



**Postdoctoral Fellow And Ph.D. Student
Studies On Group 2 Innate Lymphoid Cells (ILC2)
McGill University
Laboratory: Dr. Jörg H. Fritz**

We are looking for a postdoctoral fellow and a Ph.D. student to investigate the molecular and cellular mechanisms involved in the regulation of group 2 innate lymphoid cells (ILC2).

Innate lymphoid cells (ILC) play important roles in the initiation of inflammation at barrier surfaces in response to infection or tissue damage. ILCs can be grouped into two separate lineages, cytotoxic ILCs represented by conventional natural killer (cNK) cells and helper-like ILCs, with the later being classified into three major groups on the basis of their cytokine-producing potential: interferon- γ - (IFN- γ)-producing group 1 ILCs (ILC1), interleukin 13 (IL-13)- and IL-5-producing group 2 ILCs (ILC2), and IL-17- or IL-22- producing group 3 ILCs (ILC3). ILC2 are found in low numbers under homeostatic conditions at mucosal surfaces including the lung and intestine, as well as in skin where they expand rapidly upon activation. They provide immunity to helminth infection, and participate in inflammatory responses and tissue repair. However, clinical observations and rodent models of human disease revealed that ILC2 exert critical roles by producing immense quantities of cytokines in type 2 immunopathologies such as asthma, allergic dermatitis, and allergic lung inflammation induced by pathogens.

<https://www.ncbi.nlm.nih.gov/pubmed/26595887>

<https://www.ncbi.nlm.nih.gov/pubmed/27255596>

The project will use novel cell culture systems of ILC2, bioimaging, mouse models in combination with cutting edge functional genomics and multi-parameter flow cytometry. The position is available in the group of Dr. Jörg H. Fritz at McGill University (Department of Microbiology & Immunology), Montreal, Canada. <https://mcgill.ca/mrcct/members/primary-members/jorg>

Our group is located at the Bellini Pavilion at the Life Sciences Complex at the downtown campus at McGill University within the Departments of Microbiology & Immunology, and Physiology. We are equipped with state of the art laboratories with access to excellent dedicated core facilities for animal models, flow cytometry, bioimaging and bioinformatics.

A university degree (for Ph.D. applicants) or a doctoral degree (for postdoc applicants) in Immunology or related Life Sciences with background in molecular and cell biology is expected, although applicants with a degree in physics or bioengineering and an interest in life sciences are also welcome. Expertise in flow cytometry, cell culture systems and working with in vivo mouse models are desirable. You should be dedicated, creative and a good team player wanting to take an active role in the development of a young research team.

Proficiency in English is required. The successful candidate is expected to apply for fellowships. Send enquiries and applications directly to Dr. Jorg Fritz (jorg.fritz@mcgill.ca).

Please include: a CV, list of publications, a short statement of research interests and why you chose to apply for this position, names and contact information of three references....