Join world experts as they discuss HIV “cure” research, emerging viruses, structural biology, extracellular vesicle research, immunology and viral pathogenesis research, and advances in clinical virology, including a special lecture by Nobel Laureate Harald zur Hausen. In addition to invited presentations, scientific abstract submissions will be accepted for poster presentation.
Session A: HIV "Cure" Research with Emphasis on Viral Suppression  
8:20 AM – 12:20 PM  
Grand Ballroom  
Chairpersons and Discussants:  
Carl Dieffenbach, PhD, National Institute of Allergy and Infectious Diseases  
Anders Vahlne, MD, PhD, Karolinska Institutet  

8:20  
Robert Siliciano, MD, PhD, Johns Hopkins University  
Defective proviruses rapidly accumulate during acute HIV-1 infection  

8:40  
Bruce Walker, MD, Ragon Institute of MGH, MIT, and Harvard  
Impact of treatment in Fiebig Stage I on HIV-specific immune responses: Implications for cure strategies  

9:00  
Guido Poli, MD, Vita–Salute San Raffaele University  
Towards Achieving a State of Reversible HIV-1 Latency in Primary Monocyte-Derived Macrophages (MDM) by M1 Polarization  

9:20  
Jonathan Karn, PhD, Case Western Reserve University  
Distinct mechanisms of hormonal control of HIV latency in T-cells and microglial cells  

9:40  
Victor Garcia-Martinez, PhD, University of North Carolina  
In vivo analysis of the myeloid HIV reservoir in the CNS  

Coffee Break, 10:00 AM – 10:20 AM, Grand Prefunction  

10:20  
Ashley Haase, MD, University of Minnesota  
Concentrating Antibodies at Mucosal Frontlines for Prevention  

10:40  
Timothy Schacker, MD, University of Minnesota  
How Important Is the Lymphoid Tissue Reservoir?  

11:00  
Steven Wolinsky, MD, Northwestern University  
Persistent viral replication maintains the tissue reservoir during drug therapy  

11:20  
Fabio Romerio, PhD, Institute of Human Virology  
The HIV-1 antisense transcript AST promotes latency by recruiting PRC2 to the 5'SLTR  

11:40  
Session Speakers, co-chaired by Carl Dieffenbach and Robert Gallo  
Special Panel Discussion on HIV Cure Research  

Lunch, 12:20 PM – 1:35 PM
Session B:  Selected New Developments in Cancer Research
1:35 PM – 3:15 PM
Grand Ballroom
Chairpersons and Discussants:
Eduardo Sotomayor, MD, George Washington University School of Medicine & Health Sciences
Franco Buonaguro, MD, Istituto Nazionale Tumori "Fondazione Pascale"

1:35  Riccardo Dalla-Favera, MD, Columbia University
Molecular Genetics of HIV-associated B-cell Lymphomas

1:55  Gary Borisy, PhD, The Forsyth Institute
Visualizing the Complexity of Microbiomes at the Micron Scale

2:15  Robert Burk, MD, Albert Einstein College of Medicine
Sexual transmission of HPV16 from Neandertals to modern humans and the evolution of viral oncogenesis

2:35  Bernhard Fleckenstein, MD, Universitätsklinikum Erlangen
Functional Dissection of Primary Immunodeficiencies by Rhadinovirus-Mediated T-Cell Transformation

2:55  Jeffrey Schlom, PhD, National Cancer Institute
Emerging Concepts in Cancer Immunotherapy

Coffee Break, 3:15 PM – 3:35 PM, Grand Prefunction

Session C: Emerging Viruses and the Global Virus Network
3:35 PM – 5:50 PM
Grand Ballroom
Chairpersons and Discussants:
Kathleen Neuzil, MD, MPH, Institute of Global Health, University of Maryland School of Medicine
Jose Esparza, MD, PhD, Adjunct Professor, Institute of Human Virology

3:35  Jerome Kim, MD, International Vaccine Institute
The Middle East Respiratory Syndrome (MERS) experience in Korea

