

# Optical Technology Center Colloquium

## Miniaturized endoscopes and implantable sensors for *in-vivo* studies of cancer biology

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### **Abstract:**

An important trend in biological studies and medical diagnosis is development of miniaturized instruments that can be implanted and enable *in-vivo*, real-time observations of physiological processes and disease progression. Optical instruments present a challenge in this regard due to the fact that photonic systems do not scale to small sizes as favorably as electronic devices. In this talk, we outline fundamental capabilities, scaling properties, and design of MEMS enabled optical sensors, and we present imaging results and measurement data obtained with miniaturized microscopes and acoustic sensors.

**Monday, November 24, 2014**

**4:10 pm**

**Procrastinator Theatre  
Strand Union Building**

Refreshments will be served before the colloquium

