



DMSE SEMINAR

Thursday, February 23th, 2012, 2:00 P.M.

Room No. 109, DASAN bldg. 1st Floor

(Host: Prof. Byeong Ha Lee / Language: English)

Micro-endoscopes for high resolution in-vivo fluorescence imaging in small animals

Dr. Jun Ki Kim

*Harvard Medical School, Wellman Center for Photomedicine,
Massachusetts General Hospital*



Intravital imaging of small animal models is a powerful technique in basic and preclinical studies. Due to the physical size of conventional microscope optics, there is a need to carry out extensive surgery procedures so as to expose tissues of an organ during each imaging session. This limits the length of time and periodicity of each imaging session for the same animal, thus results in low experimental throughput. Advancements in micro-optics and fiber optics technology have paved way in removing such physical constraints, whilst maintaining high optical performance. In this research, we aim to introduce the steps necessary to prepare a high quality micro-endoscope based on graded-index lenses for carrying out minimally invasive imaging procedures in live animals.