

Project title	Effects of vitamin D3 supplementation on severity, functional and economic burden of asthma attacks of young children		
Levels(s)	⊠ MSc	□ Doctorate	□ Postdoctoral
Researcher(s) in charge	Francine M. Ducharme		
Project duration	2-3 years		
Begin date	As soon as possible.		

## **Offered** position

Funded MSc position in clinical epidemiology or related sciences.

## **Internship location:**

Laboratoire du Dre Francine Ducharme, Centre de recherche Azrieli du CHU Sainte-Justine 3175, ch. Côte-Ste-Catherine Montréal (Québec) H3T 1C5

**Project duration:** 2 - 3 years

#### **Research laboratory overview**

The clinical laboratory of Dr. Ducharme, clinician-researcher and clinical epidemiologist, focuses on various clinical studies testing the efficacy and safety profile of various interventions in pediatric asthma.

#### **Research project description**

Asthma is the most common chronic disease in children and viral infections are the main triggers for asthma attacks in young children. Despite standard treatment, young children continue to have asthma attacks triggered by colds. The proposed thesis project derives from a large multicenter clinical trial testing the efficacy of high-dose vitamin D versus placebo in addition to standard treatment to reduce the severity of asthma attacks in young preschool children who have required rescue oral corticosteroids in the past year. During

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the study, parents documented for each asthma attack their child's symptoms and functional status (validated questionnaire), their personal quality of life (validated questionnaire), as well as the direct and indirect costs. With over 320 children recruited, this study is a unique opportunity to establish the real burden of an asthma attack on the child and parents.

# **Objectives:**

The main objective of the proposed thesis topic is to document whether and how vitamin D supplementation modifies child's symptoms and affects the functional and economic burden on parents; and secondarily, to describe the burden of recurrent asthma attacks in young children and their parents.

# Student's role in the project

The student's role is to review related literature, proceed to the data management, analysis and interpretation of the found data with the R software and to write a thesis with a scientific manuscript to submit for publication.

# Profile and training required

- Bachelors or Master's Degree in biostatistics, pharmacoepidemiology, epidemiology, biomedical sciences or related discipline.
- Expertise in statistical analysis and/or mathematics.
- Good knowledge of statistical software programming (R, SAS, or SPSS) is an asset.
- Comfortable working with databases is an asset.
- Excellent academic record
- Research experience
- Excellent command of written and spoken English and, ideally, French.

# Conditions

A competitive student scholarship will be offered for the first year; the successful applicant will be invited to apply for scholarships in various competitions for years two and three.

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## Submitting your application

Applicants must send the required documents by email to Dr. Francine M. Ducharme <u>francine.m.ducharme@umontreal.ca</u>

#### Please include:

 $\sqrt{Curriculum vitae}$  $\sqrt{Most recent academic transcript}$  $\sqrt{Cover letter}$  $\sqrt{3} references$ 

## **Recipients' full address:**

Francine M. Ducharme, MD, MSc, FRCP(c), CAHS

Professeure, Départements de Pédiatrie et de Médecine sociale et préventive École de santé publique de l'Université de Montréal Tel : (514) 345-4931 ext. : 4398 CHU Sainte-Justine, Salle 17.B.000 1375 Côte Ste-Catherine Montréal, Qc, H3T1C5, Canada

#### Studies at the Centre de recherche Azrieli du CHU Sainte-Justine

Pursue your graduate or postdoctoral studies at the Centre de recherche Azrieli du CHU Sainte-Justine, and be one of the 580 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.

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### About the Centre de recherche du CHU Sainte-Justine

The Centre de recherche Azrieli du CHU Sainte-Justine is a flagship facility for motherchild research affiliated with the Université de Montréal. Focused on the discovery of innovative means of prevention, less intrusive and faster treatments, and promising avenues of personalized medicine, it brings together over 200 researchers, including more than 90 clinical researchers, as well as 500 graduate and post-doctoral students. The center is an integral part of the Centre hospitalier universitaire Sainte-Justine, the largest motherchild center in Canada and the second largest pediatric center in North America. Details at <u>Centre de recherche du CHU Sainte-Justine (chusj.org)</u>



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