3:55  Scott Weaver, PhD, Institute for Human Infections and Immunity, University of Texas Medical Branch
Zika Virus: History, Evolution, Transmission, Emergence Mechanisms, and Activities of the GVN Task Force

4:15  Alan Schmaljohn, PhD, University of Maryland School of Medicine
Special Lecture: Beyond Neutralization is Metaneutralization: Precedents and Complexities with Emerging Viruses

4:40  Roger Glass, MD, PhD, Fogarty International Center, National Institutes of Health
Special Lecture: Rotavirus and Rotavirus Vaccines: Current status and future challenges
Session D: Structural Biology  
8:20 AM – 12:40 PM  
Grand Ballroom  
Chairpersons and Discussants:  
Eric Sundberg, PhD, Institute of Human Virology  
Leonid Margolis, PhD, National Institute of Child Health and Human Development

8:20 Stefan Sarafianos, PhD, University of Missouri School of Medicine  
*Structural Basis of Inhibition and Resistance Mechanism to EFdA, a highly potent NRTI*

8:40 Andrew Ward, PhD, The Scripps Research Institute  
*The Dynamic HIV-1 Envelope Glycoprotein Trimer*

9:00 Sriram Subramaniam, PhD, National Cancer Institute  
*Cryo-EM of dynamic molecular assemblies*

9:20 Peijun Zhang, PhD, The Scripps Research Institute  
*Structural Basis of HIV-1 Capsid Assembly, Maturation and Host Cell Interactions*

9:40 Marzena Pazgier, PhD, Institute of Human Virology  
*Structural targeting of the A32-region epitopes for antibody-dependent cell-mediated cytotoxicity*

Coffee Break, 10:00 AM – 10:20 AM, Grand Prefunction

10:20 Jason McLellan, PhD, Dartmouth College  
*Structure and Stabilization of Coronavirus Spike Proteins in the Prefusion Conformation*

10:40 Bing Chen, PhD, Harvard University  
*Structural Basis for Membrane Anchoring of HIV-1 Envelope Spike*

11:00 Joseph Sodroski, MD, Harvard University  
*Understanding and Exploiting the Conformational States of the HIV-1 Envelope Glycoprotein Trimer*
11:20  Gregory Melikian, PhD, Emory University School of Medicine  
Real-time imaging of single HIV-1 core uncoating

11:40  Carol Weiss, MD, PhD, U.S. Food and Drug Administration  
Coordinated gp41 and gp120 mutations conferring an open conformation of Env and their consequences on Env function

12:00  Pamela Bjorkman, PhD, California Institute of Technology  
Structure of a natively-glycosylated HIV-1 Env reveals a new mode for VH1–2 antibody recognition of the CD4 binding site relevant to vaccine

Lunch, 12:20 PM – 1:35 PM

Session E:  Extracellular Vesicle Research  
1:35 PM – 3:15 PM  
Grand Ballroom  
Chairpersons and Discussants:  
Thomas Lehner, MD, King's College London  
Isaac Witz, PhD, Tel Aviv University

1:35  Leonid Margolis, PhD, National Institute of Child Health and Development  
Extracellular vesicles released by HIV-1 infected cells carry viral proteins and facilitate HIV infection of human lymphoid tissue

1:55  Fatah Kashanchi, PhD, George Mason University  
Exosomes from retrovirus infected cells carry distinct viral noncoding RNAs and proteins that control the fate of the recipient cell

2:15  Dirk Dittmer, PhD, University of North Carolina School of Medicine  
Viral exosomes exert paracrine effects on endothelial cells leading to enhanced migration

2:35  Howard Fox, MD, PhD, University of Nebraska Medical Center  
Extracellular vesicle microRNA leads to neurotoxicity in SIV infection

2:55  Esther N.M. Nolte-t Hoen, PhD, Utrecht University  
Naked virions, extracellular vesicles, and vesicle-enclosed virions released early after picornavirus infection – who, when, how, and why?

