



Project title	Genomic characterization of leukemia predisposing mutations in the Quebec population		
Study level(s)	<input type="checkbox"/> MSc	<input checked="" type="checkbox"/> PhD	<input type="checkbox"/> Postdoctorate
Principal investigator(s)	Vincent-Philippe Lavallée, M.D.		
Project duration	4 years		
Start date	Spring 2021 (flexible)		

Date of posting: 2020-12-07

Research project description

Dr Lavallée's laboratory is looking for a PhD student interested in working on a research project on detecting, validating and characterizing leukemia predisposing genomic variants found specifically in the Quebec population. The selected student will have access to genomic datasets of a unique cohort of leukemia patients and healthy controls from Quebec (n ~ 700) to depict the germinal landscape of leukemia and identify new associative mutations. To validate and characterise these mutations, the candidate will have the opportunity to work in collaboration with other students and researchers. The ultimate objective of this research is to increase the knowledgebase of leukemia predisposing mutations and to offer better screening and monitoring of patients.

To successfully work on this project, the student will have to master several bioinformatics and genomics tools to identify genomic variants using exome and transcriptome sequencing data and to perform genome wide association studies. During this research project, the student will get to develop an expertise in planning and executing validation screens and functional tests.

The Lavallée laboratory is a new laboratory with lots of achievement, collaborations and huge ambitions. The student working with us will be well supported by a multidisciplinary dynamic team and will work in the new research center of CHU Sainte-Justine. If you want to develop a unique and varied expertise with a bold and daring team and you understand the clinical importance of this research project, we invite you to submit your application.

Required training and profile

Preliminary expertise in molecular biology or bioinformatics are assets but are not mandatory. Willingness to learn, ability to communicate and interpersonal aptitudes are, however, mandatory.

Submit your application

Candidates must send the required documents before **15/01/2020** to **Véronique Lisi** at veronique.lisi.chusj@gmail.com



Please provide:

- ✓ Academic *Curriculum vitæ*
- ✓ Most recent transcripts
- ✓ Cover letter detailing your achievements and goals
- ✓ References

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Equity, diversity and inclusion

The masculine gender is used without discrimination and for the sole purpose to facilitate reading. The CHU Sainte-Justine subscribes to the principle of equal access to opportunities and invites women, members of visible and ethnic minorities, persons with disabilities and Indigenous people to apply. We would appreciate it if you could inform us of any disabilities that would require technical and physical accommodation adapted to your situation during the selection process. Please be assured that we will treat this information as confidential.

Studies at the CHU Sainte-Justine Research Center

Pursue your [graduate or postdoctoral studies](#) at the **CHU Sainte-Justine Research Center**, and be one of the 500 students, fellows and interns involved in accelerating the development of knowledge in the field of maternal, child and adolescent health, whether in basic or clinical research. Under the supervision of prominent scientists, especially in leukemia, rare pediatric diseases, genetics, perinatology, obesity, neuropsychology and cognition, scoliosis and rehabilitation, you will have the opportunity to work with multidisciplinary scientific teams and collaborators from all over the world.

About the CHU Sainte-Justine Research Center

CHU Sainte-Justine Research Center is a leading mother-child research institution affiliated with Université de Montréal. It brings together more than 200 research investigators, including over 90 clinician-scientists, as well as 500 graduate and postgraduate students focused on finding innovative prevention means, faster and less invasive treatments, as well as personalized approaches to medicine. The Center is part of CHU Sainte-Justine, which is the largest mother-child center in Canada and the second most important pediatric center in North America. More on research.chusj.org

