

**Posting
POSTDOCTORAL RESEARCHER**

Position Title:	Post-Doctoral Researcher
Hiring Unit:	Physiology
Name of Immediate Supervisor:	Drs. Alvin Shrier and Gergely Lukacs
Location of Work:	McIntyre and Bellini Buildings
Work Schedule:	40 hours/week
Working Hours:	9am -5pm
Planned Start Date & End Date: (if applicable)	As soon as possible renewable up to 3 years
Salary Range: (minimum as per collective agreement)	CIHR level \$43,000 - \$47,000
Posting Period: (start and end date of posting)	June 20 – July 20, 2020

PRIMARY DUTIES

A postdoctoral position is available in the Department of Physiology, McGill University Life Sciences Complex, focused on inherited cardiac arrhythmias for a scientist with a recent Ph.D. (<1 year). The successful candidate will work with Professors Alvin Shrier and Gergely Lukacs to characterize defective cellular and molecular mechanisms underlying cardiac arrhythmias and to develop novel small molecule based correctional approaches. The congenital form of the long QT syndrome (LQTS2) represents a major cause of sudden cardiac death. LQTS2 is due to mutations in the hERG gene (human Ether-à-go-go Related gene or KCNH2). We have found that a class of KCNH2 mutations can traffic to the cell membrane but are unstable and are rapidly removed by a presently poorly understood mechanism (Sci Rep 2019 Apr 15;9(1):6066). This project aims at elucidating a molecular basis of the peripheral protein quality control of the HERG mutants that is distinct from the one described previously for the severely unfolded wild-type channel from the cell surface (Mol Biol Cell. 2013 24:3787-804) and explore small molecule strategies that we found can rescue this defect. Primary responsibilities will be to conduct cell and molecular studies of the underlying mechanisms including imaging and possibly electrophysiological experiments.

QUALIFICATIONS

Qualified candidates should be highly motivated and self-driven, with a track record of success as reflected by first-author publications in highly-ranked English language scientific journals and fluency in written and spoken English. Applicants must have a recent Ph.D. in Cell Biology, Biochemistry, Biomedical Sciences or some other related discipline and have an interest in ion channel biology. The position will involve the running of the project, performing a variety of research related lab tasks, assist with training and supervision of students and collaborate with members of the two labs. The ideal candidate will have experience in mammalian and stem cell culture, cell and molecular biology, live and fixed fluorescence microscopy (confocal) and image analysis. In addition, experience in patch clamp electrophysiology and protein purification is an asset and desirable.

HOW TO APPLY

This full-time position with benefits is fully funded for two-three years with an initial appointment of one year according to CIHR guidelines. To apply, applicants should send an email to Profs. Shrier and Lukacs (alvin.shrier@mcgill.ca and gergely.lukacs@mcgill.ca) with the following

items: (1) cover letter, (2) curriculum vitae including a list of publications, (3) statement of research interests and (4) contact information for two-three references. Applications will be considered immediately for an imminent start date that will be determined by the McGill COVID-19 ramp up guidelines. Please refer to McGill's requirements on postdoctoral appointments, www.mcgill.ca/gps/postdocs, for conditions and additional information on the status of the position.

McGill University is committed to equity in employment and diversity. It welcomes applications from indigenous peoples, visible minorities, ethnic minorities, persons with disabilities, women, persons of minority sexual orientations and gender identities, and others who may contribute to further diversification.