

Friday, November 29<sup>th</sup>, 2013, 2:00 P.M. Room No. 109, DASAN bldg. 1<sup>st</sup> Floor

(Host: Prof. Kim, Hyoung Ihl / Language: English)

## Attenuation correction for animal brain PET

## Prof. Jin Su Kim

Molecular Imaging Research Center/Korea Institute of Radiological and Medical Sciences

Positron Emission Tomography (PET) is molecular imaging techniques that use radio-labeled molecules to image molecular interactions of biological processes *in vivo*. PET imaging technologies have been developed to provide a pathway to the patient from the biological and pharmaceutical sciences. Dr. Jin Su Kim developed PET quantification methods such as Template Guided attenuation correction method and Post injection transmission method. His developed methods could reduce the possible biological effects of long-term anesthesia in investigations using animal-dedicated PET scanners. His developed methods were useful option for increasing study throughput and decreasing the probability of subject movement. In this presentation, he will also introduce PET application for neuroimaging especially in the field of cognitive neuroscience and pharmacokinetics. In addition, he will briefly introduce newly developed PET probe for myocardial fibrosis detection and the study for the enhancement of mAb tumor penetration into the tumor, performed at Radiology and Imaging Sciences in NIH, USA.

## **Biosketch**

Dr. Jin Su Kim is senior staff scientist in the Molecular Imaging Research Center at Korea Institute of Radiological and Medical Sciences since 2007. He was trained as a Post-doctoral fellow in National Institute of Health, USA under the supervision of Dr Chang H. Paik (Medicinal Chemistry) and Dr. Robert B. Innis (Pharmacokinetics). He received his PhD degree in Radiation Applied Life Science, supervised by Prof. Jae Sung Lee, from Seoul National University. His research interests are development of PET quantification method for neuroimaging and oncology, and tumor microenvironment.