

Trainee positions available at Postdoctoral or PhD levels: Statistical Learning and Modelling of Epigenetics Data
Montreal, QC and Québec, QC

Description: Well-funded trainee positions are available for PhD students (25K\$ a year, for 3 years) and/or a postdoctoral trainee (45K\$ a year) to work on research projects investigating new statistical and bioinformatic methods for analysis of DNA methylation data derived from whole genome bisulfite sequencing (WGBS) or targeted custom capture bisulfite sequencing (TCCBS). The overall goal is to develop, evaluate and implement innovative bioinformatic/biostatistical methods and tools to analyze WGBS/TCCBS data, particularly with the goal of increasing the ability to find associations with disease risk and progression. The successful applicants will develop new methods and run analytic and bioinformatic pipelines to process the sequencing data to evaluate the new methods in testing for DNA methylation association with diseases and exposures.

The trainees may be located at one of three institutions:

- 1- In Dr. Celia Greenwood's research group at the [Lady Davis Institute, Jewish General Hospital, Montreal, Quebec, Canada](#).
- 2- In Dr. Karim Oualkacha's research group at [Department of Mathematics, Université du Québec à Montréal, Montreal, Quebec, Canada](#).
- 3- In Dr. Lajmi Lakhal-Chaieb's research group at [Laval University, Quebec, Canada](#).

There will be extensive interactions with the research groups of Dr. Marie Hudson (Lady Davis Institute), Dr. Denise Daley (Centre for Heart Lung Innovation UBC, Vancouver, BC), Dr. Tiejuan Zhang (Douglas Mental Health University Institute), Dr. Aurélie Labbe (HEC), Abdoulaye Baniré (Laboratoire Bioinformatique, UQAM), and Dr. Arnaud Droit (Department of Molecular Medicine, Université Laval).

Qualifications: We are seeking for candidates with strong interest in both Biostatistics and Genomics/Epigenomics areas. The PhD candidate is expected to have some background in Biostatistics/Statistics and Genetics and/or Epigenetics and should hold a Masters Degree (or equivalent) in Biostatistics, Bioinformatics, Statistics or a related subject. The postdoctoral trainee is expected to have strong background in Biostatistics/Statistics and Genetics and/or Epigenetics and should hold a PhD Degree (or equivalent) in Biostatistics, Bioinformatics, Statistics or a related subject. Postdoctoral candidates with good computational skills—such as acquaintance with bioinformatics; experience working with Compute Canada or other high-performance computational clusters—will receive higher consideration.

To apply, send a curriculum vitae and a cover letter to Dr. Karim Oualkacha, oualkacha.karim@uqam.ca. These positions are funded by Genome Canada.