

**Workshop on infectious disease imaging**  
**Natcher Building, NIH campus      Thursday, September 25th, 2014**

The meeting is co-sponsored by:

The Center for Infectious Disease Imaging, Department of Radiology and Imaging Sciences, NIH Clinical Center

Division of Clinical Research, National Institute of Allergy and Infectious Diseases, NIH

8:25    Welcome

**Recent advances in ID imaging**

8:30    Sanjay Jain (Johns Hopkins): Introduction and overview of infectious disease imaging

9:00    Gary Luker (U. of Michigan): Bioluminescence imaging: dead end or bridge to translation?

9:30    Clif Barry (NIAID): Update on PET/CT imaging of tuberculosis

10:00    Coffee break

**Current and future research**

10:30    Dan Mollura and Ulas Bagci (CIDI): PET and CT image analysis of lung infections: segmentation, pathology detection, and serial quantification methods

10:45    Dan Mollura and Ziyue Xu (CIDI): CT image processing for analyzing infectious airways and cavitory lung disease

11:00    Ed Weinstein (Johns Hopkins): Imaging enterobacterial infection in vivo with 18F-fluorodeoxyisotripton PET

11:15    Catherine Foss (Johns Hopkins): Imaging complement, macrophages and collagen remodeling in experimental staphylococcal osteomyelitis

11:30    Siddhartha Mahanty (NIAID): Imaging-assisted studies of parasite growth and inflammation in a novel rat model of neurocysticercosis

11:45    Jon Warawa (U of Louisville): Improved modeling of respiratory melioidosis through bioluminescent imaging

12:00    Lunch

**Imaging viral infections**

1:00    Dorian McGavern (NINDS): Imaging immunity to infection in the living brain

1:30    Colleen Jonsson (U. of Louisville): Global and local responses of the ferret lung to influenza virus infection

2:00    Stephanie Carlson (Mayo Clinic): Quantitative imaging of in vivo viral infection and spread using the sodium iodide symporter (NIS)

2:30    Coffee break

**Current and future research**

2:45    Amy Hartman (U Pittsburgh Medical Center): From mice to monkeys: imaging at BSL-3 in the Pitt RBL

- 3:15 Tom Bocan: Plans for BSL-3 imaging at the new USAMRIID
- 3:30 Jeff Solomon (IRF): An infrastructure for image analysis at the IRF
- 3:45 Dan Chertow (IRF): CT correlates of acute lung injury due to influenza A and methicillin-resistant *Staphylococcus aureus* infection in rhesus macaques
- 4:00 Marina Zaitseva (CBER/FDA): Quantitative bioluminescence imaging for assessing the effects of antiviral therapies on vaccinia virus infections in mice
- 4:15 Michele Di Mascio (NIAID): Imaging immune deficiency and reconstitution in nonhuman primates
- 4:30 Discussion and close

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For more information and to preregister for the workshop, contact Mike Bray at [mbray@niaid.nih](mailto:mbray@niaid.nih).



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