

Let's shape the future - University of Mons

The ProtMic Research Group at the University of Mons is hiring a **full-time research fellow in Bioinformatics and Computational biology**

Application to this **vacancy by 30th october 2024**

The University of Mons - UMONS, is a French-speaking university in the province of Hainaut, Belgium, near the French-Belgian border. It is approximately 70 kilometers from Brussels, the capital of Europe. UMONS was created in 2009 following a merger between the University of Mons-Hainaut and the Faculty of Engineering of Mons, the university's oldest faculty, founded in 1837.

Through top scientific research (>1000 researchers) we push to develop research and expertise on a large scale, subsequently benefiting society, as well as the region through an international environment. Our university is one of the region's largest, most international and most innovative employers. It maintains close links with scientific research centers, as well as university spin-off and start-up companies, the majority of which are located on the outskirts of the city center.

The University of Mons has restructured its research activities via 10 research institutes, and several technology platforms. As such, the University is able to consolidate the excellence of its basic research by encouraging collaborations between its cross disciplinary research teams from its various faculties.

Mons, as a place to live and work, offers unique opportunities as it is a vibrant historical human-scale city in the *well-connected* heart of Europe, with a rich offer of cultural and social activities.

The **Proteomic and Microbiology Department (ProtMic)**, established in 2008 by Prof. R. Wattiez, specializes in functional proteomics and metabolism research within microbiology and biomarker science. More recently, our lab's focus has shifted towards integrating cell biology and immunology with quantitative mass spectrometry-based proteomics. Our expertise spans multi-omic approaches in precision medicine for discovering and validating biomarkers in body fluids and cells, as well as clinical proteomics. The ProtMic group has developed a bioprofiling core facility, a collaboration between UMONS (Université de Mons) and ULB (Université Libre de Bruxelles), leveraging cutting-edge mass spectrometry technologies to support academic research and the rapidly expanding biotech and life sciences sector.

Position

We are seeking a highly motivated and skilled **Bioinformatics Scientist** to join our growing team. This person will be a key player in our interdisciplinary team and will play a crucial role in advancing our technological capabilities as well as contributing to our functional proteomic and biomarker efforts. He will be part of the SYST-IMM project (ULiège/ULB/Umons), whose main focus is systems biology applied to immunology: integration of multi-omics data for the study of vaccine responses and inflammatory diseases.

The ideal candidate will have a strong background in bioinformatics in addition of a passion for both Health, biology and software engineering.

Responsibilities

- Develop bioinformatic pipelines and tools from mass spectrometry data associated to proteomics and metabolomics.
- Integration of new developments in the context of research project in systems biology applied to immunology, aimed at integrating multi-omics data to study responses to vaccines and respiratory pathogenic viruses.
- Maintain software solutions for data integration, visualization, and analysis.
- Work closely with cross-functional teams, including biologists and immunologists, to understand project goals and contribute to multidisciplinary research projects.
- Implement data storage and retrieval solutions, ensuring data integrity and accessibility.

- You will prepare reports related to the progress of your research activities and will publish scientific articles related to the research project.
- You will actively participate in national and international conferences, project meetings, workshops, etc.
- You will carry out several research support tasks (including proposal writing for funding acquisition).

Profile and requirements

- PhD or engineer with experience in Bioinformatics, Computational Biology, Computer Science, or a related field.
- Proven experience in bioinformatics research working with diverse data types.
- Strong programming skills in coding system and proficiency in relevant bioinformatics and data engineering tools.
- Proficiency in using R/Bioconductor packages as well as scripting/programming languages (Bash, Perl, Python ...). Familiar with Linux environment and computing clusters.
- You have outstanding oral and written communication skills in English.
- You have excellent interpersonal skills to collaborate constructively and respectfully with scientific team members and with BSc/MSc students.
- You manage your time well and are able to meet objectives efficiently within set deadlines.
- You act with attention to quality and integrity.
- Your research qualities are in line with the faculty and university research policies.

Also a plus

- Domain knowledge in mass spectrometry associated to proteomic
- Machine learning experience

We offer

- A full-time position for a period of one year, with the possibility of renewal (2 times) after positive evaluation.
- The planned start date is November 1st, 2024, or as soon as possible.
- You will do most of your work at the sciences campus in a stimulating and flexible working environment, encouraging creativity and independent thinking, in a dynamic, and international setting.
- The opportunity to build a broad national and international network of industrial and scientific partners, and to develop new personal competencies through professional training moments, courses and workshops.
- The possibility to tutor and co-supervise BSc, MSc and PhD students working on your research topic, and engage with colleague researchers in joint research and publication efforts.
- The chance to make a difference, and personally contribute to answer to urgent societal challenges.

Want to apply?

- If you are interested in this vacancy, please send a **motivation letter and your CV at Ruddy.Wattiez@umons.ac.be**
- **Save the dates:** Interviews will take place in two rounds, with a first short interview on 25 October 2024 (morning, CET), ideally in person, but remote attendance can be accommodated, and successful applicants will be invited for an in-depth second interview on 30 October 2024 (morning, CET), on site.
- If you have any questions about the position offer, please contact prof. Ruddy Wattiez (Ruddy.Wattiez@umons.ac.be)

The University of Mons received the European Commission's HR Excellence in Research Award for its HR policy. We are a sustainable, family-friendly organization which invests in its employees' growth. We encourage diversity and attach great importance to an inclusive working environment and equal opportunities, regardless of gender identity, disability, race, ethnicity, religion or belief, sexual orientation or age.