

Short Course “Targeted Proteomics”

Instructors

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Description

Targeted proteomics by mass spectrometry is emerging as a powerful technology in cases in which specific sets of proteins need to be consistently detected and accurately quantified across cohorts of (complex) samples. Targeted proteomic measurements initially were based on selected/multiple reaction monitoring (S/MRM). More recently, emerging mass spectrometric methods including PRM and SWATH-MS.

The aim of this course is to provide the participants the required knowledge and skills to design and analyze their own targeted proteomic experiments using the most advanced and state-of-the-art methods. We aim to fill in the gap between theory and the actual implementation of the targeted proteomics workflow, so that by the end of the course the students will have a sound knowledge base to implement the targeted proteomics workflows on their own research.

The course will consist of presentations and tutorials that explain the theoretical base of targeted proteomics, discuss the optimal parameters for data acquisition and provide an overview of the computational tools required for the processing and statistical analysis of targeted proteomics datasets. The course will also cover informational resources such as assay libraries that are publicly accessible to support the technology

Language

English