

SUNDAY, MAY 12, 2019

2:00 PM – 3:30 PM

WELCOME, KEYNOTE AND ANTONIN HOLY AWARD LECTURES

Measles: A role for virus persistence?

Diane Griffin (Johns Hopkins University, Baltimore, MD)

ANTONÍN HOLÝ MEMORIAL AWARD LECTURE

Remdesivir (GS-5734), a broad-spectrum antiviral agent

Richard Mackman (Gilead Sciences, Foster City, CA)

3:30 PM – 4:00 PM COFFEE BREAK

4:00 PM – 5:30 PM

INFLUENZA SYMPOSIUM

101 years of influenza: Lessons from the 1918 pandemic

Jeffery Taubenberger (NIAID, NIH, Bethesda, MD)

Influenza antivirals: Recent developments

Frederick Hayden (University of Virginia School of Medicine, Charlottesville, VA)

A hemagglutinin stalk-based universal influenza virus vaccine

Florian Krammer (Icahn School of Medicine at Mount Sinai, New York, NY)

5:30 PM – 7:00 PM OPENING RECEPTION

(Pisces, 15th Floor)

MONDAY, MAY 13, 2019

8:30 AM – 9:00 AM

WOMEN IN SCIENCE AWARD LECTURE

Function, activation and control of innate immune networks to HSV infection

Grace Zhou (Shenzhen International Institute for Biomedical Research; ImmunoVir Co., Ltd., Shenzhen, China)

9:00 AM – 11:00 AM

EMERGING VIRUS SYMPOSIUM

Research for preparedness for arboviruses and hemorrhagic fever viruses in subsaharan Africa

Amadou Sall (Pasteur Institut, Dakar, Senegal)

WHO's Global Program on MERS: Improving global preparedness and response to high threat emerging respiratory pathogens with significant public health and economic consequences

Maria Van Kerkhove (World Health Organization, Geneva, Switzerland)

Development of medical countermeasures against Nipah virus: A field perspective

Emily Gurley (Johns Hopkins University, Baltimore, MD)

Can we predict arbovirus epidemics?

Scott Weaver (UTMB, Galveston, TX)

11:00 AM – 11:20 AM COFFEE BREAK

11:20 AM – 12:30 PM

SHORT PRESENTATIONS 1

Human Intravenous Immunoglobulin Provides Protection Against Enterovirus 71 Infection in a Mouse Model

Christopher Peterson (Institute for Antiviral Research, Utah State University, Logan)

A Novel Human Skin Tissue Model to Study HCMV and Evaluate Antiviral Drugs In Vivo

Megan Lloyd (SUNY Upstate Medical University, Syracuse, NY)

Exploring Small Molecule Synthetic Inhibitors of HSV-1 Infectivity

Luis Schang (Cornell University, Ithaca, NY)

Disrupting Transcriptional Feedback Yields an Escape-Resistant Antiviral

Leor Weinberger (Gladstone Institutes, San Francisco, CA)

Inhibition of DNA Viruses by Ribosylindole Nucleosides

Scott James (University of Alabama, Birmingham)

Neuraminidase-Targeted Immunotherapy of Influenza: Repurposing Zanamivir as a Targeting Ligand for Delivery of an Attached Immunogenic Hapten to Virus/Virus-Infected Cells

Validating Enterovirus D68 -2Apro as an Antiviral Drug Target and the Discovery of Telaprevir as a Potent D68-2Apro Inhibitor

Jun Wang (University of Arizona, Tempe)

12:30 PM – 2:30 PM POSTER SESSION 1 (lunch provided)

12:30 PM – 1:30 PM: ODD numbered posters

1:30 PM – 2:30 PM: EVEN numbered posters

2:30 PM – 4:30 PM

RETROVIRUS SYMPOSIUM

ISAR Award of Excellence – *Human retroviruses (HTLV-1 and HIV): Current therapy and prevention*

Robert Gallo (University of Maryland School of Medicine; Global Virus Network, Baltimore, MD)

Effects of broadly neutralizing antibody combinations in HIV-1 infection

Marina Caskey (Rockefeller University, New York, NY)

Long-acting antiretrovirals

Howard Gendelman (University of Nebraska Medical Center, Omaha)

The advancement of HIV NRTTIs for extended-duration dosing

Izzat Raheem (Merck, West Point, PA)