Coffee Break, 3:15 PM – 3:35 PM, Grand Prefunction

Session F:  Immunology and Viral Pathogenesis Research  
3:35 PM – 5:45 PM  
Grand Ballroom  
Chairpersons and Discussants:  
Guido Poli, MD, Vita-Salute San Raffaele University  
Arnaldo Caruso, MD, University of Brescia Medical School

3:35  Louis Picker, MD, Oregon Health & Science University  
Special Lecture:  Programming CD8+ T Cell Immunity with Cytomegalovirus Vectors
4:00 Warner Greene, MD, PhD, Gladstone Institute of Virology and Immunology  
*Special Lecture: On Death and Dying with HIV: Pyroptosis Drives CD4 T Cell Depletion*

4:25 Paolo Lusso, MD, PhD, National Institute of Allergy and Infectious Diseases  
*Structure–Function Elucidation of the Native HIV–1 Envelope Trimer As a Basis for Rational Vaccine Design*

4:45 Jeffrey Lifson, MD, National Cancer Institute  
*Insights Into AIDS Virus Pathogenesis from Studies in Nonhuman Primate Models*

5:05 Timothy Fouts, PhD, Profectus Biosciences  
*Vesiculovirus vectored vaccines can provide single dose protection against filoviruses, arenaviruses, and alphaviruses*

5:25 John Mellors, MD, University of Pittsburgh  
*Clonally–Amplified Proviruses as Reservoirs of HIV*

**Poster Session, 6:30 PM – 8:15 PM, Grand Prefunction**

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**Wednesday, September 21, 2016**

**Session G: Progress in Vaccinology and HIV Prevention**
8:20 AM – 12:35 AM
Grand Ballroom
*Chairpersons and Discussants:*
Robert C. Gallo, MD, Director, Institute of Human Virology
Georgia Tomaras, PhD, Duke Human Vaccine Institute

8:20 Donald Forthal, MD, University of California, Irvine  
*Non–neutralizing antibody activities: the good, bad and indifferent*

8:40 Margaret Ackerman, PhD, Dartmouth College  
*Fine epitope signature of HIV–1 antibody neutralization breadth at the CD4 binding site*

9:00 Gabriel Victoria, PhD, Whitehead Institute for Biomedical Research  
*Clonal and cellular dynamics in antibody evolution*

9:20 Thomas Hope, PhD, Northwestern University Feinberg School of Medicine  
*Defining the earliest targets of SIV susceptibility after mucosal challenge in the Rhesus Macaque model*

9:40 Anthony DeVico, PhD, Institute of Human Virology  
*HIV Vaccines Based on Transition State Envelope Structures*

10:00 Christopher Parks, PhD, International AIDS Vaccine Initiative  
*Mucosal vaccination with a replication-competent VSV–HIV chimera delivering Env trimers protects rhesus macaques from rectal SHIV infection*
10:20 Garnett Kelsoe, DSc, Duke University School of Medicine
*High Resolution of Humoral Responses to HIV-1: determinism or chance?*

**Coffee Break, 10:40 AM – 10:55 AM, Grand Prefunction**

10:55 Michel Nussenzweig, MD, PhD, The Rockefeller University
*Special Lecture: HIV-1 Prevention: Progress Towards Passive or Active Vaccination*

11:20 Jeffrey Ravetch, MD, PhD, The Rockefeller University
*Special Lecture: Engineering anti-HIV antibodies for optimal control of HIV infection*

11:45 Cynthia Derdeyn, PhD, Emory University School of Medicine
*Events in Early HIV-1 Infection That Prime the Development of Heterologous Neutralization Breadth*

12:05 Frances Eun-Hyung Lee, MD, Emory University School of Medicine
*Identification of Human Long-lived Plasma Cells: Implications for HIV Vaccines*

12:25 Thomas Lehner, MD, King's College London
*The effect of stress agents in vitro and human vaccination in vivo on stem cell memory CD4+ CD45- T cells*

