

# Bioinformatics / Sequencing analysis – Postdoctoral fellowship

## CHU Sainte-Justine Research Center



<b>Project title</b>	Identifying outcome predictors, novel therapies and mechanisms of resistance in Philadelphia chromosome-like acute lymphoblastic leukemia (Ph-like ALL)		
<b>Study level(s)</b>	<input type="checkbox"/> MSc	<input type="checkbox"/> PhD	<input checked="" type="checkbox"/> Postdoctorate
<b>Principal investigator(s)</b>	<a href="#">Thai Hoa Tran, M.D. FRCPC</a> Clinical Adjunct Professor, Department of Pediatrics, University of Montreal, CHU Sainte-Justine		
<b>Project duration</b>	2 years		
<b>Start date</b>	As soon as possible		

Date of posting: 2021-01-13

### Research laboratory presentation

The overarching goal of the Tran lab is to translate genomics discoveries into effective therapies for high-risk pediatric leukemia. Specifically, the laboratory focuses on a new genetic subtype of B-lineage acute lymphoblastic leukemia (ALL) associated with poor prognosis despite intensive chemotherapy regimens known as Philadelphia chromosome-like ALL. The main objective of our research program is to identify novel prognostic and therapeutic biomarkers in order to implement them into precision medicine clinical trials. In addition, the laboratory is interested in investigating the underlying mechanisms of resistance of Ph-like ALL.

### Research project description

The proposed research project consists of analyzing transcriptomic data of a cohort of pediatric and adult patients with B-lineage ALL to identify patients with Ph-like ALL. Furthermore, the project also aims to assess the prognostic impact of potential candidate genes in order to predict the relapse risk. Finally, the third aspect of the project aims to investigate the mechanisms of resistance of Ph-like ALL using a validated in-vitro saturation mutagenesis screen.

### Required training and profile

PhD in molecular biology or equivalent;  
Expertise in analysis of next-generation sequencing data (exome and transcriptome);  
Experience in handling laboratory animals (eg. mice);  
Ability to work independently and collaboratively;  
English proficiency;

### Conditions

The candidate must apply for admission to the University of Montreal as a postdoctoral fellow, and must meet the eligibility conditions in effect.



Postdoctoral fellows at the CR-CHUSJ are Scholarship recipient postdoctoral fellows (stagiaires postdoctoraux boursiers (SPB)). They are considered as researchers in training and are not employees of the CHUSJ. They are paid in the form of a scholarship (stipend), not a salary. For this reason, CR-CHUSJ postdoctoral fellows are not eligible for employment insurance, parental insurance, pension plans and other benefits exclusive to employees. Federal tax deductions will be withheld at source upon payment of the bi-monthly scholarship.

The candidate will receive a scholarship from their director's research funds according to the CHU Sainte-Justine Research Center's remuneration policy. The candidate will have to apply for external scholarships to obtain his nominative scholarship. He will also have access to CHU Sainte-Justine Foundation's internal merit scholarship program.

The duration of research training is conditional on:

- Research funds availability;
- Project progress;

### Submit your application

Candidates must send the required documents to Dr Thai Hoa Tran at [thai.hoa.tran@umontreal.ca](mailto:thai.hoa.tran@umontreal.ca)

Please provide:

- ✓ *Curriculum vitæ*
- ✓ Most recent transcripts
- ✓ Cover letter
- ✓ References

### 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

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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](https://research.chusj.org)

