Postdoctoral Position in Psychosis Research

The Clinical Neuroscience Lab at Michigan State University (https://cnl.psy.msu.edu), directed by Dr. Katy Thakkar, is seeking a postdoctoral fellow to begin in 2021 (flexible start date). The lab uses behavioral and neuroimaging techniques to study the mechanisms of psychotic disorders. We are particularly interested in characterizing abnormal sensory and motor processes and understanding their relevance for clinical symptoms. Many of our current projects focus on visual perception and eye movements and **this position would be suitable for individuals with a clinical background or a background in cognitive neuroscience and/or vision research**. The laboratory is located within the Department of Psychology, which provides an excellent research and training environment.

The postdoctoral fellow will have the opportunity to contribute to several ongoing projects as well as to develop independent studies within the broader aims of the lab. For many current projects, data collection is completed or near-completion, and the candidate will have the opportunity to publish papers on this existing data. Other projects are underway, and the candidate will have the opportunity to participate in study design and data acquisition as well. Current projects include:

1) A funded study tests contemporary theories of schizophrenia, which posit that symptoms arise from deficits in using prior experience to interpret current sensory input, and uses the visual system as basis for empirical enquiry. This project involves behavioral and fMRI experiments testing experience-dependence in visual processing in individuals on the schizophrenia spectrum and exploring the relationship with symptoms.

2) A funded study investigates mechanisms for agency disturbances in schizophrenia (e.g. delusions that one is being controlled by aliens). The aim of this project is to investigate a potential sensorimotor mechanism thought to support a subjective sense of agency (corollary discharge signaling) in schizophrenia patients at different illness stages and in individuals with bipolar disorder. This project tests corollary discharge signalling in the saccadic eye movement system using behavioral and fMRI experiments.

3) Ongoing and planned studies are using pupillometry to assess whether pupil metrics may provide insights into the mechanisms of symptoms—particularly motivational symptoms—and whether pupil reflexes differ between groups and may serve a role in early detection or treatment response.

In addition, the candidate will have the optional opportunity to participate in mental health outreach activities and will have the opportunity to acquire post-doctoral clinical hours towards licensure.

Requirements include a Ph.D. in clinical or cognitive psychology, neuroscience, or a related field. Applicants should have a strong publication record and statistical training. Programming skills (Matlab or Python), experience with human neuroimaging, eye tracking and/or visual psychophysics are desired. The ideal candidate will have excellent interpersonal and communication skills, the ability to work independently, and experience conducting research with clinical populations (although this is not required).

We strongly believe that science is a team effort and that diversity within this team is integral to creativity and discovery. As such, we encourage applications from those individuals who identify as members of marginalized or historically disadvantaged groups. We strive towards creating an inclusive lab climate and a training environment that supports the needs of all individuals.

Michigan State University is located in mid-Michigan and part of the University Research Corridor (http://urcmich.org/about/) that includes MSU, the University of Michigan and Wayne State University, offering opportunities for collaboration with some of the nation's top scientists.

Initial appointment will be for 12 months and will be renewable contingent upon satisfactory performance. Stipends will be at standard NIH levels.

Interested applicants should email Dr. Katy Thakkar at kthakkar@msu.edu and include all required application materials:

1. Cover letter explaining professional developmental goals and research focus
2. CV
3. Names and email addresses of three references

Applications will be reviewed starting immediately and continue until the position is filled. Any questions about the position may be directed to Dr. Katy Thakkar at kthakkar@msu.edu