

## **Postdoctoral Fellow, Focused Ultrasound Group, Sunnybrook Research Institute**

**Status:** Full time

**Research Unit:** Focused Ultrasound Group, Sunnybrook Research Institute

**Principal Investigator:** Kullervo Hynynen PhD. Professor, Department of Medical Biophysics and Cross Appointed Professor, Institute of Biomedical Engineering, University of Toronto.

**Co-Principal Investigator:** Gary Yau MD MS FRCPC. Faculty, Department of Ophthalmology and Vision Sciences, University of Toronto

### **Overview**

The Focused Ultrasound (FUS) Laboratory at Sunnybrook Research Institute in Toronto, Ontario is seeking applications from highly qualified and motivated individuals for a Post-doctoral Fellowship. Focused ultrasound is changing the way that surgery is performed by allowing treatment of tumours and other diseases without ever making an incision. Our group is one of the leading laboratories in the world in the development of highly innovative, leading-edge technology for completely non-invasive image-guided surgery and targeted drug delivery using focused ultrasound.

### **Training Opportunity**

The Fellow will be involved in the investigation and development of a novel medical device to treat a blinding ocular condition, working alongside a multidisciplinary group of experts in physics, engineering, biology and medicine. The successful candidate will be primarily responsible for the design and execution of experiments to investigate the effect of FUS on preclinical (tissue and animal) models of this disease. The ultimate goal of this research is to translate this device for a "First-in-Human" trial, with the results of this work forming the proof of concept for this trial. Given this overarching goal, the fellow will be in close collaboration with clinician end-users throughout the project. The Physical Sciences Platform at Sunnybrook has spun off many companies, and is a hotbed for innovation, and the successful Fellow will be placed in the opportunity to be a key driver of this innovation.

### **Qualifications and Skills**

- PhD (<5 years) in Medical Biophysics, Biomedical Engineering or related fields
- Experience in experimental investigation (in vivo and in vitro) with analysis of biomedical data, with experience in focused ultrasound a particular asset
- Ability to work independently and collaboratively, and deliver work on schedule
- Outstanding written and verbal communication skills

A competitive salary commensurate with experience will be provided for 1 year, with the possibility of extension up to 2 years. Can start as soon as possible. Candidates should send a cover letter (brief description of reason for interest, relevant research experience), curriculum vitae, and name and contact information of two references to: [g.yau@utoronto.ca](mailto:g.yau@utoronto.ca)