ANR-11-INBS-0010

Position Reference: Cler-P4-C

Engineer in computational metabolomics – “full stack” Web developer

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.
- Development of tools, databases and information systems based on big data and web semantic technologies to store data and mining existing knowledge.

The mission

The future engineer will work in the framework of the work package “Spectral resources for annotation and extended metabolome coverage” and in collaboration with the engineers in charge of the creation of FAIR e-resources for knowledge mining. The main task will be to design a new generation of scientific information systems in terms of interoperability and scalability. The position will focus on the upgrade and extension of the PeakForest framework, an open multi-analytical platform spectral database.

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.**

Key Responsibilities

The person recruited will be in charge of the following:

- Building Web Components (Vue.JS3 / TypeScript) library to display Metabolomics data (front-end)
- Components mapping on REST-APIs using OpenAPI specifications (middleware)
- Building REST API microservices (back-end)
- Reporting, code review; code publication on GitHUB repositories
- Software solutions review; Frameworks and practices benchmarking

Profile

• Academic
• Interest for software development
• Motivation for latest Web technologies
• Knowledge in REST API and CI/CD pipelines
• Knowledge on web-security and microservices would be an advantage

Skills

Java & Spring Boot;
Git & Docker;
Organized, code quality;
Team co-working;
Agile & Scrum methods;

Informations

CDD Engineer
18 months contract, full-time position
Salary range (gross salary): 2300 euros/month
Place of work: Clermont-Ferrand / Theix
Starting from: 2d semester 2023

How to apply ?

The application should contain the following attachments:
• by email with
• a motivation letter
• a full CV (max. two pages) including contact details of two references,
• Contact information for at least two relevant references

Contacts

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More informations

www.metabohub.fr

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