UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Software and tools for data analysis in Metabolomics

2627-121R-018

Title

Software and tools for data analysis in Metabolomics

Teacher(s)

Prof. Giuseppe Paglia

Language

English

Short description

This course will guide you through the use of the main open-access software tools for processing and interpreting complex metabolomics and lipidomics data. You will acquire fundamental skills to independently manage univariate and multivariate statistical analyses on complex datasets to identify key patterns. In addition, through functional analysis, you will learn how to biologically contextualize your results by linking significant metabolites and lipids to specific metabolic pathways. Key tools widely used in the field—such as MetaboAnalyst and LION—will be explored and applied in detail. The course is highly practice-oriented. The sessions include substantial hands-on activities involving the analysis of real datasets directly provided by the instructor, ensuring practical experience that can be immediately applied to research.

CFU / Hours

1 CFU / 8 hours

Teaching period

Late May – Early June 2027

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING