

Introduction to Metabolomics for the Microbiologist

Course Programme

Date	Time	Session	
Day 1	09.15 – 09.30	Registration	
	09.30 – 09.45	Lecture : Introduction to the course and Birmingham Metabolomics Training Centre <i>Dr Cate Winder</i>	
	09.45 – 10.30	Lecture : Introduction to metabolomics <i>Professor Warwick Dunn</i>	
	10.30 – 11.15	Lecture : Experimental design with case studies <i>Professor Warwick Dunn</i>	
	11.15 – 11.30	Break	
	11.30 – 12.15	Lecture : Analytical strategies applied in metabolomics to analyse complex biological samples <i>Professor Warwick Dunn</i>	
	12.15 – 13.00	Lunch	
	13.00 – 13.45	Lecture : Sample preparation strategies in microbial metabolomics <i>Dr Cate Winder</i>	
	13.45 – 15:15	Group 1 : Lab session : Sample preparation strategies (quenching) <i>Dr Andrew Southam</i>	Group 2 : Lab session : UHPLC-MS set-up and familiarization <i>Dr Cate Winder</i>
	15.15 – 15.30	Break	
15.30 – 17:00	Group 1 : Lab session : UHPLC-MS set-up and familiarization <i>Dr Cate Winder</i>	Group 2 : Lab session : Sample preparation strategies (quenching) <i>Dr Andrew Southam</i>	

Day 2	09.15 – 10.45	Group 1 : Lab session : Sample preparation strategies (extractions) <i>Dr Andrew Southam</i>	Group 2 : Lab session : UHPLC-MS data acquisition <i>Dr Cate Winder</i>
	10.45 – 11.00	Break	
	11.00 – 12.30	Group 1 : Lab session : UHPLC-MS data acquisition <i>Dr Cate Winder</i>	Group 2 : Lab session : Sample preparation strategies (extractions) <i>Dr Andrew Southam</i>
	12.30 – 13.15	Lunch	
	13.15 – 14.15	Lab session : Data review and MS/MS data acquisition <i>Dr Cate Winder</i>	
	14.15 – 14.45	Workshop : Experimental design <i>Dr Cate Winder</i>	
	14.45 – 15.00	Break	
	15.15 – 17.30	Computer workshop : Data processing and assessing data quality <i>Dr Andris Jankevics</i>	
Day 3	09.15 – 10.15	Lecture : Introduction to data analysis <i>Dr Gavin Lloyd</i>	
	10.15 – 12.15	Computer workshop : Data analysis with example data using MetaboAnalyst <i>Dr Gavin Lloyd</i>	
	12.15 – 12.45	Lunch	
	12.45 – 13.30	Lecture : Introduction to metabolite annotation and identification <i>Professor Warwick Dunn</i>	
	13.30 – 14.45	Computer workshop : Metabolite Identification pipeline <i>Professor Warwick Dunn</i>	
	14.45 – 15.45	Q&A : Tips and tricks from the experts and question session <i>Professor Warwick Dunn, Dr Cate Winder</i>	
	15.45 – 16.00	Feedback session <i>Mr David Epps</i>	