Ph.D. positions in Optical Imaging and Vision Science.
Indiana University Bloomington

Two Ph.D. positions are available in Dr. Tankam’s laboratory in the Frontiers of Optical Imaging and Biology at Indiana University School of Optometry. The group focuses on developing cutting-edge optical imaging systems, including high-resolution optical coherence tomography and fluorescence microscopy, to enable new investigations in the biomedical research field. The group uses a translational approach to study disease mechanisms; from the fundamental understanding of biological processes involved in normal and pathological conditions in animal models to the early diagnostic and monitoring of disease progression in human subjects. The laboratory is looking for highly motivated students from various background including engineering, optical physics, biomedical imaging, bioengineering or a related discipline. Interest in vision science is a plus.

One project particularly focuses on designing an innovative multimodality imaging system to study structural changes and physiological processes associated with normal development and pathological conditions using small animal models. Another project consists of developing a cellular resolution optical coherence tomography system to evaluate morphological remodeling of the anterior segment due to disease conditions of corneal endothelial dystrophy and primary open-angle glaucoma.

Student positions are part of the IU Vision Science Graduate Program. The Program includes a highly active group of multidisciplinary scientists, mostly from within the School of Optometry but also from Physics, Intelligent System Engineering, Neuroscience, Psychology, Cognitive Science, Mathematics, Chemistry, and Biology. Research areas include imaging, optics, neuroscience, visual development, visual impairment and correction, visual psychophysics, biology and biophysics, and involve both basic science and translational research. Students are financially supported through a combination of grants and teaching activities.

A description of the Ph.D. program is available at https://optometry.iu.edu/academics/phd-vision-science.html. The application deadline is January 15. Please use the following link to learn more about the application process and how to apply https://optometry.iu.edu/admissions/apply/ms-phd-programs.html.

For more information about the openings, please contact Patrice Tankam at ptankam@iu.edu. You can also visit his faculty webpage at https://optometry.iu.edu/people-directory/tankam-patrice.html.

About IU Bloomington

Indiana University is a major public research university founded in 1820. It currently enrolls over 33,000 undergraduates and 10,000 postgraduate students on the Bloomington campus with over 110,000 students in the university system. Bloomington campus is always referred by visitors as one of the most beautiful campuses around the world. The School of Optometry has very active research and graduate programs with numerous collaborations with other disciplines within the university. The School has several major teaching clinics as well as outreach affiliations. Bloomington is a relaxed community located in a beautifully wooded and hilly area of the state where cultural and recreational opportunities abound, housing costs are low, schools are excellent, and commuting time is short. More information about the School is available at www.optometry.iu.edu, and about the University at www.indiana.edu.