

# INITIATION TO $^{13}\text{C}$ -FLUXOMICS

THE OBJECTIVE IS TO ACQUIRE THEORETICAL AND PRACTICAL KNOWLEDGE FOR THE ANALYSIS OF METABOLIC SYSTEMS IN CELLS OR TISSUES USING  $^{13}\text{C}$ -FLUXOMICS APPROCHES.

Expert scientists from the MetaToul platform will teach you the fundamental principles and cutting-edge techniques of metabolomics through a dynamic blend of theoretical and practical sessions

### TARGET AUDIENCE :

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

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

### PROGRAM :

- **Day 1 (6h) :**
  - General introduction
  - Metabolic systems
- **Day 2 (6h) :**
  - Data analysis for metabolic network
  - Modeling of metabolic fluxes (cells scale)
- **Day 3 (6h) :**
  - Experimental design & sampling
  - Analysis & data treatment (MS & NMR)
- **Day 4 (6h) :**
  - Flux map
  - Feedback & round table
  - Conclusion

**The knowledge acquired during the training will be assessed throughout the session by means of practical exercises or round-table discussions.**

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

### INFO

**DURATION :** 3 days - 24 Hours

**NUMBER OF PARTICIPANTS :** Min 4 / Max 10

**PRICE :**

Academic : 1300 €

Others : 2500 €

Lunch and educational materials included

**TRAINING COURSE MANAGERS :**

■ **Lindsay PEYRIGA** - Application Engineer, CNRS. Co-Manager of MetaboHUBMetaToul-Metabolic networks

■ **Maud HEUILLET** - Research Engineer, INRAE. Metabolic networks

**INFORMATION AND REGISTRATION :**

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**PERIOD OF TRAINING :  
FROM MAY 26 TO 29 2026**

