Dr. Zahid Yaqoob is a Research Associate Professor of Biomedical Engineering (BME) at Boston University (BU). He is also the Technical Director of BU Neurophotonics Center (NPC) and Director of the BME Micro/Nano Imaging (MNI) Facility. The two core facilities host a variety of custom-built and commercial optical imaging and spectroscopy platforms for research studies in neuroscience, cancer, biomaterials, mechanobiology, and tissue engineering. Some of these instruments include wide-field fluorescence microscopes, 2-photon and 3-photon microscopes, laser scanning and spinning disk confocal microscopes, and visible/near infra-red small animal imager.



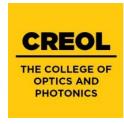
Dr. Yaqoob also holds a Research Affiliate appointment at the Department of Mechanical Engineering, Massachusetts Institute of Technology (MIT) and actively collaborates with the MIT Laser Biomedical Research Center on various research projects on high-throughput label-free cellular imaging. In addition, he is an adjunct faculty at the College of Professional Studies at Northeastern University.

He received his M.Sc. and M.Phil. degrees from the Department of Electronics, Quaid-i-Azam, Islamabad, in 1993 and 1995, respectively. During his graduate studies at CREOL, College of Optics & Photonics, University of Central Florida, he worked on diffractive optics-based subsystem design for optical communications in the Lab of Prof. Nabeel Riza. After receiving his Ph.D. degree in 2003, he joined the Biophotonics Lab at California Institute of Technology (Caltech) as a postdoctoral associate, where he worked with Prof. Changhuei Yang on optical coherence tomography, quadrature phase microscopy, and turbidity-suppressed deep tissue imaging. After his postdoctoral training, he joined the Laser Biomedical Research Center (LBRC) at MIT in 2007, where he worked with Profs. Michael S. Feld and Peter So on developing interferometry-based optical imaging instruments for cellular and tissue imaging applications. At the LBRC, he also served as one of the lead investigators on a p41 National Institute of Health (NIH) biotechnology center grant, working closely with graduate students and postdoctoral scholars to develop novel optical imaging and spectroscopy tools for biomedical applications.

During his twenty-five years research career, he has played an instrumental role in the design and development of various optical imaging and spectroscopy instruments. These include for example, optical coherence tomography, quadrature phase microscopy, turbidity-suppressed deep tissue imaging, high-sensitivity quantitative phase imaging (QPI), polarization-sensitive QPI, dispersion phase microscopy, confocal reflectance interferometric microscopy, tomographic phase microscopy, speckle diffraction tomography, Bessel-beam 2-photon microscopy, and single-shot label-free 3D cellular imaging at >10,000 cells/sec. These technologies have enabled several high-impact studies, including cell size homeostasis, biophysical markers in sickle cell disease, nuclear mechanics during transendothelial migration, and *in vivo* visualization of butterfly scale cell morphogenesis. His work has been published in 75 peer-reviewed journal articles in Nature Photonics, Nature Communications, Nature Light Science & Applications, Proceedings of National Academy of Sciences, Advanced Photonics, Physical Review Letters, Journal of Biomedical Optics, and OSA journals, including Optica, Optics Letters, and Optics Express.

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Email: <u>zyaqoob@bu.edu</u>; <u>zyaqoob@mit.edu</u>