

## Lester Wolfe Workshop in Laser Biomedicine

# “Biosensor Photonics”

---

Biomedical optics and photonics is increasingly being utilized in the field of biosensors, with the ability to probe, analyze and quantify important biomolecules and biological processes. The 2014 fall Lester Wolfe Workshop will examine applications of carbon nanomaterials, Forster resonance energy transfer in microscopy, and cover two examples of the growing trend to use the ubiquitous smartphone as a diagnostic device.

---

**Smartphone based Molecular Diagnostics- from personalized vitamin and cholesterol monitoring to cancer diagnostics in the developing world**

*Moungi Bawendi, Massachusetts Institute of Technology*

**Chemical and biological detection for diagnostic, food safety and drug safety using the internal sensing capabilities of mobile devices**

*Brian Cunningham, University of Illinois at Urbana-Champaign*

**New concepts in Biosensing using Single Wall Carbon Nanotubes and Graphene**

*Michael Strano, Massachusetts Institute of Technology*

**Localization of Protein Interactions in living cells: FRET Microscopy**

*Ammasi Periasamy, University of Virginia*

---

Tuesday, November 18, 2014, 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 MIT Laser Biomedical Research Center, Chemistry Department, MIT; MGH Wellman Center for Photomedicine; Harvard—MIT Division of Health Sciences and Technology