Stem cell research has become a hot topic in biomedical research for several reasons, including: a change in federal funding policy, their enormous potential in regenerative medicine, fundamental discoveries in developmental biology, and their role in cancer progression and metastasis. This workshop will highlight the role that biomedical optics can play in imaging, tracking, measuring and destroying various classes of stem cell.

**Bone Marrow Hematopoietic Stem and Progenitor Cells Go Live: Tracking HSPC/niche Interactions at Single Cell Resolution**  
*Cristina Lo Celso, PhD, Instructor in Medicine, Massachusetts General Hospital (MGH) Center for Regenerative Medicine*

**Therapeutic and Diagnostic Stem Cells for Cancer Therapy**  
*Khalid Shah, PhD, Neurobiologist, Assistant Professor, Harvard Medical School, Laboratory for Molecular Neurosciences and Imaging, MGH Center for Molecular Imaging Research*

**Cancer Stem Cells Evade Photodynamic Therapy**  
*Janet Morgan, PhD, Department of Dermatology, Roswell Park Cancer Institute, Buffalo, NY*

Tuesday, April 21, 2009  
4:00 - 6:00 PM  
Massachusetts General Hospital  
Richard B. Simches Research Center, Room 3110  
185 Cambridge Street, Boston  
(located in Charles River Plaza next to Whole Foods Market and CVS)

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