

Exploring and Harnessing Biosynthesis

Dr. Rebecca Goss

University of East Anglia, Norwich (United Kingdom)

Friday 15th June, 2012. ICIQ Auditorium, 12 p.m.

Professional Career

Royal Society BP Dorothy Hodgkin Fellowship: "Combinatorial and Directed Biosynthesis to Create Novel Halogenated "Natural" Products", October 2003-2007

Senior Lectureship, School of Chemistry, University of East Anglia: December 2010- present

Lectureship, School of Chemistry, University of East Anglia: July 2005-2010 (Maternity break 2008)

Lectureship, School of Biological and Chemical Sciences, University of Exeter: October 2003-June 2005 (Closure of Chemistry in Exeter)

One Year Teaching Fellowship, School of Chemistry, University of Nottingham: October 2002-September 2003

Post Doctoral Research Associate, Department of Biochemistry, University of Cambridge, Professors J. Staunton (FRS) and P. F. Leadlay (FRS): November 2000-September 2002

PhD, University of Durham, Professor D. O'Hagan: October 1997-October 2000 (Awarded June 2001)

Degree Chemistry BSc Hons., Hatfield College, University of Durham
First year joint Biology and Chemistry (Awarded June 1997)

Research Interests

She is a bioorganic chemist/chemical biologist with research interests in the biosynthesis of natural products at the chemical and genetic level. Specifically, her research focuses on natural products with important medicinal properties and in understanding how biosynthetically intriguing motifs within these compounds are assembled. From this vantage point her group harness individual enzymes as convenient tools for organic synthesis, and employ a Biomolecular Engineering/Synthetic Biology approach to harness entire biosynthetic pathways in order to enable expeditious access to libraries of medicinally relevant compounds. These libraries may be used to gain a greater understanding as to how the drug acts at the molecular level within the cell. Though at an early stage of her career already she has begun to develop a national and international reputation presenting invited research seminars in Brazil, Capetown, Delhi, Kyoto, Gothenburg (Sweden), Philadelphia, Boston, Yokohama and Dublin in addition to invited seminars at numerous UK departments.

