DEPARTMENT OF RADIOLOGICAL SERVICES
UNIVERSITY of CALIFORNIA, IRVINE • SCHOOL OF MEDICINE

RESEARCH SEMINAR SERIES IN RADIOLOGICAL SCIENCES

WHEN: Wednesday September 2, 2015

12:00 noon

WHERE: LIVE - Irvine Campus: Medical Education Building, Colloquium 3070

TELECAST - UC Irvine Medical Center: Douglas Hospital Radiology Conference Room 0117

NOTE: Guest Speaker will be in Medical Education Colloquium 3070. Videocast will be in UCIMC Radiology Conference Room, Douglas Hospital Room 0117

Speaker: Damini Dey, PhD

Associate Professor, Medicine
Research Scientist, Biomedical Imaging Research Institute
Cedars-Sinai Medical Center, Los Angeles, CA

Title: Automated Plaque Characterization from Coronary CT Angiography and Identification of Ischemia

Abstract:

Coronary CT Angiography (CTA) is increasingly used for direct, noninvasive evaluation of the coronary arteries. Beyond stenosis, coronary CTA also permits assessment of atherosclerotic plaque (including total and non-calcified plaque burden) and coronary artery remodeling, which was previously only measurable through invasive techniques. It has been shown that coronary plaque volume for non-calcified and mixed plaques and the arterial remodeling index correlate closely with corresponding measures from invasive intravascular ultrasound. In this seminar I will summarize our work on automated plaque characterization and quantification from coronary CTA, and our studies on identification of ischemia.

About the Presenter:

Damini Dey, PhD, is an Associate Professor of Medicine and Research Scientist with the Department of Biomedical Sciences at the Cedars-Sinai Medical Center. Dr. Dey is also the technical director of the Quantitative Image Analysis Lab and technical co-director of PET-MR at the Biomedical Imaging Research Institute, and an Associate Professor at the University of California, Los Angeles (UCLA) David Geffen School of Medicine. Dr. Dey received her doctorate in medical physics from the University of Calgary in Canada. Dr. Dey's current research investigations include the development of automated algorithms for characterization and quantification of coronary plaque from coronary CT angiography, noninvasive quantitative measurement of epicardial and thoracic fat, machine learning integration of imaging biomarkers, as well as improvement of cardiac PET and MR imaging.