CLINICAL RESEARCH COORDINATOR II IN DIVISION OF NEUROTHERAPEUTICS AT HARVARD MEDICAL SCHOOL/ MASSACHUSETTS GENERAL HOSPITAL

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

The CRC II will be responsible for both data collection and analysis. Data collection includes application of neuroimaging and electrophysiology (fMRI and MEG/EEG), behavioral/psychophysical tasks, and standardized questionnaires. Data analysis includes time series (MEG/EEG & intracranial recordings) and behavioral data analysis for several studies on the neural mechanisms of psychiatric illness. This is likely to additionally include methods development, e.g. programming the visual display of standardized stimuli for various testing environments. Analysis will include a variety of statistical methods, and will require learning new software tools (e.g., MNE, FieldTrip, FreeSurfer). This often involves programming scripts and code collections that can then be used by others. Finally, the CRC II also helps produce reports, scholarly clinical research abstracts, posters, and manuscripts for publication and can expect to be credited as an author on many of these.

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 severely ill psychiatric patients for data collection, and so should be comfortable around clinical populations. We give preference to candidates who are interested in clinical/translational 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 engineering, computer science, or mathematics who had a strong interest and motivation to apply that knowledge in neuroscience. Neuroscience, biology, psychology, or other majors are also acceptable with demonstrated quantitative skills. Candidates must be organized with attention to detail, able to work independently, and possess good writing and editing skills. Strong interpersonal skills are a must. Prior experience working with clinical populations is highly preferred.

Candidates must have a strong background in at least one programming language commonly used for scientific data analysis. MATLAB and/or Python are strongly preferred, R or Julia are welcome. Lower-level languages such as C or Java are not required. There should be documented evidence of ability to independently complete programming tasks, including selection and re-use of open-source function libraries and consultation of online resources when appropriate. Experience with basic statistical analyses (linear and generalized linear regression, ANOVA) is necessary. Additional methods, particularly Bayesian or non-parametric frameworks, will be a plus. Familiarity with signal processing will also be a plus. Candidates with prior experience with one or more existing neuroscience time series analysis tools (e.g., FieldTrip, MNE, or EEGLAB) would be given high priority.

Start Date: May-June 2017
Principal Investigators: Alik Widge MD PhD, Darin Dougherty MD, Thilo Deckersbach PhD
Ongoing/upcoming projects: Projects in the laboratory include multiple DBS studies funded by the Brain Initiative, multi-site studies of the neural basis of consciousness, and neuro-imaging studies of trichotillomania, eating disorders, and endocrine dysfunctions. Our laboratory is part of the Martinos Center, 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 relevant CV and cover letter to Matthew Boggess at mboggess@mgh.harvard.edu