

## Research Center of the Centre hospitalier de l'Université de Montréal

The Research Center of the Centre hospitalier de l'Université de Montréal (CRCHUM) is the largest research center in biomedical sciences and health care at the University of Montreal, and among the largest in Canada. Located at the Champs de Mars metro station, the CRCHUM offers a dynamic and innovative work environment in ultramodern facilities at the cutting edge of technology. The CRCHUM promotes job stability and supports the development and professional improvement of its employees who benefit from a full range of social benefits (flexible hours, teleworking policy, pension plan (REGOP), generous leave policy).



Our research center promotes job stability and supports professional development and improvement for challenges that meet your aspirations.

## Laboratory of Dr Bertrand Routy MD, PhD – Cancer Axis

Dr. Routy's lab focuses on the impact of the microbiota of patients treated with cancer immunotherapy and is looking for a doctoral student.

Despite the unparalleled clinical success of immune checkpoint inhibitors (ICI) with anti-PD-1 and anti-CTLA-4 in patients with non-small cell lung cancer (NSCLC) and melanoma, sustained control of the disease occurs in a minority of patients. Microbiome profiling from patients with cancer, coupled with the development of fecal microbiota transplantation (FMT) in murine models have identified specific bacteria that modulate the ICI anti-cancer response, and revealed the novel therapeutic potential of the gut microbiome. Our laboratory focuses on: 1. Understanding the immune mechanisms linking the gut microbiome to cancer immunotherapy, 2. developing novel microbiome biomarkers in patients with cancer amenable to immunotherapy, and 3. performing translational research in microbiome-centered clinical trials.

## Responsibilities

- ✓ Participate in the execution of research projects
- ✓ Receive, handle and biobank human samples (blood, tumor tissue, stool, urine)
- ✓ Carry out multi-color flow cytometry markings on human and murine cell suspensions
- ✓ Perform DNA/RNA extractions and PCR experiments on human and murine samples
- ✓ Enter data into various software for clinical projects
- ✓ Work in the germ-free animal facility and the primary animal facility to develop experiments
- ✓ Write background requests and scientific articles

## Qualifications

- ✓ Hold a bachelor's or master's degree in health sciences (biology, biochemistry, immunology, microbiology, biomedical sciences)
- ✓ Have experience in a research laboratory
- ✓ Master good laboratory practices and WHMIS
- ✓ Knowledge of the Microsoft Office suite (Word, Excel)
- ✓ Good understanding of French and English
- ✓ Ability to manage several activities simultaneously and prioritize tasks

- ✓ Excellent sense of organization

### Status and advantages

- ✓ Full-time position, 35 hours/week from Monday to Friday
- ✓ Location: CHUM Research Centre
- ✓ Enrollment in a graduate study program at the University of Montreal
- ✓ Grant and conditions according to CRCHUM policies

### To apply

Those interested are requested to send:

- ✓ curriculum vitae
- ✓ cover letter
- ✓ grade transcripts
- ✓ Letters of two references

For the attention of Afnan Al-Saleh: [afnan.al-saleh.chum@ssss.gouv.qc.ca](mailto:afnan.al-saleh.chum@ssss.gouv.qc.ca)

Only successful candidates will be contacted for an interview.

The CRCHUM invites women, Aborigines, visible minorities, ethnic minorities and people with disabilities to apply. The CRCHUM adopts a broad and inclusive definition of diversity that goes beyond applicable laws. The CRCHUM thus encourages all people, regardless of their characteristics, to apply. In accordance with Canadian immigration requirements, please note that priority will be given to Canadian citizens and permanent resident.