

Research Technician: Metabolomics Platform

Application deadline: **27/08/2021**

Start date: **01/11/2021**

Employment fraction: **60 – 80 %**

Job reference: **Research Technician 60-80%**

Type of contract: Position will start with a one-year contract (renewable)

City: **Lausanne, Switzerland**

Employer: **Metabolomics platform, Faculty of Biology and Medicine, UNIL**

Job description (Description des taches)

University of Lausanne is looking for an enthusiastic and skilled research technician to join the well-established Metabolomics Platform at University of Lausanne. Metabolomics is a rapidly evolving 'omic field that aims to provide a comprehensive, qualitative and quantitative characterization of the biochemical composition of a biological sample. A research technician is required to work on sample preparation of complex biological matrices and the application, development and optimization of hyphenated mass spectrometry based approaches (GC and LC-MS) mainly for high-coverage targeted analysis. The candidate will also contribute to the maintenance of instrumentation, safe-keeping of samples and data processing while interacting with the rest of our multidisciplinary team.

Metabolomics platform supports the research projects and collaborates mainly with life scientists from the University of Lausanne, the Ludwig Institute for Cancer Research, Lausanne University Hospital (CHUV), the Swiss Federal Institute of Technology Lausanne (EPFL) and other academic institutions across Switzerland. The candidate should provide technical support for ongoing service and research projects: She/he will have the opportunity to learn about analytical method development and implementation. She/he will also have the opportunity to work with diverse sample types provided through collaborations mainly in biomedical and clinical, as well as functional and evolutionary biology research (e.g. brain metabolism, cancer metabolism, aging phenomenon, diverse metabolic diseases).

Job tasks

- Apply and optimize protocols for metabolome extraction from different types of biological matrices (biofluids, tissues, cell lines, bacteria cultures) and depending on the analysis approach (untargeted/targeted)
- Contribute to set-up of standardized protocols for sample preparation
- Operating and troubleshooting chromatographic/mass spectrometry equipment
- Carry out sample analyses using the targeted and/or untargeted approach
- Contribute to set-up of standardized LC-MS methods for targeted analysis
- Perform metabolite quantification using the existing software solutions (following targeted analysis)

- Perform data analysis using the existing bioinformatic platform, as well as newly developed and implemented software tools
- Keep an up to date written and electronic record of laboratory work
- Contribute to maintenance of adequate stocks in the laboratory (consumables such as chemicals, gases, disposables)
- Help ensure the functionality of key platform apparatus (service/maintenance) by liaising with the platform staff in a timely manner
- Assume shared responsibility for organizing and implementing routine lab cleaning schedules and procedures

Your profile (Profil souhaité)

- BSc in Analytical Chemistry, Biochemistry or equivalent in related discipline (i.e. CFC with several years of experience)
- Experience with wet – lab, large-scale sample preparation
- Knowledge and practical experience in working with LC-MS systems
- Team player with enthusiasm to set up new analytical methods at the technology forefront
- Relevant experience in design of GC- and LC-MS experiments and data processing is an advantage but not necessary, strong motivation is essential
- Commitment and ability to work together in an international service and research group
- Flexibility to handle multiple projects in parallel and adjust to changing priorities
- Excellent organizational skills and the ability to set and achieve analytical targets in collaboration with colleagues and the lab manager
- Very good communication skills in French and/or English (spoken and written)

Application submission (Dossier de candidature)

Please submit your application including a CV, a letter of motivation and contact information of at least two references *via* the UNIL application service. In the cover letter, detail how your profile fits the service and research activities of the group and your long-term career goals.

Contact person (Personne de contact)

For any specific enquiries, please contact Julijana Ivanisevic, Head of Metabolomics Platform at julijana.ivanisevic@unil.ch or Dr. Hector Gallart-Ayala, Senior Scientist at hector.gallartayalla@unil.ch.

Comment (Remarques)

The University of Lausanne (UNIL) offers an outstanding scientific environment and a competitive salary, while Lausanne provides a high standard of living and dynamic cultural atmosphere. Ideally situated along the lake of Geneva, near Lausanne's city center, UNIL campus brings together over 120 nationalities.