



## Research Associate Position

The Hanrahan Laboratory in the Department of Physiology in the faculty of Medicine at McGill University seeks a Research Associate available to join the CF Translational Research Centre (CFTRc).

The successful applicant will carry out a research project on bicarbonate and pH regulation in the airways. It will involve studies of extracellular pH in airway surface liquid and intracellular pH in airway epithelial cells, the roles of ion transporters and channels in bicarbonate and proton secretion, and the roles of surface liquid pH in antimicrobial activity, bicarbonate secretion and mucociliary transport.

### Responsibilities:

- Develop micro-methods for studying pH
- Design experimental protocols that involve fluorescence imaging and electrophysiological measurements
- Drive the CFC project and break new ground
- Analyze data, review and evaluate the findings
- Prepare written and oral reports and manuscripts for publication.
- Presenting results at scientific meetings and will represent the lab and the CFTRc at internal and external meetings and conferences.
- Participate in the supervision of graduate & undergraduate students and train users in ratiometric fluorescence imaging and other techniques.

**Qualifications:** Applicants must have a doctoral or equivalent degree and at least five (5) years of research experience. The applicant must have experience with ratiometric fluorescence imaging for intracellular pH, experience with buffers and microtitrations, patch clamp recording, and expertise with gas mixing pumps. A strong understanding of the theory behind pH and buffer capacity is essential. Experience with mammalian cell culture at the air-liquid interface is essential. These studies will require decision-making and the ability to troubleshoot problems in the laboratory, resolve conceptual problems in experimental design, and interpret results in the context of mathematical models. This is a full time position and is funded by Cystic Fibrosis Canada (CFC).

**Duration:** This position is for a period of two (2) years, 40 hours per week.

Please take note that this is a unionized position covered by the AMURE Collective Agreement.

### HOW TO APPLY

Applicants should submit a cover letter explaining their qualifications and their interest in this position, a curriculum vita and the names and contact information for three individuals who could provide letters of recommendation. Applications and all inquiries should be sent to Valerie Lapointe-Boyer ([Valerie.lapointe-boyer@mcgill.ca](mailto:Valerie.lapointe-boyer@mcgill.ca)). Applications will not be considered 30 days after the date it is posted.

*McGill University is committed to diversity and equity in employment. It welcomes applications from: women, Aboriginal persons, persons with disabilities, ethnic minorities, persons of minority sexual orientation or gender identity, visible minorities, and others who may contribute to diversification.*

*All qualified applicants are encouraged to apply; however, in accordance with Canadian immigration requirements, Canadians and permanent residents will be given priority.*