FINAL AGENDA

MONDAY, MAY 8, 2017

8:30 a.m. – 8:45 a.m. WELCOME & OPENING REMARKS
Introduction by Diana Finzi, NIAID, NIH
Yegor Voronin, Global HIV Vaccine Enterprise

8:45 a.m. – 9:00 a.m. WORKSHOP GOALS
Jacob D. Estes, Frederick National Laboratory, MD

SESSION 1 EARLY EVENTS AND PATHOGENESIS

CHAIRS
Thomas J. Hope, Northwestern University, IL
Timothy Schacker, University of Minnesota, MN

SESSION OVERVIEW & QUESTIONS

9:00 a.m. – 9:30 a.m. Ashley T. Haase, University of Minnesota, MN
Image analysis of HIV/SIV pathogenesis: A guide to improving treatment, vaccine development, and cure strategies

SESSION PRESENTATIONS

9:30 a.m. – 10:00 a.m. Thomas J. Hope, Northwestern University, IL
Imaging HIV/SIV transmission and prevention in macaque mucosal challenge and human explant models

10:00 a.m. – 10:30 a.m. Brandon F. Keele, Frederick National Laboratory, MD
Imaging and molecular techniques combined to track mucosal transmission and dissemination
10:30 a.m. – 11:00 a.m.  BREAK

11:00 a.m. – 11:30 a.m.  Timothy Schacker, University of Minnesota, MN  
*Image analysis of HIV induced lymphoid tissue fibrosis advances our understanding of HIV pathogenesis*

11:30 a.m. – 12:00 p.m.  Michele Di Mascio, NIAID, NIH, MD  
*Dynamics of CD4 pool repopulation in the whole-body following antiretroviral treatment of SIV infection: an in vivo imaging study*

12:00 p.m. – 12:30 p.m.  SESSION DISCUSSION

12:30 p.m. – 1:30 p.m.  LUNCH

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**SESSION 2**  RESERVOIRS AND CURE

**CHAIRS**  
Timothy Henrich, University of California, San Francisco, CA  
Thomas J. Hope, Northwestern University, IL

**SESSION OVERVIEW & QUESTIONS**

1:30 p.m. – 2:00 p.m.  Robert F. Siliciano, Johns Hopkins University, MD  
*New developments in understanding the latent reservoir for HIV*

**SESSION PRESENTATIONS**

2:00 p.m. – 2:30 p.m.  Jacob D. Estes, Frederick National Laboratory, MD  
*Novel in situ imaging approaches to understand viral persistence*

2:30 p.m. – 3:00 p.m.  BREAK

3:00 p.m. – 3:30 p.m.  Francois Villinger, University of Louisiana, LA  
*Mapping early SIV replication during acute and post acute infection*

3:30 p.m. – 4:00 p.m.  Elizabeth Connick, University of Arizona, AZ  
*Imaging B cell follicles to investigate HIV/SIV persistence*

4:00 p.m. – 4:30 p.m.  Won-Bin Young, University of Pittsburgh, PA  
*Visualization of HIV mucosal transmission, viremia rebound, and drug-resistance in humanized mice*

4:30 p.m. – 5:00 p.m.  SESSION DISCUSSION
TUESDAY, MAY 9

SESSION 3  VACCINES

CHAIRS
Roger Le Grand, CEA, France
Costas Petrovas, National Institutes of Health, MD

SESSION OVERVIEW & QUESTIONS
8:30 a.m. – 9:00 a.m. Dan Barouch, Beth Israel Deaconess Medical Center, MA
New approaches to HIV vaccines and imaging

SESSION PRESENTATIONS
9:00 a.m. – 9:30 a.m. Costas Petrovas, NIAID, NIH, MD
Tissue imaging: Shedding light into immune dynamics in vaccinology and viral infections

9:30 a.m. – 10:00 a.m. Philip Santangelo, Georgia Tech, GA
Immuno-PET/CT interrogations of SIV and SHIV infections

10:00 a.m. – 10:30 a.m. Roger Le Grand, CEA, France
Imaging changes at vaccine injection site

10:30 a.m. – 11:00 a.m. SESSION DISCUSSION

11:00 a.m. – 11:30 a.m. BREAK

SESSION 4  EMERGING TECHNOLOGIES AND LESSONS FROM NON-HIV/SIV MODELS

CHAIRS
Gabriel Victora, Rockefeller University, NY
Thorsten R. Mempel, Harvard University, MA

11:30 a.m. – 12:00 p.m. SESSION OVERVIEW & QUESTIONS
Gabriel Victora, Rockefeller University, NY
Visualizing the immune response to infection and immunization

12:00 p.m. – 12:30 p.m. SESSION PRESENTATIONS
Michael Gerner, University of Washington, WA
Visualizing immune responses to vaccines

12:30 p.m. – 1:30 p.m. LUNCH

1:30 p.m. – 2:00 p.m. Weiming Yu, NIAID, NIH (Ron Germain Lab), MD
Histo-cytometry – highly multiplex quantitative 2D and 3D tissue imaging
2:00 p.m. – 2:30 p.m.  **Sigal Shachar**, Center for Cancer Research (NCI), MD  
*Using high-throughput microscopy to study cellular structure and function*

2:30 p.m. – 3:00 p.m.  **Thorsten R. Mempel**, Harvard University, MA  
*Cellular and viral dynamics during HIV infection in humanized mice*

3:00 p.m. – 3:15 p.m. **BREAK**

3:15 p.m. – 3:45 p.m.  **Michael Angelo**, Stanford University, CA  
*High dimensional, subcellular imaging of clinical FFPE biopsies using MIBI*

3:45 p.m. – 4:15 p.m.  **Angela Kashuba**, University of North Carolina, NC  
*Using mass spectrometry imaging to visualize drug distribution in putative viral reservoirs*

4:15 p.m. – 4:45 p.m. **SESSION DISCUSSION**

4:45 p.m. – 5:00 p.m. **CLOSING REMARKS (Organizing Committee)**