



IRCM

**MONTREAL CLINICAL
RESEARCH INSTITUTE**

AFFILIATED WITH UNIVERSITÉ DE MONTRÉAL



2 Positions for Post-docs and Graduate Students Hematopoiesis & Cancer Laboratory, IRCM, Montreal, Canada

1 Postdoctoral position in molecular biology, epigenetics and gene regulation

One (1) postdoctoral position is available to study gene regulation in hematopoiesis and leukemia by the transcription factor and epigenetic regulator “Growth factor independence 1” (Gfi1), a key regulator for normal blood development. Gfi1, and its homologue Gfi1b, repress chromatin regions by recruiting chromatin modifiers such as LSD1 and HDAC, but other chromatin modifiers are also involved. The project aims to understand the mechanistic consequences of Gfi1 loss or mutation in blood cells or leukemic cells (www.moroylab.org).

1 Postdoctoral or graduate student position to identify and study lncRNAs in hematopoiesis and leukemia

One (1) position for a post-doctoral fellow or graduate student is available to identify and characterize Gfi1 and/or Gfi1b regulated long noncoding RNAs (lncRNAs), to determine the regulation patterns of the lncRNA genes by Gfi1 or Gfi1b and to investigate the biological functions of Gfi1 controlled lncRNAs in lymphoid and myeloid differentiation and in the development of leukemia and lymphoma (www.moroylab.org).

These projects will involve the use of High Throughput Sequencing (ChIP-Seq, RNA-Seq) methods the use of CRISPR/Cas9 technology and experience with bioinformatics tools to interpret sequencing data is required. Preliminary data for both projects are available as well as support on specific experimental protocols. Methods will also include the study of various knockout mice generated in our laboratory, and the use of primary cells from these animals as well as in-house cell lines and human samples.

Summary of responsibilities:

- Ability to design and carry out the experimental work and to follow the literature on a subject, Ability to write publications and to present data in international meetings,
- Capability to perform complex biochemical experiments, bioinformatic analyses and to archive experimental work,
- Willingness to integrate into a research laboratory and interact with team members

How to apply: Your curriculum vitae, a letter of motivation and three letters of reference (or contacts of references) should be forwarded to:

Dr. Tarik Moroy, Full research Professor and Director of the “Hematopoiesis and Cancer Research Unit”, Institut de recherches cliniques de Montréal – IRCM, 110 avenue des Pins ouest, Montréal (QC) Canada H2W 1R7, Email: Tarik.Moroy@ircm.qc.ca

The IRCM is an independent non-profit research institution affiliated with the Université de Montréal, and with a long-standing association with McGill University. All IRCM researchers hold appointments as university research professors at the Université de Montréal and are associated to various departments at McGill University. Located in the heart of Montréal’s academic community, the IRCM attracts top researchers. Every year, more than 100 Master’s and PhD students, and some 50 postdoctoral fellows pursue their scientific education at the Institut, supervised by experienced researchers in various fields of biomedical research (www.ircm.qc.ca).