Research Assistant/Data Manager Position
in Social and Affective Neuroscience

The Jiang lab is looking for a full-time Research Assistant/Manager to assist our social and affective neuroscience research projects. Our research projects focus on (1) determining causal neural circuits relevant to social and emotional deficits and treatment effects using brain lesion or brain stimulation methods (transcranial magnetic stimulation [TMS], intracranial electrical stimulation) in neuropsychiatric/neurological populations, (2) identifying neuromarkers of social and emotional skills acquisition during typical and atypical development using brain imaging (functional near-infrared spectroscopy [fNIRS], functional magnetic resonance imaging [fMRI]) in infants or children.

The position is ideal for someone who is pursuing a research career and plans to apply for Ph.D. and/or M.D. programs. You will receive professional mentoring and support in career development (e.g., involving in or even leading independent projects using multimodal neuroimaging and neuromodulation methods, publishing first-authored papers, and networking opportunities from conferences and collaborations). After two years with us, you will have the research experience, skills, and a track record to be admitted to a top program in the field. If you enjoy working on our team, you could continue being a member of us as a graduate student!

The Jiang lab is situated in the Departments of Pediatrics and Psychiatry, and maintains active collaborations with faculty and teams from the Departments of Neurology, Neurosurgery, Psychological and Brain Sciences, and Biomedical Engineering at the University of Iowa, the Iowa Neuroscience Institute, and the Intellectual and Developmental Disabilities Research Center. The lab has access to the University of Iowa's cutting-edge imaging facility (see details here), the world-renowned Iowa Neurological Patient Registry, which includes neuroimaging and neuropsychological testing data from over 3500 patients with focal brain lesions, as well as state-of-the-art portable fNIRS, concurrent TMS-fMRI, concurrent TMS-intracranial electroencephalography (iEEG), and concurrent intracranial stimulation-fMRI systems.

The University of Iowa (UI) is an internationally recognized leader in neuropsychology and cognitive neuroscience. The UI Roy J. and Lucille A. Carver College of Medicine is consistently one of the nation's top-ranked medical schools (#39 on research by the 2022 *U.S. News & World Report*). Trainees and mentees here learn to become accomplished clinicians and top-flight researchers and educators. The UI Stead Family Children's Hospital is listed among the nation's best in seven specialties in the 2022-23 "Best Children's Hospitals" rankings by *U.S. News & World Report* (#38 in pediatrics neurology).

This position will be responsible for several aspects of conducting experiments, collecting, managing, and analyzing data and performing operational duties associated with the laboratory. Per university policy, the candidate must have US citizenship or permanent residency to apply. For more details visit this page.

Duties
- Learn behavioral recording (e.g., eye-tracker), neuroimaging (e.g., fNIRS, fMRI), brain stimulation (e.g., TMS) skills
- Assist with writing grants and manuscripts
- Design forms to facilitate the collection and tracking of study participant data
- Screen, recruit, and schedule neurodevelopmental / neurological / neuropsychiatric / healthy infants / children / adults as research participants
- Arrange, prepare, and maintain laboratory equipments for experimental protocols.

- Collect fNIRS / fMRI / MRI / behavioral data, obtain subject consent if applicable.
- Track and perform data entry for reports.
- Conduct audit to assess quality assurance. Develop procedures for on-site data audits; participate in audits; design and generate reports for use in data audits; summarize results of audits and write reports
- Manage various data sets and maintain highly organized and detailed research records
- Analyze data, prepare abstracts and manuscripts for conferences and publications.
- Analyze literature, propose, and lead independent research projects supervised by the lab director.
- Perform routine tasks related to the recruitment, enrollment and monitoring of research subjects or to the research environment (lab, clinic, field, classroom).
- Assist in general administrative tasks, e.g., IRB or equivalent protocol preparation and submissions, orientation and training of new staff or students on experimental protocols and techniques.

Requirements
- Bachelor's degree in a field relevant to life science or medical research such as Psychology, Neuroscience, Cognitive Science, Computer Science, electrical or biomedical engineering, or a related field
- A minimum of six months related research experience in the area of Psychology, Neuroscience, Cognitive Science, or Computer Science.
- Experience with scripting/programming languages (preferable MATLAB and/or Python)
- Excellent written and interpersonal communication skills.
- Excellent organizational skills with careful attention to detail.
- Demonstrated ability to acquire new skills quickly.

Preferred Qualifications
- Prior experience in infant / child participants and/or cohorts with neurodevelopmental / neurological / neuropsychiatric disorders.
- Prior experience in performing brain imaging (e.g., fNIRS / fMRI / EEG) design, collection, and / or analyses.
- Prior experience or demonstrated coursework in data analysis with Python, R, MATLAB, and / or UNIX shell preferred

To apply, please email (1) a cover letter describing your research interests, (2) your CV, and (3) 2-3 references to Dr. Jing Jiang (jing-jiang@uiowa.edu). Applications will be reviewed on a rolling basis until the position is filled. Start date is flexible depending on candidate availability.