4:30 PM – 4:45 PM COFFEE BREAK

**4:45 PM – 6:00 PM PECHAKUCHA EVENT WITH
INTRODUCTION OF FIRST TIME ATTENDEES**

TUESDAY, MAY 14, 2019

8:30 AM – 10:00 AM

WHAT'S NEW IN ANTIVIRAL RESEARCH 1

Antiviral treatment for patients with yellow fever: a new frontier

Michael Jacobs (Royal Free London NHS Foundation Trust, London, UK)

Novel utilization of smallpox medical countermeasures – challenges to vaccination against endemic orthopoxvirus disease (monkeypox)

Victoria Olson (US Centers for Disease Control, Atlanta, GA)

Antivirals against chikungunya virus from a medchem perspective: Challenges and lessons learned

María-Jesús Pérez-Pérez (Instituto de Química Médica, Madrid, Spain)

10:00 AM – 10:30 AM COFFEE BREAK

10:20 AM – 11:50 AM

SHORT PRESENTATIONS 2

Inhibition of Arenavirus Infection by a Novel Fusion Inhibitor
Brian Gowen (Utah State University, Logan)

Broad-spectrum Antiviral Remdesivir Provides Superior In Vivo Therapeutic Efficacy against MERS-CoV Compared to a Combination of Lopinavir/ Ritonavir Plus Interferon Beta
Timothy Sheahan (University of North Carolina at Chapel Hill)

A Genome-Wide CRISPR Screen Identifies N-Acetylglucosamine-1-Phosphate Transferase as a Potential Antiviral Target for Ebola Virus

Mike Flint (Centers for Disease Control and Prevention, Atlanta, GA)

Efficacy of a ML336 Derivative against Venezuelan and Eastern Equine Encephalitis Viruses

Colleen Jonsson (University of Tennessee Health Science Center, Memphis)

Sofosbuvir, a Clinically Approved Antiviral Drug, Inhibits Zika Virus Replication

Giselle Barbosa-Lima (FIOCRUZ, Rio de Janeiro, Brazil)

Single-dose Efficacy of Viral Replicon Particle Vaccines for Prevention of Lassa and Crimean-Congo Hemorrhagic Fever

Jessica Spengler (Viral Special Pathogens Branch, Centers for Disease Control & Prevention, Atlanta, GA)

A Novel Class of Small Molecule Inhibitors Targeting the Chikungunya Virus Capping Machinery with a High Barrier to Resistance

Leen Delang (KU Leuven, Rega Institute for Medical Research, Belgium)

Development of a Nucleoside Analog for Norovirus

Randall Lanier (Chimerix)

Rottlerin, a Small Bioactive Compound, Inhibits La Crosse Virus (LACV)-induced Neuronal Damage by Limiting Virus Release from the Golgi

Vidon Nair (Staff Scientist, Hamilton, Montana)

11:50 AM – 12:00 PM ISAR AWARD FOR OUTSTANDING CONTRIBUTIONS TO THE SOCIETY FOR MARK PRICHARD (University of Alabama, Birmingham)

12:00 PM- 1:30 PM LUNCH BREAK (on your own)

12:15 PM – 1:15 PM CAREER DEVELOPMENT PANEL

1:30 PM – 2:00 PM

WILLIAM PRUSOFF YOUNG INVESTIGATOR AWARD LECTURE

An industry perspective on developing dengue antiviral small molecules

Marnix Van Loock (Janssen Pharmaceutica NV (Johnson & Johnson), Beerse, Belgium)

2:00 PM – 3:30 PM

MEDICINAL CHEMISTRY SYMPOSIUM

Rational (and sometimes irrational!) strategies in nucleoside drug design

Kathie Seley-Radtke (University of Maryland, Baltimore County, MD)

In search of novel antivirals using structure-based drug design approaches

Andrea Brancale (Cardiff University, Wales, UK)

Drug discovery using DNA-encoded chemical libraries

Anthony Keefe (X-Chem Pharmaceuticals, Waltham, MA)

3:30 PM – 4:00 PM COFFEE BREAK

4:00 PM – 5:00 PM

SHORT PRESENTATIONS 3

Novel ProTide Prodrugs of Tenofovir and Their Antiviral Properties

Filip Kalčić (Institute of Organic Chemistry and Biochemistry CAS; Charles University)

