Molecular Imaging of Infectious Diseases: Current Status and Future Challenges
September 21, 8:00 am to 5:00 pm
Natcher Conference Center, National Institutes of Health

Morning Sessions

08:00-08:30a  Light Breakfast

Introduction
08:30-08:55a  Challenges in Infectious Disease: Need for Imaging
   Sanjay K. Jain, MD, Johns Hopkins University
09:00-09:25a  Overview of Molecular Imaging
   Dima A. Hammoud, MD, NIH
09:30-09:55a  Molecular Imaging Tools for Cardiovascular Infection and Inflammation
   Farouc A. Jaffer, MD, PhD, Massachusetts General Hospital

10:00-10:20a  Coffee Break

Molecular Imaging of the Immune System: Targeting the Host
10:20-10:45a  Cytokine and Chemokine Receptor Imaging
   Gary D. Luker, MD, University of Michigan
10:50-11:15a  Translocator Protein (TSPO) as an Inflammatory Marker
   H. Charles Manning, PhD, Vanderbilt University
11:20-11:45a  PET imaging of T-lymphocytes Using Reporter Genes
   Caius Radu, MD, University of California, Los Angeles
11:50-12:15a  Labeling of Immune Cells Using Iron Oxide Particles
   Erik M. Shapiro, PhD, Yale University

12:20-01:20p  Lunch and Poster Session
Afternoon sessions

**Molecular Imaging of Infection: Targeting the Pathogen I**

01:20-01:45p  Optical Imaging Applications for Mycobacterial Lung Infections  
*Jeffrey D. Cirillo, PhD, Texas A&M*

01:50-02:15p  Imaging Viral Vector Distribution in Small Animals  
*Michael A. Barry, PhD, Mayo Clinic*

02:20-02:45p  Maltodextrin-based Probes to Detect Bacteria  
*Niren Murthy, PhD, University of California, Berkeley*

02:50-03:10p  Coffee Break

**Molecular Imaging of Infection: Targeting the Pathogen II**

03:10-03:35p  PET Based Bacteria-Specific Tracers  
*Edward A. Weinstein, MD, PhD, Johns Hopkins University*

03:40-04:05p  Anti-infectious Drug Chemotherapeutics in Animal Models  
*Peter J. Tonge, PhD, Stony Brook University*

04:10-04:35p  Use of PET and SPECT for Detecting Bacteria in Humans  
*Steve Cho, MD, Johns Hopkins University*

04:40-05:00p  Wrap up

Please contact Dima A. Hammoud, MD (301-402-3041; hammoudd@cc.nih.gov) or Sanjay K. Jain, MD (410-502-8241; sjain5@jhmi.edu) for more information.