

Lipidomics: principles & applications in health



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Combining theory and practical applications, this workshop aims to provide participants with an overview of the state of the art in lipidomics approaches to healthcare, their interests and limitations, and the challenges associated with setting up suitable workflows.



Deadline: **September 5, 2025**

PHASE I THEORETICAL



December
1 - 3, 2025



Bordeaux

EMBARKING ON THE LIPIDOMICS ROAD - Justine BERTRAND-MICHEL (I2MC, FRA), Sophie AYCIRIEX (CNRS UMR 5280, FRA), Laura GORACCI (University of Perugia, ITA) & Yu XIA (Tsinghua University, CHN)

MOLECULAR NETWORK - Pieter DORRESTEIN (University of California, USA)

INFLAMMATION AND METABOLIC DISEASES - Valerie O'DONNELL (Cardiff University, GBR) & Maria FEDOROVA (Center for Membrane Biochemistry & Lipid Research, DEU)

BIOMARKERS - Michal HOLČAPEK (University of Pardubice, CZE), Andrej SHEVCHENKO (Max Planck Institute of Molecular Cell Biology and Genetics, DEU) & Martin GIERA (Leiden University, DEU)

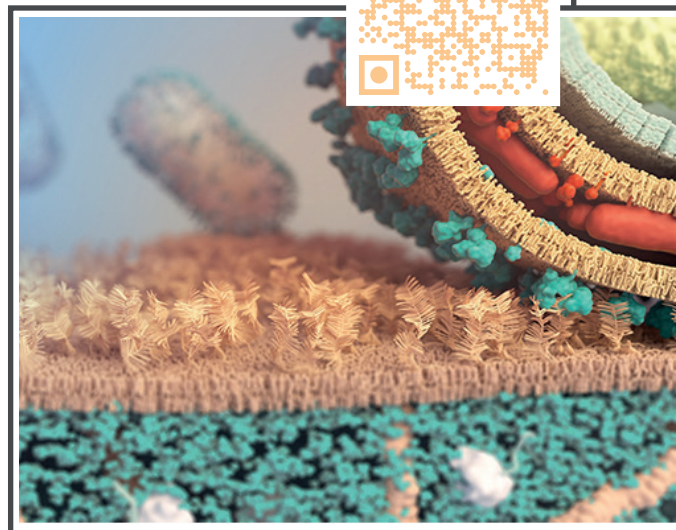
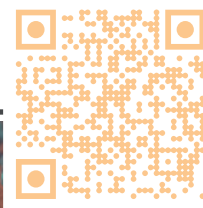
LIPIDOMICS AND FLUXOMICS - Jean-Charles PORTAIS (Université Paul Sabatier, FRA) & Ondrej KUDA (IPHYS, CZE)

TOOLS FOR LIPIDOMICS RESULTS MEANING - Nathalie POUPIN (INRAE, FRA)

SPATIAL LIPIDOMICS - Maxence WISZTORSKI (Inserm U1192, FRA) & Martina MARCHETTI (TU Wien, AUT)

LIPIDS DISCOVERY - Emilie LAYRE (CNRS UMR 5089, FRA) & Nicolas CÉNAC (IRSD, FRA)

Inserm
Workshop **287**



PHASE II PRACTICAL



2 days in
January 2026



Toulouse &
Villeurbanne

Sample preparation, targeted & semi-targeted lipidomics (Toulouse): It will include preparation of samples for lipidomics in liquid-liquid extraction (biological fluids and tissues) and their analysis in GC-MS for fatty acid profiling and in LC-MS for semi-targeted profiling of phospholipids and major sphingolipids on low (QqQ) and high-resolution (Orbitrap) MS instruments.

Spatial lipidomics & Structural Characterization (Villeurbanne): It will include MALDI imaging analyses, from sample preparation (mouse liver or brain samples) to data processing. Some samples will be analyzed by untargeted analysis using a high-resolution mass spectrometer with ion mobility and alternative fragmentation modes (CID vs EAD).

SELECTION: 8 trainees for Toulouse and 4 trainees for Villeurbanne will be selected among Phase I participants.

INFORMATION &
REGISTRATION [CLICK HERE](#)

