

Research Intern / Research Assistant Position in Affective Neuroscience and Neuromodulation

The Jiang Lab (PI: Dr. Jing Jiang, <https://jingjiang.lab.uiowa.edu/>) is looking for a full-time Research Intern / Research Assistant to assist our affective neuroscience and neuromodulation research projects. Our current research projects mainly focus on determining causal neural circuits relevant to affective deficits and treatment effects by combining multimodal brain stimulation (transcranial magnetic stimulation [TMS], intracranial electrical stimulation) with multimodal brain recording (functional magnetic resonance imaging [fMRI], intracranial electroencephalography [iEEG]) methods in healthy population and patients with neuropsychiatric, neurological, and neurodevelopmental conditions. Join us as we scale up our efforts to better understand how to modulate human brain circuits and promote the development of novel treatments to improve mental illness!!

What you will achieve

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 brain stimulation and recording 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 with our team, you could continue being a member of us as a graduate student!

Position Responsibilities

This position will be responsible for several aspects of conducting experiments, collecting, managing, and analyzing data and performing operational duties associated with the laboratory.

Duties to include:

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

Education 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

Experience Requirements

- 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 clinical populations with neurodevelopmental / neurological / neuropsychiatric conditions and/or pediatric population.
- Prior experience in performing brain imaging (e.g., fMRI / iEEG) 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.