Start Date: ASAP/open until filled

Principal Investigators: Darin Dougherty, MD, Tina Chou, PhD (primary supervisors)

Responsibilities: Full-time Clinical Research Coordinator I (CRC I) needed in the Division of Neurotherapeutics, a multidisciplinary clinical neuroscience group. We conduct neuroimaging, EEG, TMS, behavioral, and clinical studies of severe psychiatric illness. Most of our work uses Deep Brain Stimulation and similar neurostimulation devices as tools to both treat disease and understand the brain.

The CRC I will be responsible for both data collection and analysis. Data collection includes application of neuroimaging and electrophysiology (fMRI and EEG), behavioral/psychophysical tasks, and standardized questionnaires. The CRC I will be responsible for performing fMRI, PET, and behavioral data analysis for several studies involving neural mechanisms underlying psychiatric illness. Data analysis will include a variety of statistical methods and will likely require learning new software tools (e.g., SPM, Freesurfer, FSL). This often involves familiarity with programming scripts and code collections that can be used by others. The CRC I will also help produce reports, scholarly clinical research abstracts, posters, and manuscripts for publication and can expect to be credited as an author.

The CRC I will work closely with Investigators, study staff and the Institutional Review Board (IRB) to implement and oversee studies and submit appropriate regulatory forms, document, compile and maintain clinical research data, patient files, regulatory binds and study databases. The CRC I can expect to conduct clinical assessments and work closely with patients by coordinating and administering, scoring, and evaluating study questionnaires/interviews. There will be opportunities to shadow clinicians in the division and/or observe neurosurgeons as part of our research data collection.

The position requires high level technical and analytical skills, the ability to manage data software systems, strong research and writing skills, and the ability to work independently. The CRC will be working closely with psychiatric patients for data collection, and so should be comfortable and considerate while working with clinical populations. We give preference to candidates who are interested in clinical/translational research work as part of their long-term career.

Qualifications: Bachelor's degree with at least 1 year of related research experience not for course credit required. This position would be suitable for an applicant with a background in cognitive neuroscience or psychology who has a strong interest and motivation to apply that knowledge in neuropsychiatry. General Biology, Engineering, or other majors are also acceptable with demonstrated quantitative skills. Candidates must be organized, attentive to detail, able to work independently and manage multiple tasks at once. Strong interpersonal skills are a must. Candidates must also possess good writing and editing skills, and basic programming skills in a scientific language such as MATLAB. Familiarity with UNIX/Linux scripting is recommended but not required. Candidates must have prior neuroimaging experience (i.e. fMRI, PET, etc.), including familiarity with fMRI data analysis. Proficiency in SPM, Freesurfer, or similar programs is a plus.

Ongoing/upcoming projects:
- An fMRI study on the neural correlates on the consciousness of fear
- Neuromodulation of ventral striatum with transcranial focused ultrasound
- PET study on the neural correlates of depression in HIV
- An fMRI study to validate the use of bezafibrate as a treatment for bipolar depression

Our laboratory is part of the Martinos Center for Biomedical Imaging, one of the world's largest and most diverse human neuroscience centers. There will be many opportunities for a broad exposure to cognitive and emotional neuroscience through seminars, workshops, and peer interactions.

Please send a copy of your CV and a cover letter describing your research experience to Kendra Simpson and Ben Borron at neurotherapeutics@mgh.harvard.edu