Imaging Science Seminar

Quantitative PET in PET/MRI

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Abstract: Simultaneous PET/MRI emerged a few years ago as a new modality that allows for functional PET imaging and anatomical MRI imaging in a single station. The anatomy of the scanner imposes constraints on the geometry of the PET detectors which affects the performance of the PET system in its spatial resolution and sensitivity with potential to improve spatial resolution due to the emission of positrons inside the magnetic field. This lecture will discuss this new modality and present the technological development of attenuation correction strategies in PET/MR. Specific developments of applications of synchronous PET/MRI for cardiovascular imaging and evaluation of quantitative accuracy in oncology will be presented.

Time: 8:40-9:30 a.m.
Date: Friday, Dec. 1, 2017
Room: 0120 Green Hall

Dr. Laforest obtained a Ph.D. in Nuclear Physics from Laval University in Canada and then pursued post-doctoral studies in France and Texas. In 1998, Dr. Laforest initiated his career in medical physics, performing research work in radionuclide production and in small animal and human Positron Emission Tomography imaging. He is now Associate Professor of Radiology, co-director of the Small Animal PET/CT imaging Facility and Nuclear Medicine Medical Physicist at Washington University.