Opportunity with Dr. Jin Lee’s laboratory

Lab Mentors: Dr. Lee and Dr. Cron

Project Title: Quantification and atlas registration of light sheet microscopy images

Project Description:
The Lee lab at Stanford carries out research on mouse brain circuit anatomy and function, in order to develop novel treatments for neurological and psychiatric disorders. A new and very important tool for this research is light sheet microscopy (LSM), which enables 3D visualization of intact, optically cleared mouse brains. LSM can reveal the distribution of certain types of neurons, as well as the propagation of disease. The lab has been investigating how to analyze LSM images to quantify the density of stained neurons, and how to register the images to a common brain atlas. The Bio-X undergrad summer student will develop a software pipeline for automated brain registration and quantification of LSM images.

*Interested students and/or those who would like to learn more information can contact Dr. Jin Lee at ljinhy@stanford.edu (https://llab.stanford.edu).