



## Post-doc position in focused ultrasound

**A motivated Postdoctoral Fellow is sought** to join a unique multidisciplinary team of neuroscientists (Zelma Kiss, Clark, Martino, Whelan), imaging and ultrasound engineers (Bruce Pike, Pichardo, Murari). The project is NSERC-funded and involves focused ultrasound (FUS) neuromodulation imaging/electrophysiology and modeling. Focused ultrasound is emerging as an important neuromodulatory tool, allowing for non-invasive or minimally invasive alteration of brain network function. The mechanisms of FUS action are not well-understood. The candidate would use *in vitro* and *in vivo* animal models to interrogate how FUS alters neural function, with access to cutting edge equipment from InSightec, BrainSonics, as well as custom-built focused ultrasound systems and software. The post-doc will present at local and international

conferences (e.g. International Symposium on Therapeutic Ultrasound will be in neighbouring Banff in 2025), have opportunities for teaching or industry relationships, and expand the project into new directions. Taking ownership of the work will allow them to apply for their own fellowship funding from local and national/international organizations, with the support of their network of mentors.

Candidates must have a PhD with a strong background in electrophysiology or neuroimaging, be within 5 years of PhD completion, and have a publication record in respected scientific journals. A competitive salary and benefits will be provided through the University of Calgary post-doctoral training stream. Note both these recently funded grants have a 5 year duration so while contracts are offered yearly, there is potential for longer term training.

The training environment within the Hotchkiss Brain Institute is diverse, has state-of-the-art translational research facilities, a weekly seminar series and clinical rounds, both of which feature leading international neuroscientists. We have strength in both synaptic and systems physiology, imaging and computational modeling. Being immediately adjacent to neuroscience clinics at the Foothills Hospital gives unprecedented access to clinical data. Thus, the successful candidate will have access to a wide variety of mentors, techniques and approaches that will provide a unique training experience. Calgary is a lively multicultural city, and is a one hour drive from the Canadian Rockies and Banff.



Please send CV and contact information for 3 references to Dr. Zelma Kiss [zkiss@ucalgary.ca](mailto:zkiss@ucalgary.ca) or [bruce.pike@ucalgary.ca](mailto:bruce.pike@ucalgary.ca)