



The Yale PET Center presents

PET Talks

Seminars By and For PET Users



Quantitative Simultaneous PET-MR: Challenges and Opportunities

Georges El Fakhri, PhD

*Massachusetts General Hospital
Harvard Medical School*



Monday April 29, 2013

12 noon. (Please arrive early for lunch)

Brady B131 Auditorium, 310 Cedar St.

Abstract: Simultaneous PET-MR is a novel and promising imaging modality that is generating substantial interest in the medical community and offers the scientific community many challenges and opportunities. Unlike sequentially-acquired WB PET-CT scans, the simultaneous acquisition of MR and PET data can be used to incorporate information from MR into the PET reconstruction. This in turn can yield substantial improvement in image quality and accuracy. In this talk we present several axes of research that are being pursued in our center to greatly improve PET image quality by compensating for motion using several MR sequences, improve spatial resolution using MR anatomical priors and/or yield better understanding of neurotransmission pharmacokinetics using simultaneous PET-fMRI. We will present pertinent applications of each approach in specific clinical studies that pertain to oncologic, cardiac and neuroscience applications and assess their clinical impact.



http://tauruspet.med.yale.edu/wiki/index.php/PET_Talks!