'Connor, John Innes Institute, UK
14:50 *ECR 1: Plant-endophyte communication for biosynthesis of bioactive natural products: maytansine as an example*
Dr Souvik Kusari, TU Dortmund, Germany
15:10 *ECR 2: Reductive chain release and subsequent transamination diverts products of modular polyketide synthases towards alkaloid metabolism*
Dr Joleen Masschelein, University of Warwick, UK

15:30 Refreshment break

- 16:00 *Using Nature's chemical diversity as a stepping stone for drug discovery*
Dr Philipp Krastel, Novartis, Switzerland

16:50 POSTER SESSION 1

19:00 Dinner

Tuesday 12 July

Session 3 Chair: Dr Irene Francois

- 09:00 *From artemisinin to a tetraoxane-based antimalarial drug candidate that circumvents K13- dependent clinical artemisinin resistance*
Prof Paul O'Neill, University of Liverpool, UK
09:50 *New paradigms and challenges of natural products drug discovery programs*
Prof Bruno David, Pierre Fabre Research Institute, France

Tuesday 12 July (cont.)

10:40 Refreshment break

- 11:05 *Marine natural product drug discovery: leads for treatment of inflammation, cancer, infections, and neurological disorders*
Dr Lena Gerwick, Scripps Institute of Oceanography, La Jolla, USA
11:55 *Biomimetic natural product synthesis*
Dr Andrew Lawrence, University of Edinburgh, UK

12:45 Lunch

Session 4 Chair: Dr Paul Race

- 14:00 *Using natural products to invent new chemicals for crop protection*
Dr John Clough, Syngenta, UK
14:50 *ECR 3: Fully automated workflow for efficient detection and rapid identification of new hits from plant extracts*
Paul Coulerie, Nestlé Institute for Health Sciences, Lausanne, Switzerland
15:10 *ECR 4: Evaluation of 41 essential oils as antimicrobials against bacterial phytopathogens Pseudomonas syringae pv pisi and Pectobacterium carotovorum*
Marimar Bravo Cadena, University of Oxford

15:30 Refreshment break

- 16:00 *The challenge of exploiting microbial sources to deliver novel bioactive natural products*
Prof Olga Genilloud, Fundación Medina, Grenada, Spain

16:50 POSTER SESSION 2

19:00 Dinner

Wednesday 13 July

Session 5

Chair Prof Joe Sweeney

- 09:00 *Efficient ways to investigate plant and microorganism metabolomes for the search of new lead compounds of natural origin*
Prof Jean-Luc Wolfender, University of Geneva, Switzerland
09:50 *Lichen symbioses as a bioresource for natural products*
Dr Martin Grube, University of Graz, Austria

10:40 Refreshment break

- 11:05 *Exploiting new biotechnologies for discovery and development of bioactive natural products*
Prof Gregory Challis, University of Warwick, UK
11:55 *Close of conference*

Introduction

The RSC Biotechnology Group and sponsors invite you to a residential conference focused on contemporary scientific research which will facilitate the therapeutic use of small molecules derived from natural sources.

The tradition of using naturally occurring small molecules as medicines is thousands of years old, but many front-line pharmaceuticals and agrochemicals in contemporary use owe their origins to natural sources. Modern research methods have brought back into the spotlight the concept of developing novel biomedical and agrochemical products from so-called *natural products*.

This conference, which follows three earlier successful meetings organized by the Biotechnology Group at the University of Sussex in 1996, at the University St Andrews in 1999 and most recently at Magdalen College, Oxford in 2009, will highlight the current trends, challenges and successes in the industrial exploitation of natural products from a global perspective. The event will bring together key academic and industry interdisciplinary scientists, to disclose recent progress in this field, identify new perspectives and promote networking to facilitate the use of bioactive natural products in medical, agrochemical and related areas of societal need.

We warmly invite you to Oxford in 2016 to participate in this vibrant and timely event.

Venue and Travel

The conference will be held in St Catherine's College, Oxford, a celebrated and exceptionally attractive venue, featuring famed contemporary architecture, designed by Arne Jacobsen. The College is located in Manor Road, 15 minutes walk from the centre of the city. Oxford has excellent motorway access and is well-served by regular train and coach services from many parts of the UK. Four major airports are within 90 minutes travel – London Heathrow, London Gatwick, London Stansted and Birmingham International – and all are connected by direct coach services to Oxford. Please note that there is no car parking available at the College and delegates arriving by car are advised to use Park and Ride facilities that are available on all main roads entering the City.

Accommodation

Single bedroom en suite accommodation is available in St Catherine's College at a cost of £320 for bed and breakfast on 10, 11 and 12 July. En-suite rooms have their own shower, basin and toilet. Dinner on Monday 11 and Tuesday 12 July is also included.

Call for Posters and Presentation Opportunities

Poster: All delegates (including exhibitors) are invited to submit abstracts to present their work as posters.

Oral: ECRs (early career researchers) who are aged 30 or younger and lecturers who are within three years of their appointments may also be selected by the organising committee to deliver a twenty-minute oral presentation. Please indicate at time of abstract submission.

Template: All abstracts should be submitted using the downloadable template by 31st March. Please send your one-page abstract in Microsoft Word format as an e-mail attachment to the Secretariat.

Student Travel Grants

The organisers are able to offer a number of student travel grants for full-time postgraduate students and post-doctoral fellows who are able to present a poster and who are RSC student members. Enquiries should be addressed to the conference secretariat. A travel grant application form may be downloaded from the website, and the closing date for applications is 19th June.

Social Events

A Wine Reception will coincide with the poster session on Monday 11 July.

Registration and Fees

Application should be made on the enclosed form. An early bird discount applies until 18 March 2016.

The fees, listed below, include attendance at all sessions, abstracts, lunches and refreshments.

	Early Bird Before 18 March	Standard After 18 March
RSC member	£350	£400
Non-member	£450	£500
RSC student or retired member	£250	£300
Student non-member	£300	£350

A late-booking fee of £30 will apply after 3 June.

Exhibition

A small relevant trade exhibition is planned. Each exhibitor is offered stand space measuring no more than 3 m wide x 2 m deep, a table, wi-fi and electricity. Registration fees are:

£500 Exhibition stand only (excludes attendees)

£120 Trade stand staff (no access to technical programme)

Sponsorship

The organisers are grateful to the organisations below for their support of the meeting:

- The RSC for student travel bursaries
- Syngenta
- NPRONET for poster session and poster prizes

Organising Committee

The conference is organised by the committee members of the RSC Biotechnology Group, namely:

Prof Joe Sweeney (Chair) University of Huddersfield

Dr Colin Bedford, University College London

Mr Neville Nicholson, Consultant

Dr Irene Francois, Consultant

Dr Paul Race, University of Bristol

Conference Secretariat

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Website: www.maggichurchoousevents.co.uk/biotech

*Prof Joe Sweeney (Chair)
University of Huddersfield*

Second circular