



## CONFIRMATION OF ATTENDANCE

**Palni Kundra**

successfully completed the course

### **'Mass spectrometry-based metabolomics – from theory to practice'**

#### **The participant:**

- Attended all introductory lectures, practical tutorials and lab sessions
- Got acquainted with several LC-MS technologies and applications
- Learned the principles and operations of MS platforms
- Learned how to carry out the entire process of mass spectrometry-based metabolomics, including data analysis and interpretation of the results.

#### **Content of the course:**

##### **Lectures**

- Introduction to metabolism and metabolomics
- Introduction to LC-MS technologies and different applications
- Introduction to MS data analysis in untargeted and targeted mode
- Introduction to sample preparation and experimental design

##### **Tutorials**

- Principles of quality control (QC)
- Technical QC of mass spectrometry results using specific software
- Data analysis and metabolite identification with hands-on exercises for untargeted mass spectrometry data
- Data analysis and quantification with hands-on exercises for targeted mass spectrometry data

##### **Practical lab sessions**

- Sample preparation workflow, including:
  - Sample extraction
  - Sample reconstitution
  - Sample acquisition
- Nano LC/MS setup and standard QC on Thermo Q-Exactive and QqQ Quantiva

Organizer: Serena Di Palma, Endre Laczko

Instructors: Serena Di Palma, Endre Laczko, Stefan Schauer, Sebastian Streb

Credit points: 2 ECTS

Dates: 5 November– 8 November 2018

Location: University of Zurich

Zürich, 13.11.2018

Dr. Serena Di Palma