

Metabolomics Data Processing and Data Analysis

School of Biosciences, University of Birmingham

Course Plan

Week 1	Week 2	Week 3	Week 4
An overview of metabolomics	Processing mass spectrometry data	Data visualization - PCA	Supervised multivariate data analysis
The influence of experimental design and data acquisition on data processing and analysis	Processing liquid chromatography – mass spectrometry data	Exploring the effect of normalization, transformation and scaling	Metabolite Identification
Introduction to data processing	Data analysis – the structure of the data	Identifying outliers and drift	Reporting standards and data repositories
Processing NMR data	Missing value imputation	Univariate data analysis	The future direction of data processing and analysis in metabolomics