**Lunch, 12:45 PM – 1:50 PM**

**Session H: Lifetime Achievement Award Mini-Symposium**
1:50 PM – 5:40 PM
*Grand Ballroom
Chairpersons and Discussants:
Robert C. Gallo, MD, Director, Institute of Human Virology
William Blattner, MD, IHV Co-founder*

1:50 Robert C. Gallo, MD, Director, Institute of Human Virology
*Introduction to Lifetime Achievement Awards*

Carlo Croce, MD, The Ohio State University College of Medicine
*Video remarks in honor of Peter Vogt*

1:55 Robin Weiss, MD, PhD, University College London
*Speaking in honor of Peter Vogt: Pseudoviruses: Sheep in Wolves Clothing*

2:15 Joseph Pagano, PhD, University of North Carolina
*Speaking in honor of Peter Vogt: The Epstein-Barr Virus, a 50-year Odyssey*

2:35 Harald zur Hausen, MD, Nobel Laureate, German Cancer Research Center
*Special Lecture in Honor of Peter Vogt: Novel infectious agents in dairy cattle and their role in human chronic diseases*

3:15 Peter Vogt, PhD, The Scripps Research Institute, The 2016 IHV Lifetime Achievement Award for Scientific Contributions
*Reinhard Kurth Memorial Lecture: The Non-coding Transcriptome: Regulation by MYC and Cancer-specific Transcripts*
Coffee Break, 4:00 PM – 4:20 PM, Grand Prefunction

4:20 Mario Stevenson, PhD, University of Miami Miller School of Medicine
Speaking in honor of Ray Schinazi: Assessing the contribution of myeloid cells to HIV-1 persistence in the face of ART

4:40 Samuel Broder, MD, Intrexon
Speaking in honor of Ray Schinazi: Thirty Years of Anti-Retroviral Therapy for Patients with AIDS

5:00 Harvey Alter, MD, National Institutes of Health
Special Lecture in honor of Ray Schinazi: The HCV Story: From Origins to Cure

6:30 PM Gala Reception, Grand Prefunction

7:15 PM Lifetime Achievement Awards Dinner, Cobalt

Thursday, September 22, 2016

Session I: Advances in Clinical Virology
8:20 AM – 12:20 PM
Grand Ballroom
Chairpersons and Discussants:
Shyamasundaran Kottilil, MD, PhD, Institute of Human Virology
John Bartlett, MD, Johns Hopkins University School of Medicine

8:20 John Bartlett, MD, Johns Hopkins University School of Medicine
Public Health Approach to HIV Stagnation

8:40 Mark Wainberg, MD, McGill University
The Absence of Drug Resistance against Dolutegravir in First-Line Therapy is Attributable to Reduced Viral Replicative Fitness

9:00 Barry Peters, MD, King's College London
Metabolic and cardiovascular co-morbidities in people living with HIV

9:20 Mark Sulkowski, MD, Johns Hopkins University School of Medicine
Advances in the treatment of chronic HCV infection with direct acting antivirals

9:40 Howard Gendelman, MD, University of Nebraska
Special Lecture: Transforming anti-HIV drugs

Coffee Break, 10:10 AM – 10:30 AM, Grand Prefunction
Grand Ballroom
Chairpersons and Discussants:
Ed Tramont, MD, National Institute of Allergy and Infectious Diseases
Robert Redfield, MD, Institute of Human Virology

10:30 Shyamasundaran Kottilil, MD, PhD, Institute of Human Virology
Challenges in eradicating chronic HBV infection

10:50 Luigi Buonaguro, MD, National Cancer Institute "Fondazione Pascale"
Discovery to first-in-man of a multi-peptide-based hepatocellular carcinoma
vaccine adjuvanted with CV8102 (RNAdjuvant) – HEPAVAC

11:10 Peter Stock, MD, University of California, San Francisco
Transplantation in the HIV Positive Recipient: The Unexpected Findings

11:30 JoAnn Suzich, PhD, MedImmune
Targeting the PD-1/PD-L1 pathway to achieve a functional cure for chronic
infection

11:50 Robert Gallo, MD, Institute of Human Virology
Closing Remarks
Notes:
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