The Cognitive Disorders Research Laboratory (CDRL) is seeking qualified postdoctoral applicants for several positions. The CDRL is located in the Department of Neurosciences at the University of Toledo Medical School, Toledo, Ohio, USA. The CDRL is seeking qualified applicants in the areas of bioinformatics, electrophysiology, proteomics, and kinomics to join the laboratory. Links to apply with full descriptions of each position are detailed below. For all postings, please go to https://jobs.utoledo.edu

CDRL webpage: (http://www.utoledo.edu/med/depts/neurosciences/CDRL.html)

Kinomics/Signal transduction: A position is available for a postdoctoral fellow to study signal transduction in postmortem brain and animal models of severe mental illness. The fellow will explore mechanisms of dysregulation of signaling nodes using a kinome array platform, testing hypotheses related to alterations in cell-subtype specific changes in excitatory cortical neurons. Principal approaches include kinome array, RNAseq, mass spectrometry, QPCR, western blot analysis, cell culture, enzyme assays, and laser capture microdissection. Experience as a user of bioinformatics is desirable.

Posting #39449 (https://jobs.utoledo.edu)

Bioinformatics: A position is available for a postdoctoral fellow to study the pathophysiology of severe mental illness using a bioinformatics approach that combines data from animal models, cell culture, and postmortem brain. Data from kinomic, proteomic, and transcriptomic studies will be analyzed using cutting-edge bioinformatics approaches, including the iLINCs platform and other big-data analytic applications, with the goal of identifying new strategies for the treatment of disorders of cognition, including schizophrenia. Applicants with experience in programming and bioinformatics are preferred. A background in molecular biology or biochemistry is desirable, but not required.

Posting #39451 (https://jobs.utoledo.edu)

Proteomics: A position is available for a postdoctoral fellow to study protein-protein interactions in postmortem brain and animal models of severe mental illness. The fellow will explore mechanisms of dysregulation of protein hubs using mass spectrometry, testing hypotheses related to alterations in subcellular microdomains. Principal approaches include mass spectrometry, QPCR, western blot analysis, cell culture, affinity purification, and bioinformatics. Experience as a user of bioinformatics is desirable.

Posting #39467 (https://jobs.utoledo.edu)

Electrophysiology: A position is available for a postdoctoral fellow to perform translational studies in model systems with the goal of elucidating pathophysiological mechanisms of severe mental illness. The fellow will explore mechanisms of dysregulation of glutamate transporter expression and function, and related bioenergetic systems in slice culture, cell culture, and postmortem brain samples. Principal approaches include electrophysiology, viral vectors, confocal microscopy, electron microscopy, and cell culture. Experience in electrophysiology is highly desirable.

Posting #39469 (https://jobs.utoledo.edu)

Successful applicants for all positions will also have experience in writing, publishing manuscripts, and contributing to grant applications.