

## Research Assistant/Associate Position

Lady Davis Institute for Medical Research of the Jewish General Hospital

With funding from Genome Quebec, a two-year position is available to help improve computational algorithms for identification of causal genes for a wide range of complex diseases. This program will be supervised by Dr. Celia Greenwood at the Lady Davis Institute, in conjunction with employees of 5 Prime Sciences Inc.

### Required Education and Expertise

- MSc or PhD in Computer Science, Machine Learning, Statistics, Biostatistics.
- Minimum of 2 years' experience working in these fields.
- Experience with high dimensional datasets.
- Experience cleaning, processing and analyzing genomics datasets.
- Experience with a variety of machine learning methods.
- Strong background in human genetics, functional genomics and/or genome annotation.
- Familiarity with HPC or cloud computing environment.
- Familiarity with Docker and Terra is an asset.
- Strong communication skills.

### Principle Duties and Responsibilities

- Develop computational pipelines to capture, process, store and manipulate genomic data from sources such as genome-wide association studies, whole exome sequencing and whole genome sequencing studies.
- Develop computational pipelines to identify causal genes influencing risk of disease. This will include exploring a number of statistical and machine learning techniques focusing on high dimensional data.
- Collaborating with companies to execute this work plan, and thus gaining experience with industry.
- Writing reports and manuals to describe the results of the work program, document its output and enable others to use the resultant code.
- Version control and document code effectively using GitHub.
- General administrative tasks related to the above work program.
- Participation in the creation of new analysis programs.

Salary commensurate with experience in the range between 75,000 and 90,000K. To apply, send a curriculum vitae and a cover letter to Darin Adra, [darin.adra@ladydavis.ca](mailto:darin.adra@ladydavis.ca).