



ANR-11-INBS-0010



Post-doctoral fellowship in mass spectrometry data processing

About MetaboHUB

MetaboHUB (MTH) is the national French metabolomics and fluxomics infrastructure. Launched in 2013, MTH is a leading international infrastructure serving more than 700 scientists worldwide. MetaboHUB gathers **5 regional facilities** including more than **80 permanent staffs, 15 NMRs, 43 MS, robotic and computational platforms.** MTH aims at pushing forward the field to develop metabolomics and fluxomics from single cell to population. **Your contribution will serve a broad range of researchers** in the fields of biotechnologies, Human health and nutrition and plant science. **Joining MTH, you will be involved in cutting edge research within a highly skilled and motivated consortium.**

About MTH-PFEM <https://eng-pfem.isc.inrae.fr/>

The PFEM (**metabolism exploration platform**) is a metabolomic platform, recognized as a national and international leader in metabolomics applied to **nutrition and health.** PFEM principal research interest concerns the development of MS-based analytical methods and bioinformatics tools for a better characterization of metabolic deviations associated with development of chronic metabolic diseases and the study of nutrition and health relationships:

- metabolic profiling using multiplatform approaches in biofluids and tissues.
- development of analytical strategies for biomarker identification using ultra high-resolution MS and bioinformatics tools.
- development of models and tools to increase knowledge extraction from high throughput data.



Profile

Academic

- PhD with experience in Mass Spectrometry
- Skills and motivation for data processing
- Knowledge in metabolomics or proteomics
- Knowledge on DDA-MS and DIA-MS would be an advantage



Skills

English mandatory

Good communication and writing skills
Autonomy, organisation
Motivation to work within a multidisciplinary environment (chemists, data analysts, biologists)



Informations

CDD IR / post-doctoral fellow
18 months contract, full-time position
Salary range (gross salary): 2400 euros/month
Place of work: Clermont-Ferrand
Starting from: March 1st 2022

The mission

In the framework of the Workpackage 1, Task 2, of MetaboHUB2.0 (Advanced acquisition protocols for HT data acquisition), the aim is **to evaluate a set of software solutions for DDA-MS and DIA-MS data extraction in the context of high-throughput analyses and to validate a relevant strategy** to implement across MetaboHUB facilities. Tests will be performed using MTH in-house datasets in collaboration with mass-spectrometry experts and data analysts. Once validated, data processing strategies will be documented to harmonize standardized high-throughput data extraction on MTH platforms.

Key Responsibilities

The person recruited will be in charge of the following:

- Literature review of software solutions to **apprehend the underlying extraction strategies** for DDA-MS and DIA-MS data.
- Practical **tests** to evaluate the efficiency and ease of use of selected tools in the context of high-throughput analyses.
- **Determination of optimal strategies** for data extraction and **implementation of its use** across MTH facilities (documentation writing, analyst training).

How to apply ?

The application should contain the following attachments:

- a motivation letter
- a full CV (max. two pages) including contact details of two references,
- Copies of relevant diplomas or university certificates
- Short statement from a former supervisor
- Contact information for at least two relevant references

Contacts

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More informations

www.metabohub.fr

<https://eng-pfem.isc.inrae.fr/>