

**Postdoctoral Associate in Computational Psychiatry**  
**Yale School of Medicine, Department of Psychiatry**

The Powers Laboratory at Yale is recruiting a full-time post-doctoral fellow to work on two newly-funded studies on the computational underpinnings of psychosis.

In an R21 from the NIMH, we will use performance on a simple perceptual task and computational modeling to predict behavioral and neural responses to cholinergic manipulation. Our goal is to use the knowledge generated to take the first steps toward a computationally-informed, personalized treatment approach to hallucinations.

In a separate grant from the Ludwig Family Foundation, we will study the emergence of psychotic symptoms in those at high genetic risk. Using a combination of cutting-edge computational modeling of behavior on perceptual tasks, neuroimaging, and electrophysiology, we will attempt to catch the signatures of hallucinations and other psychotic symptoms as they develop from typical processing. We plan to collect a host of measures that will allow us to understand how their brains process information over time and predict both risk and resilience to the development of psychotic symptoms.

Activities will include data collection, use of pharmaceutical agents, analysis of behavioral and functional imaging data using cutting-edge computational modeling, and reporting in the form of journal articles and presentations at national and international meetings. Ideal candidates will have experience with behavioral data collection and analysis, basic working knowledge of MATLAB or other technical computing languages, expertise in sensory neuroscience, and a background in working with individuals with psychosis-spectrum illness. Duration and start date are negotiable but a minimum of a two-year commitment is required.

Salary and benefits package are highly competitive. Interested candidates should send a letter of interest, CV, and the names of three references to Al Powers, M.D., Ph.D. by email: [albert.powers@yale.edu](mailto:albert.powers@yale.edu).