The Yale PET Center presents

Special Seminar



Strategies for molecular imaging and targeted therapy of pancreatic cancer

Jacob L. Houghton, Ph.D. Chief Research Fellow Department of Radiology Memorial Sloan Kettering Cancer Center

Tuesday, 12 April 2016 12:30 PM to 1:30 PM Trask Room, LMP 3-108



<u>Abstract</u> Pancreatic cancer is one of the most devastating forms of cancer and it will soon be the second-leading cause of cancer deaths in the United States, surpassing both breast and colorectal cancer. Over the next decade advances in the fields of molecular imaging and nuclear medicine will be critical for improving the outcomes for patients with pancreatic cancer. Dr. Houghton's research takes a multi-faceted approach to the development of radiopharmaceuticals for a number of applications, including: anatomical localization of premalignant and cancerous lesions, molecularly targeted radiotherapeutics, optical imaging probes for image-guided surgery, as well as companion diagnostics for chemo-, radio-, and immunotherapy. In his presentation, Dr. Houghton will discuss the development of molecular imaging probes — both PET and optical — that target pancreatic cancer biomarkers and their assessment in advanced preclinical models of pancreatic cancer. Additionally, he will discuss progress in the preclinical development of radioimmunotherapy strategies for pancreatic cancer.

<u>Bio</u> Dr. Houghton is the Chief Research Fellow for the Department of Radiology at Memorial Sloan Kettering Cancer Center in the laboratory of Dr. Jason Lewis. While obtaining his PhD in Medicinal Chemistry at the University of Michigan his research was focused on the application of organic chemistry, spectroscopy, biochemistry, and molecular biology to projects aimed at understanding and overcoming bacterial resistance to antibiotics as well as developing novel pharmaceuticals for Alzheimer's disease and cancer. His postdoctoral research at MSK is focused on the development and clinical translation of tools for providing precision management of oncological diseases — primarily pancreatic cancer — using a multi-disciplinary, collaborative approach.