Staff Scientist Neurorobotics Research Group

Rehabilitation Medicine Department National Institutes of Health Clinical Center Department of Health and Human Services

The National Institutes of Health's Clinical Center (NIH CC) is a 200-bed hospital dedicated to clinical research. All care is delivered under active clinical research protocols. The Clinical Center's mission is scientific discovery: approximately half of the clinical protocols evaluate rare (most often genetically-determined) diseases; the other half are clinical trials of novel interventions.

Position Description:

The Rehabilitation Medicine Department of the NIH CC is seeking a Staff Scientist to join the Neurorobotics Research Group. The Neurorobotics Research Group, under the direction of Dr. Thomas Bulea, PhD, develops innovative device-based approaches to treat movement disorders. These approaches are evaluated in our motion analysis laboratory, where their effects on movement are studied using mobile-brain body imaging techniques including motion capture, EMG and functional neuroimaging (EEG / fNIRS). These methods are also deployed to study the underlying causes of movement disorders and elucidate new approaches to their treatment. We are part of a section where scientists, engineers, and clinicians work together to identify clinical needs, develop new solutions and translate them into practice. This position offers exceptional opportunities for interdisciplinary collaboration within and outside of NIH.

The role of the Staff Scientist is to support the research of the principal investigator by providing expertise and leadership in the development, implementation and evaluation of novel robotic devices and other technology-based neurorehabilitation strategies. The Staff Scientist serves as the Chief Operating Officer of the group by helping to lead and manage experimental design, data collection and analysis, and mentoring of other lab personnel including pre- and post-doctoral trainees. The Staff Scientist will also provide administrative and/or programmatic support, including assisting with clinical protocol development and regulatory and institutional review board compliance. This position will include the opportunity to present research at meetings and conferences within and outside of NIH and to participate in relevant professional development training.

Qualifications:

The ideal candidate for this position will be a dynamic, self-motivated individual possessing a track record of productivity within an academic or other research setting. The Neurorobotics Research Group is a multidisciplinary team and this position provides the opportunity to share in shaping the future of our research program. The ideal candidate will have the following qualities:

- A PhD in engineering, biomechanics, kinesiology or another closely related field
- Expertise in EITHER wearable robotics for rehabilitation, movement augmentation, prosthetics and/or functional electrical stimulation OR the study of human movement, including biomechanics, neuromechanics, electromyography (EMG) or mobile-brain body imaging
- Experience collecting and analyzing motion capture, EMG, EEG, and/or other biomechanical measurements from human subjects
- Expertise in scripting (Matlab, R and/or Python) software for data analysis
- Experience interfacing with regulatory bodies governing clinical trials and research protocols involving human subjects, including the FDA and Institutional Review Boards (IRB)

The successful candidate must have a history of scholarship evidenced by authorship of peer-reviewed publications, and have a demonstrated ability to function independently and as part of a multidisciplinary team. Post-doctoral experience is desirable but not a requirement. Salary will be commensurate with experience and accomplishments. Interested applicants should send a current Curriculum Vitae with a complete list of publications and a cover letter highlighting key qualifications, experience and career goals, and names and contact information of three references to: Thomas C. Bulea, PhD; Tenure Track Investigator at thomas.bulea@nih.gov. Applications can be submitted beginning June 17, 2022 to July 18 2022, when review of applicants will begin.

Applications from women, minorities, and persons with disabilities are strongly encouraged. Appointees may be U.S. citizens, resident aliens, or non-resident aliens with or eligible to obtain a valid employment authorized visa. This position is subject to a background investigation.

The Department of Health and Human Services and NIH are equal opportunity employers committed to equity, diversity and inclusion.

Vaccine Requirements:

Federal agencies may request information regarding the vaccination status of selected applicants for the purposes of implementing other workplace safety protocols, such as protocols related to masking, physical distancing, testing, travel, and quarantine. Employees providing healthcare or services in support of healthcare (Healthcare Workforce) may be required to receive a COVID-19 vaccine because they are expected to perform duties that put them in contact or potential contact with patients. We may request COVID-19 vaccination, and other vaccination documentation from Healthcare Workforce personnel at any point during the onboarding process or at any time during your employment with NIH.