

Postdoc Position in Social and Affective Neuroscience

The Jiang lab is looking for a 2-year postdoc to conduct social and affective neuroscience research. Research topics are flexible and will be organized in accordance with the applicants' interests and expertise. Specific areas of interest could include (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. We are an interdisciplinary team and welcome applicants from various research backgrounds to join us!

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 <u>here</u>), 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).

Responsibilities

You will be expected to (1) analyze our existing fMRI data concurrent with brain stimulations to better understand the causal neural circuits relevant to clinical symptoms, (2) work with Dr. Jiang to develop a plan (e.g., independent projects, grant application, job hunts, networking) that meets your career goals.

Requirements

- PhD or MD/PhD degree in Psychology, Neuroscience, Cognitive Science, Computer Science, electrical or biomedical engineering, or a related field
- A track record of peer-reviewed scientific journal publications in human neuroscience
- Experience with scripting/programming languages (preferable MATLAB and/or Python)
- Experience with one or several of the following human neuroscience techniques: fNIRS, fMRI, iEEG, TMS, intracranial electrical stimulation, brain lesion, etc.
- Self-motivated, able to work independently, strong written and interpersonal communication skills

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