Medical Physics Seminar

Monday, September 24th, 2018

1345 HSLC ~ 4:00 P.M.

Samuel Achilefu, PhD

Hosted by Dr. Kevin Eliceiri and Dr. Melissa Skala
Talk Sponsored by the Morgridge Institute for Research Multiscale Imaging Initiative

Director, Optical Radiology Laboratory Professor of Radiology, Biomedical Engineering, and Biochemistry & Molecular Biophysics
Michel M. Ter-Pogossian Endowed Chair in Radiology Vice Chair, Innovation and Entrepreneurship, Mallinckrodt Institute of Radiology
Washington University School of Medicine, St. Louis, MO - USA

Cancer Viewing Glasses for Fluorescence Image-Guided Cancer Surgery

Surgeons still rely on vision and touch to distinguish cancerous from healthy tissue, often leading to incomplete tumor removal that necessitates repeat surgery or favors relapse. To address these issues, we have developed Cancer Viewing Glasses (CVGs) that can provide real-time intraoperative visualization of tumors and sentinel lymph nodes without disrupting the surgical workflow. The CVGs were designed to detect near-infrared fluorescence (NIRF) from molecular probes targeted to cancer cells. Preclinical and clinical studies demonstrate the feasibility of using this method to improve surgical outcomes

1345 Health Sciences Learning Center (HSLC) 4:00 - 5:00 P.M.