



Postdoc and PhD Student Opportunities in Biomedical Optics and Instrumentation Lab

The Biomedical Optics and Instrumentation Laboratory (<https://www.brilloptics.org/>) within the Department of Biomedical Engineering at Michigan State University is inviting applications for a postdoctoral position. The position is available as early as the **spring of 2025**. Additionally, we are seeking a PhD student to begin in **fall 2025**.

Qualifications:

The postdoc candidate is expected to have an extensive background in biophotonics and/or optical engineering. Applicants should have earned a Ph.D. in one of the following fields: optical engineering, biomedical engineering, electrical engineering, experimental physics, or a closely related engineering discipline. We highly value candidates who possess substantial practical experience, particularly in designing and assembling optical setups. This includes, but is not limited to, expertise in photoacoustic microscopy, optical microscopy, spectroscopy, and Raman/Brillouin microscopy. Preference will be given to candidates who not only meet these qualifications but also demonstrate a passion for advancing the frontiers of science through optical engineering and biophotonics.

The PhD candidate is expected to have background in optical engineering, applied physics, biomedical engineering, or related engineering discipline. Earned master's degree is preferred but not required.

Application Process:

Interested candidates should submit their CV and a brief cover letter to Dr. Jitao Zhang at zhangjt06@gmail.com. Your cover letter should detail your training and research experiences.

About the Laboratory: The laboratory will be moved to Biomedical Engineering Department and IQ at Michigan State University in January 2025. Our research focuses on the intersection of optical technology innovation and biomedical applications. **About the PI:** Dr. Jitao Zhang, an incoming Assistant Professor at Michigan State University, leads the Biomedical Optics and Instrumentation Laboratory. His research, primarily on Brillouin microscopy, aims to combat metastatic cancer and birth defects. Dr. Zhang has authored over 40 peer-reviewed research articles and holds three patents in Brillouin technology. His recent work was featured in “*The 10 Biggest Science Stories of 2022*” by The Guardian. Research of the lab is supported by a K25 award and R21 grant from the National Institutes of Health, an Institutional Research Grant from the American Cancer Society, and the NSF CAREER award.