



Project title	Inflammatory pathways modulation to prevent preterm birth – Advanced therapeutic developments		
Study level(s)	<input type="checkbox"/> MSc	<input type="checkbox"/> PhD	<input checked="" type="checkbox"/> Postdoctorate
Principal investigator(s)	Dr Sylvain Chemtob		
Project duration	3 years		
Start date	Winter 2024		

Date of posting: 2023-12-06

### Research laboratory presentation

The laboratory of Dr Chemtob is established at the forefront of preclinical studies aiming to prevent preterm birth. Rationalized development of pharmacological agent is a constant objective of our laboratory, with in mind to improve future consequences of prematurity. The work of Dr Chemtob has been recognized by numerous awards, including a recent invitation to the Royal Society of Canada. Fundamental research interests of the lab reside at the intersection of vascular biology and inflammation, in the context of pathologies of prematurity; we integrate mechanisms of cellular biology to a broader physiological understanding. Current projects integrate expertise from a wide network of academics, locally and internationally. Several senior graduate students and research associates are currently part of the lab; the structure of the Research Center in the Sainte-Justine Hospital nurtures collaborations and training of graduate students, while the surrounding Université de Montréal campuses foster innovation and discovery.

### Research project description

The Chemtob lab is currently looking for a postdoctoral researcher to lead and supervise projects relating to intra-uterine inflammation and its consequences on neonates. Current projects attain to the therapeutic modulation of interleukin signalling to prevent preterm delivery. Our laboratory research expertise lies in the areas of inflammation and angiogenesis, relying on molecular biology tools as well as preclinical studies (including histopathology and functional analyses). Our vision is to develop new therapeutics in a collaborative manner: expertise from different areas is always useful.

The successful applicant will be able to propose relevant avenues in this context, accounting for the most recent publications from the Chemtob lab.

### Required training and profile

- PhD completed, ideally less than 2 years prior
- Background in pharmacology, immunology, or cardiovascular biology
- Strong motivation to pursue fundamental and translational research projects
- Great autonomy
- Recognized aptitudes in molecular biology
- Experience in student supervision (*preferred*)
- Communication and collaborative capacities (*essential*)
- Ability to work in a diverse and inclusive environment



### Conditions

Candidate must be admissible to the University of Montreal. The candidate will apply for nominative fellowships to funding agencies and organisations. The candidate will also have access to the Excellence fellowships from the Foundation of the CHU Sainte-Justine. Research training duration will be conditional to funding availability and project advancement.

### Submit your application

Candidates must send the required documents before **January 8<sup>th</sup>, 2024** to Dr Sylvain Chemtob at [sylvain.chemtob@umontreal.ca](mailto:sylvain.chemtob@umontreal.ca) and a copy to [Emmanuel.bajon.hsj@ssss.gouv.qc.ca](mailto:Emmanuel.bajon.hsj@ssss.gouv.qc.ca).

Please provide:

- ✓ Curriculum vitæ
- ✓ Cover letter
- ✓ Two (2) References

Sylvain Chemtob, M.D., Ph.D., FRCPC  
Centre de Recherche CHU Sainte-Justine,  
3175 Ch de la Côte-Sainte-Catherine Montréal, Québec

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

