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

Start Date: May-June 2019

Principal Investigators: Darin Dougherty, MD, Thilo Deckersbach, PhD (primary supervisors)

Responsibilities: Full-time *Clinical Research Coordinator II (CRC II)* 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 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 (EEG often in conjunction with TMS, and fMRI), behavioral/psychophysical tasks, and standardized questionnaires. Data analysis includes time series (human 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. The CRC II will also help produce reports, scholarly clinical research abstracts, posters, and manuscripts for publication and can expect to be credited as an author. Finally, the CRC II will have multiple administrative duties such as assisting with grant preparation and IRB maintenance.

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.

Ongoing/upcoming projects:
- Neural basis of consciousness using TMS, EEG and fMRI
- Combined cortical and striatal DBS clinical pilot
- Transformative Restoration of Affective Networks by Systematic, Function-Oriented, Real-Time Modeling and Deep Brain Stimulation (TRANSFORM DBS)

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.

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 has a strong interest and motivation to apply that knowledge in clinical neuroscience. Neuroscience, biology, psychology, or other majors are also acceptable with demonstrated quantitative skills. Candidates must be organized, attentive 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 preferred but not required.

Candidates must have a strong background in at least one programming language commonly used for scientific data analysis. Python and/or MATLAB strongly preferred; R or Julia are welcome. 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 (e.g., linear and generalized linear regression, ANOVA) is necessary. Knowledge of additional methods, particularly Bayesian or nonparametric frameworks, will be a plus. Familiarity with signal processing is also desired. Candidates with prior experience with one or more existing neuroscience time series analysis tools (e.g., FieldTrip, MNE, or EEGLAB) or experience with EEG experimental design and data collection will be given high priority.

APPLY HERE – https://partners.taleo.net/careersection/ghc/jobdetail.ftl?job=3080156&tz=GMT-05%3A00

*Please send a copy of your CV and a cover letter to **Thilo Deckersbach at deckersbach.thilo@harvard.edu***