



Project title	Characterisation of leukemic cellular populations identified by single cell sequencing		
Study level(s)	<input checked="" type="checkbox"/> MSc	<input checked="" type="checkbox"/> PhD	<input checked="" type="checkbox"/> Postdoctorate
Principal investigator(s)	Vincent-Philippe Lavallée		
Project duration	2-4 years		
Start date	2022 or 2023		

Date of posting: 2022-05-19

Research laboratory presentation

The Lavallée laboratory is a young lab that has already accomplished a lot, has tons of collaborations and loads of ambition. We study cellular diversity at the genome, transcriptome and proteome scales by a variety of molecular biology techniques derived from next generation sequencing, combined to computational biology analyses. Our multidisciplinary team works in the new research center affiliated to the Sainte-Justine hospital.

Research project description

The Lavallée laboratory, in collaboration with the members of the Leucegene group, has generated, using the Cite-Seq methodology, the single cell transcriptomic profile of a large cohort of leukemia patients. To analyse this cohort, we are looking for a masters or PhD student or a postdoctoral fellow. This recruit will be tasked with the identification of cellular populations that are found in the leukemia samples and absent from the normal samples. The student will have to interact, in a multidisciplinary team, with members of the leucegene group whose expertise include proteomic, metabolomic, cellular biology and medicinal chemistry. The student will have the opportunity to complement his/her computational analysis with molecular biology approaches. This work will be supervised by highly qualified personnel in computational and molecular biology.

Required training and profile

The ideal candidate will have previous expertise in bio-informatics/computational biology and an interest in molecular biology. An interest for a research project combining two fields of expertise is required together with the will to learn, the ability to communicate with others and interpersonal skills.

Submit your application

Candidates must send the required documents as soon as possible to **Véronique Lisi** at veronique.lisi.chusj@gmail.com. The applications will be evaluated as soon as they are received.

Please provide:



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

Vincent-Philippe Lavallée
Assistant Professor, Faculty of Medicine, Department of Pediatrics, Université de Montréal
Hematologist, CHU Sainte-Justine
Researcher, CHU Sainte-Justine Research Center
3175 côte Sainte-Catherine,
Montréal, Qc
H3T 1C5

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

