

## Lester Wolfe Workshop in Laser Biomedicine

# “Probing single molecules with light”

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It has long been a goal of scientists to be able to investigate molecular interactions at the single molecule level. Biological interactions are often weak and transitory in nature and need extremely sensitive techniques to be able to detect single molecules. The Fall Lester Wolfe Workshop will present instances in which the power and precision of light can be harnessed to “see” single molecules.

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### **A pre-transcriptional regulation mechanism predicts gene expression output in living cells**

*Ibrahim Cisse, Massachusetts Institute of Technology*

### **Spontaneous motions of DNA and protein probed with single molecule methods**

*Tae-Hee Lee, Pennsylvania State University*

### **Mechanical forces in nanoscale biology: from hemostasis to single-molecule centrifugation**

*Wesley Wong, Harvard University*

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Tuesday, October 20, 2015, 4:00-6:00 PM

**Massachusetts Institute of Technology**

Grier Room, 34-401

77 Massachusetts Avenue, Cambridge

Refreshments served at 3:30 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