



CHU Sainte-Justine
Research Center
Mother and Child
University Hospital Center

Université
de Montréal

Project title	Impact of Vitamin D supplementation in young children with repeated asthma flare-ups		
Study level(s)	<input type="checkbox"/> MSc	<input type="checkbox"/> PhD	<input checked="" type="checkbox"/> Postdoctorate
Principal investigator(s)	Ducharme, Francine M. M.D., M.Sc., FRCPC Geneviève Mailhot, Ph.D., DtP		
Project duration	3 years		
Start date	As soon as possible		

Research project description

Postdoctoral fellowship in clinical epidemiology, pediatric respiratory and nutrition

Preschoolers have the highest morbidity due to asthma attacks, most of which are triggered by upper respiratory tract infections (URTIs). Vitamin D deficiency is prevalent among Canadian preschoolers with recurrent asthma flare-ups, especially in the fall and winter and has been associated with more URTIs and more moderate to severe asthma flare-ups. Our ongoing randomized controlled trial aims to ascertain the impact of vitamin D3 supplementation on moderate and severe flare-ups in preschool aged children with recurrent asthma flare-ups.

Main objectives

- To gain experience in the management and coordination of a large multicentre clinical trial
- Explore the impact of vitamin D on gene expression measured on peripheral blood mononuclear cells (PBMCs), lymphocyte count, blood count (hemoglobin, eosinophilia, etc.), lung function measured by oscillometry, bone metabolism, colonisation and distribution of viral pathogens documented in the nasopharynx.
- Develop and test a clinical score to identify children at risk for vitamin D deficiency.
- Develop skills for grant applications

Required training and profile

- Have a completed PhD in epidemiology, nutrition, biomedical sciences and / or an MD with advanced training in clinical research and expertise in pediatrics or pulmonology.
- Excellent academic record
- Good statistical analysis skills
- Excellent knowledge of computer science and the use of softwares (Office suite, SPSS, SAS, etc.)
- Excellent ability to review scientific literature
- Excellent competence in written and oral English. Linguistic competence in French is an asset.



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Conditions

A research grant, reserved for this project, will cover the first year; the candidate will be invited to apply for training awards and operational funds at various competitions and programs for the following years.

Submit your application

Candidates must send the required documents to Annie Théoret at annie.theoret@recherche-ste-justine.gc.ca by putting the title of the project in subject.

Please provide:

- ✓ *Curriculum vitae*
- ✓ Most recent transcripts
- ✓ Cover letter
- ✓ Two References

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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

