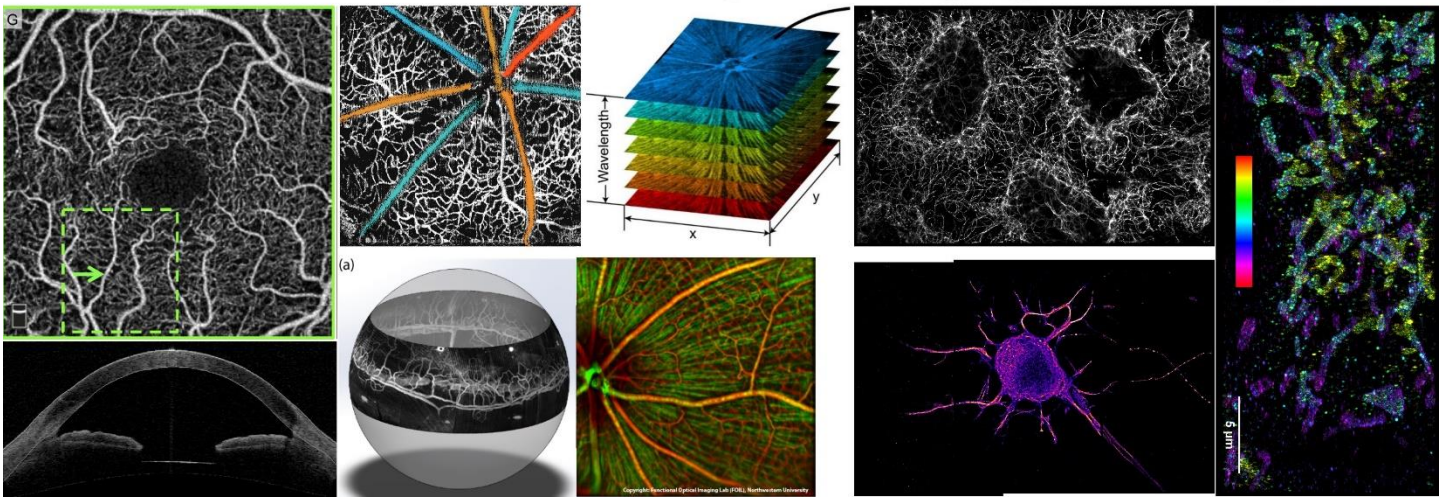
Northwestern Functional Optical Imaging Laboratory



Functional Optical Imaging lab (FOIL, http://foil.northwestern.edu) in the Department of Biomedical Engineering at Northwestern University develops optical imaging and sensing technologies for biomedical applications, including ophthalmology, vision science, single-molecular analysis, and genomics. Our investigations focus on clinical diagnosis in patients, physiological and pathological alterations in animal models, and biophysics of single cells and individual molecules.

We have immediate openings for Ph.D. students in the lab to work on (1) super-resolution optical microscopy (single-molecule localization microscopy), optical instrumentation, new molecular labeling, single-cell/ single-molecule analysis, and molecular interaction imaging; (2) ophthalmology research focusing on clinical management of blinding diseases (*i.e.*, glaucoma and retinal degeneration), experimental animal models, and new ocular imaging technology/system development; and (3) high-performance computing and image/data processing.

If you are a hardworking person with a curious mindset, FOIL is the ideal place for you. You will work with an extremely productive and friendly team of students, researchers, and Northwestern University collaborators on some of the most exciting foundational and clinical research projects. You will also have opportunities to work closely with (including travel to) collaborators from institutions around the country. In addition, FOIL will provide all the necessary resources to prepare members for their future careers in academics or industry.

We welcome future and 1st year Ph.D. students from all programs across both Northwestern campuses, including but not limited to all Engineering departments, Computer Science, Chemistry, Physics, Applied Physics, IBiS, MSTP, DGP, and NUIN.

If interested, please contact Prof. Hao. F. Zhang (hfzhang @ northwestern.edu).