Post-doc position in multimodal imaging & connectivity in deep brain stimulation (DBS)

A motivated Postdoctoral Fellow is sought to join a multidisciplinary team including neuro- and imaging scientists and clinicians (Bruce Pike, Zelma Kiss, Darren Clark, Davide Martino). The target project is newly CIHR-funded and focuses on development of a novel neuromodulatory target for dystonia. The candidate would map anatomical and functional connectivity in patients, using state-of-the-art MR imaging techniques. The trainee would have access to our new GE Ultra-High Performance (aka UHP) scanner, which leverages very strong and fast switching gradient coils to allow highly accelerated imaging and dramatically improved diffusion imaging. Transcranial magnetic stimulation (TMS) mapping and chronic human electrophysiological recordings from implanted DBS electrodes will also be used to map connectivity within networks in dystonia. The post-doc will present at local and international conferences, 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 zkiss@ucalgary.ca and/or bruce.pike@ucalgary.ca