



Project title	Inflammation in the maternal circulation and placenta in pregnant women living with HIV		
Study level(s)	<input checked="" type="checkbox"/> MSc	<input type="checkbox"/> PhD	<input type="checkbox"/> Postdoctorate
Principal investigator(s)	<a href="#">Isabelle Boucoiran, MD MSc</a>		
Co -Supervisor	<a href="#">Sylvie Girard, PhD</a>		
Project duration	2 years		
Start date	September,2020		

Date of posting: 2020-06-10

### Research laboratory presentation

The Centre Maternel Infantile sur le SIDA hosts the largest database of HIV+ pregnancy in Canada. It is a unique opportunity to study the relation between the use of antiretrovirals in pregnancy and adverse perinatal outcomes.

### Research project description

Pregnant women living with HIV are more susceptible to obstetric causes of morbidity and mortality than seronegative women, even when treated with antiretroviral therapy (ART). These women are at greater risk of severe pregnancy complications especially preterm delivery (1.5 to 3.5 fold increased risk). Some antiretrovirals, especially protease inhibitors have been specifically associated with this risk. HIV and antiretroviral therapy may lead to non-apoptotic cell death causing DAMP secretion and inflammation leading to preterm delivery.

We propose to study the link between maternal/placental inflammation and ART exposure in pregnant WLWHIV.

We hypothesize that DAMPs in the maternal circulation and inflammatory cytokines are modulated by ART regimens and ART initiation timing in pregnant WLWHIV, which results in placental inflammation associated to PTB.

Objectives: To determine the relation between the maternal and placental inflammatory profiles of WLWHIV and the main ART regimens followed by these women

### Required training and profile

- Hold a bachelor's degree in biomedical sciences / microbiology / immunology or related field;
- Be serious and motivated;
- Have a good academic record;
- Have a good level in English;
- Having experience in clinical research would be an asset.



### Conditions

Scholarship according to the criteria of CHU Sainte - Justine and the University of Montreal for master's students. The candidate will have to apply for external scholarships.

### Submit your application

Candidates must send the required documents before **30/07/2020** to Dr Isabelle Boucoiran at : [isabelle.boucoiran@umontreal.ca](mailto:isabelle.boucoiran@umontreal.ca)

Please provide:

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

### Isabelle Boucoiran

MD, MSc, Professeur Adjoint de Clinique  
Centre d'Infectiologie Mère-Enfant, CHU Sainte-Justine  
Départements d'Obstétrique-Gynécologie et de Médecine Sociale et Préventive  
Université de Montréal  
3175 chemin de la côte Ste-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](http://research.chusj.org)

