

Abstract:**Optical Neuroimaging**

Understanding the functional architecture of the brain is one of the most interesting, but also challenging task of our times. This challenge is largely due to the extraordinary complicated structures and functional states of the brain, and the very limited access to them with our current research techniques. The recent progresses in optical neuroimaging techniques, however, showed great promise to dissect both the structural and functional connections of the complicated brain network with unprecedented resolution and throughput. Why and how the optical approaches became the methods of choice for brain studies? What this emerging techniques can bring us and where the limit of this technique could lie are topics of great interests in field of brain researches.