

Post-Baccalaureate Research Assistant/Intern in Translational Neuroscience and Neuromodulation

The Jiang Laboratory (PI: Dr. Jing Jiang, <https://jingjiang.lab.uiowa.edu/>) at the University of Iowa Carver College of Medicine is seeking a full-time Research Intern to join our research team.

Our research aims to uncover the causal brain circuits underlying emotion, cognition, and psychiatric disorders and translate these discoveries into personalized neuromodulation therapies. We employ a unique multimodal approach that combines invasive and noninvasive brain stimulation techniques, including transcranial magnetic stimulation (TMS) and intracranial electrical stimulation, with advanced brain recording methods such as functional magnetic resonance imaging (fMRI) and intracranial electroencephalography (iEEG). Ongoing projects involve healthy participants as well as individuals with neuropsychiatric, neurological, and neurodevelopmental conditions, providing unique opportunities to investigate causal human brain circuits and develop next-generation neuromodulation therapies.

This position is ideal for recent graduates who are interested in pursuing careers in neuroscience, medicine, psychology, psychiatry, biomedical engineering, or related fields and plan to apply to PhD, MD, or MD/PhD programs.

Training and Career Development

The Jiang Lab is committed to helping trainees develop into successful independent researchers. Research interns will receive close mentorship and hands-on training in human neuroscience research, including neuroimaging, brain stimulation, clinical research, and scientific communication. Depending on interests and performance, trainees may have opportunities to:

- Gain experience with TMS, fMRI, iEEG, and related neuroscience research methods
- Develop programming and data analysis skills using Python and/or MATLAB
- Contribute to peer-reviewed scientific manuscripts and conference presentations
- Participate in the development of independent research projects
- Develop the research experience, technical skills, publications, and mentorship necessary for successful admission to competitive PhD, MD, or MD/PhD programs

Position Responsibilities

Responsibilities may include:

- Assisting with participant recruitment, screening, scheduling, and study visits
- Collecting behavioral, clinical, MRI, and brain stimulation data
- Managing and organizing research databases, study records (e.g., REDCap), and research data storage systems
- Managing different experimental equipment
- Assisting with general laboratory operations, regulatory documentation, and IRB submissions
- Conducting data quality checking
- Preprocessing, analyzing, and maintaining research datasets
- Conducting literature reviews and supporting ongoing research projects
- Contributing to scientific presentations, manuscripts, and grant-related activities

Required Qualifications

- Bachelor's degree in Neuroscience, Psychology, Cognitive Science, Biomedical Engineering, or a related field
- At least one year of research experience involving human participants in neuroscience, psychology, cognitive science, biomedical engineering, or a related field
- Experience with MATLAB and/or Python programming
- Excellent written and interpersonal communication skills



- Excellent organizational skills with strong attention to detail
- Demonstrated ability to learn new skills and work effectively both independently and as part of a team

Preferred Qualifications

- Prior experience working with clinical populations with neuropsychiatric conditions
- Prior experience with neuroimaging (e.g., fMRI, EEG, iEEG) and/or brain stimulation methods (e.g., TMS)
- Experience with data analysis using Python, MATLAB, R, and/or UNIX/Linux environments

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.