

## PhD Position (Bioinformatics/Deep Learning)

We are seeking applications from motivated candidates to join our team at the Montreal Heart Institute (MHI) research center affiliated to Université de Montréal, led by Julie Hussin. The successful PhD candidate will carry out research in a highly collaborative environment, developing and applying deep learning methods to combine different types of biomedical data in the context of personalized medicine of cardiovascular disease. The research will be done in collaboration with Yoshua Bengio at the Montreal Institute of Learning Algorithms (MILA) and Simon Gravel at the McGill University and Genome Quebec Innovation Center (MUGQIC) and is funded by IVADO (<https://ivado.ca>).

## Ongoing projects

- 1) Prediction of relevant medical phenotypes in population and clinical samples taking into account population heterogeneity
- 2) Integration strategies for large heterogeneous datasets to allow the efficient use of multi-omic data in biomedicine

## Responsibilities

- Method development and application within their own project and involving collaborations with members of the team
- Fulfilling requirements of a PhD program at Université de Montréal in a relevant field (bioinformatics, computer science).
- Although funds are available to support a PhD student, the successful candidate is expected to apply for institutional/provincial/national graduate scholarships.

## Qualifications

- Academic background in computer science, bioinformatics, statistics or equivalent.
- Inquisitive proactive attitude to research, independent learner, strong work ethic, ability to work independently and collaboratively
- Familiarity with Linux/Unix based high performance computing clusters and programming skills (Python, R, C/C++, Java) is highly desirable
- Experience in analyses of large 'omic' datasets is a plus
- Experience in machine learning/deep learning is a plus
- Candidates with strong research experience will be given priority.

## How to Apply

To apply, please send your CV and a cover letter outlining your previous research, career goals, and how they integrate with the group's research interests (max 1 page). Please provide contact information for two references and a proposed start date. Informal enquires and electronic applications (pdf files only) must be sent to: [julie.hussin@mhi-omics.org](mailto:julie.hussin@mhi-omics.org)

## Additional Information

For more information about Julie Hussin's group at MHI, please visit <https://mhi-omics.org>

For more information about the MILA, please visit <https://mila.quebec/en/>

For more information about IVADO, please visit <https://ivado.ca/en/>