



¹³C-FLUXOMICS FOR HEALTH

The objective is to acquire theoretical and practical knowledge for the analysis of metabolic systems in mammalian cells or tissues using ¹³C-fluxomics.

TARGET AUDIENCE

The course is intended for PhD students, post-docs, researchers, engineers or technical staff from academia or industry with:

- basic/intermediate knowledge in metabolism, Mammalian cells and health domains
- ongoing/forthcoming project regarding metabolism in health

Organizers

Lindsay Peyriga

Application Engineer, CNRS

Head of MetaboHUB-MetaToul-Metabolic networks

PROGRAM

Day 1

- General Introduction
- Metabolism & Health
- Metabolic systems

Day 2

- Module 1 :
 - « Data Analysis for metabolic networks »
 - « Modeling of metabolic fluxes : cells scale »
- Module 2 « Experimental design and sampling » :
 - Polar molecules
 - Lipides

Day 3

- Module 2 « Experimental design and sampling » -Polar molecules TP
- Module 3 : « Analysis & data treatment NMR »
- Module 3 : Analysis & data treatment MS »
- Module 3 : TD Analysis & data treatment

Day 4

- Module 4: « Flux map »
- Feedback & round table
- Conclusion and Training evaluation

Instructors

Laurent Le Cam

Research director IRCM, INSERM

Cancer metabolism

Jean-Charles Portais

Professor University of Toulouse

Scientific director of MetaboHUB-MetaToul

Metabolism, metabolic systems, metabolomics, fluxomics

Noémie Butin

PhD student

MetaboHUB-MetaToul

MS, isotopic analysis and fluxomics

Justine Bertrand-Michel

Research Engineer, INSERM

MetaboHUB-MetaToul

Co-director of MetaboHUB-MetaToul and head of MetaboHUB-MetaToul-Lipidomics

Nathalie Poupin

Researcher, INRAE

Network analysis and bioinformatics

Pierre Millard

Researcher, INRAE

Metabolic systems biology



Floriant Bellvert

Research Engineer, CNRS

Head of MetaboHUB-MetaToul-Metabolic networks

Edern Cahoreau

Research Engineer, CNRS

MetaboHUB-MetaToul

NMR, isotopic analysis and fluxomics

Fabien Jourdan

Research director, INRAE

MetaboHUB-MetaToul

Network analysis and bioinformatics

Cécilia Berges

Engineer, INRAE

MetaboHUB-MetaToul

Robotics, isotopic analysis and fluxomics

INFOS

 upon request

Duration :

4 days – 30 hours

 Prices

Private Compagny : 2200€

Academic : 1300 €

Information & Registration :

 05 61 55 92 53

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A certificate of attendance will be delivered at the end of the training