Cell-type Dependence of Metabolic Products and Antiviral Potency for T-705 and T-1105

Johanna Huchting (University of Hamburg, Germany; KU Leuven, Rega Institute for Medical Research, Belgium)

Development of Novel hDHODH Inhibitors as Potent Broad Spectrum Antiviral Agents

Nora Constanze Fohrmann (University of Hamburg, Germany)

Optimizing Diarylbenzopyrimidines as HIV-1 Non-nucleoside Reverse Transcriptase Inhibitors for Superior Antiviral and Improved Drug Resistance Profile

Ge Meng (Fudan University, Shanghai, China)

Structure-Based Design of Nucleoside Triphosphate Mimics and Their Broader Implications for Discovery of Viral DNA and RNA Polymerase Inhibitors

Sergio Martinez (Rega Institute for Medical Research, KU Leuven, Belgium)

Potent Peptidomimetic Inhibitors of NS2B-NS3 Protease from Dengue and Zika Viruses

Dahai Luo (Lee Kong Chian School of Medicine, Nanyang Technological University, Singapore)

5:00 PM – 7:00 PM POSTER SESSION 2

5:00 PM – 6:00 PM: EVEN numbered posters

6:00 PM – 7:00 PM: ODD numbered posters

7:00 PM – 9:00 PM ISAR NETWORKING RECEPTION

At Baltimore Visitor Center

401 Light Street – across street from hotel

WEDNESDAY, MAY 15, 2019

8:30 AM – 9:00 AM

GERTRUDE ELION MEMORIAL AWARD LECTURE

The challenge of developing antivirals to treat eradicated disease

David Evans (University of Alberta, Canada)

9:00 AM – 10:30 AM

WHAT'S NEW IN ANTIVIRAL RESEARCH 2

Small molecules for big problems in large animals

Nesya Goris (ViroVet, Leuven, Belgium)

Polio eradication: Need for antivirals and progress to date

Marc S. Collett (ViroDefense Inc., Rockville, MD)

Update and challenges in research and development of dengue and zika antivirals

Subhash Vasudevan (Duke-National University of Singapore Medical School, Singapore)

10:30 AM – 10:50 AM COFFEE BREAK

10:50 AM – 12:00 PM SHOTGUN ORAL PRESENTATIONS AND AWARDS RECOGNITION

12:00 PM – 12:30 PM ISAR ANNUAL BUSINESS MEETING

12:00 PM – 1:15 PM LUNCH BREAK (on your own)

1:15 PM – 2:15 PM

DEVELOPING NEW ANTIVIRAL THERAPIES

Therapeutic strategies to combat cytomegalovirus infection

Rhonda Cardin (Louisiana State University School of Veterinary Medicine, Baton Rouge)

Investigational therapies for chronic hepatitis B: Does anything really work?

Timothy Block (Baruch S. Blumberg Institute, Doylestown, PA)

2:15 PM – 3:30 PM

SHORT PRESENTATIONS 4

A Small Molecule Human STING Agonist that Induces Antiviral Cytokine Response and Stimulates the T Lymphocyte Activation

Jinhong Chang (Baruch S. Blumberg Institute)

Antiviral Properties and Liver Specific Delivery of a TLR1/2 Ligand in HBV and/or HDV Infected Models

David Durantel (CRCL - INSERM U1052, Lyon, France)

SMCHD1 and PML Mediate IFN- α Suppression of Hepadnaviral cccDNA Transcription

Ju-Tao Guo (Baruch S. Blumberg Institute)

Advances in HBV Ribonuclease H Drug Development

Tiffany Edwards (Saint Louis University, MO)

Discovery and Mechanistic Studies of Novel Suppressors of Tat-mediated HIV Expression

Cole Schonhofer (Simon Fraser University, Burnaby, BC, Canada)

Viral Compartmentalization and Rapid Evolution of Drug-resistant Herpes Simplex Virus (HSV-1) Infection in a Hematopoietic Stem Cell Transplantation (HSCT) Patient

Hanna Schalkwijk (Rega Institute for Medical Research, KU Leuven, Belgium)

In Vitro and Clinical Resistance Profile of RV521, a Small Molecule Respiratory Syncytial Virus Fusion Inhibitor in Clinical Development

Elaine Thomas (ReViral Ltd, United Kingdom)

3:30 PM CONFERENCE CONCLUDES
