

The NERC Biomolecular Analysis Facility - Birmingham and the Birmingham Metabolomics Training Centre present

Introduction to Metabolomics for the Environmental Scientist

Instructors:

Prof Mark R. Viant

Dr Ulf Sommer

Dr Jasper Engel

Monday 21st September 2015

Time	Session
12.30 – 12.45	Registration
12.45 – 13.00	Welcome, introduction to the NERC Biomolecular Analysis Facility – Birmingham & to the Birmingham Metabolomics Training Centre
13.00 – 13.45	Lecture: Introduction to environmental metabolomics with case studies
13.45 – 14.15	Break
14.15 – 15.00	Lecture: Importance of experimental design, sample collection, and quality control
15.10 – 15.45	Lecture: Overview of sample preparation techniques
15.45-16:10	Lab: Sample prep demonstration (including tour of robotics facility)
16:15 – 17:00	Lecture: Overview of analytical technologies for metabolomics: mass spectrometry and NMR spectroscopy
17.00 – 17.30	Q&A session

Tuesday 22nd September 2015

Time	Session
09.00 – 9.50	Lecture: Overview of data processing for metabolomics
10.00 – 11.00	Lecture: Overview of statistics for metabolomics
11.00 – 11.15	Break
11.15 – 12.00	Lecture: Challenges for metabolite identification
12.00 – 13.00	Lunch (provided)
13.00 – 14.15	Lab: Tour of mass spectrometry instrumentation and NMR facility
14.15 – 15.15	Discussion about proposed metabolomics studies; Q&A session
15.15-15:30	Summary and wrap up

<http://www.birmingham.ac.uk/facilities/metabolomics/masterclass/index.aspx>