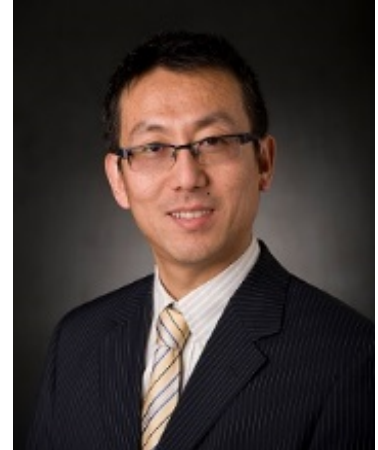

Nanyin Zhang, PhD

Hartz Family Professor
Department of Biomedical Engineering
Department of Electrical Engineering
The Pennsylvania State University
University Park, PA 16802



Understanding neural circuit function in awake rodents by integrating multi-dimensional information

Abstract: A major challenge in research on the pathophysiology of brain disorders has been the difficulty to directly translate from human symptoms to animal models that have a unique behavioral repertoire. The brain circuit function and connectivity, which has become accessible through the broad application of fMRI in humans, might provide a link between animal models and observations in humans with psychiatric disease. However, this task has been largely unsuccessful, primarily due to the confounding effects of anesthesia in most animal fMRI experiments. Our lab has established an approach that allows animal's brain circuit function to be examined at the awake state and investigation of the link between animal models and human pathophysiology for psychiatric disorders.
