



Undergraduate Student Positions Available to Study the Basic Mechanisms of Multiple Sclerosis (MS)

Join a dynamic, world-class, generously funded basic and translational science team, led by Dr. Michael Levin, the Saskatchewan Multiple Sclerosis Clinical Research Chair. Dr. Levin offers personalized mentorship, state of the art laboratory facilities, and the opportunity for basic scientists to work hand-in-hand with clinicians in Saskatoon City Hospital and the University of Saskatchewan.

The laboratory is in the Department of Anatomy, Physiology & Pharmacology (APP) at the University of Saskatchewan and has positions currently available for Undergraduate students to study how abnormalities in the immune and nervous systems contribute to the pathogenesis of MS. The laboratory is physically located in Saskatoon City Hospital, as part of the Cameco MS Neuroscience Research Centre. For more information about the lab and Dr. Levin, please visit <http://research-groups.usask.ca/skms-office/>.

The long-term goal of research in the Levin Lab is to better understand the cause of neurodegeneration, a salient feature and cause of permanent disability in progressive MS patients. For more than 20 years, we have studied how dysfunctional RNA binding proteins contribute to the pathogenesis of MS. Using a number of molecular, in situ, in vitro and in vivo techniques, our research indicate that DNA mutations within RNA binding proteins and autoimmunity to RNA binding proteins result in their dysfunction, leading to subsequent neuronal and axonal degeneration.

Potential students should be in a relevant undergraduate degree program, with a preference given to students going into their third or fourth years of studies. Students will gain experience in one or more of the following; mouse models, imaging, immunocytochemistry/immunohistochemistry, protein biochemistry, molecular biology (PCR, cloning, etc.) and human tissue analyses. In addition, students will also receive training in data analysis and interpretation using statistical software.

The individual should be independent, self-motivated and should be able to perform tasks with modest supervision after receiving appropriate training. Applicants must have the ability to adhere to tight deadlines, be detail oriented, possess organization skills, and keep meticulous records. As the laboratory is a shared space, strong interpersonal skills are necessary.

Prospective students should send the following documents to the Office of the Saskatchewan MS Clinical Research Chair via email to Ms. Catherine Hutchinson, c.hutchinson@usask.ca :

- Current CV with list of laboratory of experience (if any)
- Transcripts (unofficial, accepted)
- If student has previous research experience, provide the name and contact information of previous research supervisor(s)