

Lester Wolfe Workshop in Laser Biomedicine

Pushing the Frontiers with New Light Sources for Biomedical Applications

Many advances in biophotonics are made possible by the development of advanced light sources. The development of novel femtosecond fiber laser sources that are compact, reliable and low cost that are promising to transform various nonlinear optical imaging modalities. These fiber lasers further enable rapid wavelength swipe that greatly improve optical coherence tomography imaging speed and signal-to-noise ratio. Recent works have even shown that cell-based laser can be constructed providing high sensitivity sensing of intracellular and extracellular environment.

New fiber lasers for Megahertz optical coherence tomography (OCT), multi-photon and Raman imaging

Robert Huber, Universität zu Lübeck

Advances in Short-Pulse Fiber Lasers for Nonlinear Microscopy

Frank Wise, Cornell University

Cell laser as a new organelle

Andy Yun, Harvard Medical School

Tuesday, November 1, 2016, 3:30-6:00 PM

Massachusetts Institute of Technology

Grier Room, 34-401

77 Massachusetts Avenue, Cambridge

Refreshments served at 3:00 PM

Sponsored by the G. R. Harrison Spectroscopy Laboratory, MIT, MGH Wellman Laboratories, the Harvard-MIT Division of Health Sciences and Technology, and the Center for the Integration of Medicine and Innovative Technology (CIMIT)