

KEYSTONE SYMPOSIA

on Molecular and Cellular Biology

Pathogenesis of Respiratory Viruses (J5)

Scientific Organizers: Adolfo García-Sastre and Peter J.M. Openshaw

Supported by the Directors' Fund

Innate Immunity to Viral Infections (J6)

Scientific Organizers: Caetano Reis e Sousa, Kate A. Fitzgerald and Charles M. Rice

January 19-24, 2014 • Keystone Resort • Keystone, Colorado, USA

Supported by the Directors' Fund

Abstract & Scholarship Deadline: September 19, 2013 / Abstract Deadline: October 22, 2013 / Discounted Registration Deadline: November 19, 2013

SUNDAY, JANUARY 19

MONDAY, JANUARY 20

Keynote Session (Joint)

Jean-Laurent Casanova, Rockefeller University, USA
Human Factors Contributing to Infectious Diseases
Peter M. Palese, Mount Sinai School of Medicine, USA
Influenza Virus+

Viral Entry and Replication (J5)

Ian A. Wilson, The Scripps Research Institute, USA
Structural Basis of Influenza HA Function and Neutralization
James E. Crowe, Jr., Vanderbilt University Medical Center, USA
Host-Virus Interactions during RSV Infection
Robert A. Lamb, Northwestern University, USA
Budding of Respiratory Negative Strand RNA Viruses

Antiviral Strategies Across Taxa (J6)

Luciano Marraffini, Rockefeller University, USA
The Side Effects of the CRISPR-Cas Adaptive Immune System of Prokaryotes
Olivier Voinnet, Swiss Federal Institute of Technology, Switzerland
Antiviral RNAi: From Plants to Mammals
Jean-Luc Imler, Institut de Biologie Moléculaire et Cellulaire, France
Sensing and Signaling Viral Infection in Drosophila

Workshop 1: Innate Virus Sensors (J6)

Short Talks Chosen from Abstracts

Virus-Host Interactions (J5)

Yoshihiro Kawaoka, University of Wisconsin; University of Tokyo, USA
Influenza Virus Pathogenesis and Transmission
Ursula Buchholz, NIAID, National Institutes of Health, USA
Subversion of Host Responses by RSV
J. Kenneth Baillie, University of Edinburgh, UK
Host Genetic Susceptibility and Viral Pathogenesis
Short Talk Chosen from Abstracts

Effector Responses and Viral Evasion (J6)

Sara R. Cherry, University of Pennsylvania School of Medicine, USA
Autophagy and Antiviral Defenses
Ulrich H. Von Andrian[†], Harvard Medical School, USA
NK Cells in Innate and Adaptive Immunity to Viruses
Andrew G. Bowie, Trinity College Dublin, Ireland
Role of PYHIN Proteins in Anti-Viral Responses
Short Talk Chosen from Abstracts

Poster Session 1

TUESDAY, JANUARY 21

Virus Detection by the Host (Joint)

Yong-Jun Liu, Baylor Research Institute, USA
Virus Sensing by Dendritic Cells
Teunis B.H. Geijtenbeek, University of Amsterdam, Netherlands
C-Type Lectin Receptors as Virus Sensors
Kate A. Fitzgerald, University of Massachusetts Medical School, USA
DNA Sensing in the Cytoplasm
Stephen Cusack[†], European Molecular Biology Laboratory, France
Structure of RIG-I-Like Helicases
Short Talk(s) Chosen from Abstracts

Innate Immunity in Pathogenesis (J5)

Peter Staeheli, University of Freiburg, Germany
Role of IFN in Influenza Virus Defense
Cecilia Johansson, Imperial College London, UK
Interferons in Paramyxovirus Infections
Deborah J. Lenschow, Washington University School of Medicine, USA
Regulation of the Host Response to Viral Infection by ISG15
Short Talk Chosen from Abstracts

Signaling Responses to Virus Infection (J6)

Zhijian 'James' Chen, HHMI/University of Texas Southwestern Medical Center, USA
MAVS Prions
Glen Barber, University of Miami, USA
STING at the Crossroads of Cell-Intrinsic DNA Sensing
Veit Hornung, University Hospital, University of Bonn, Germany
Inflammasomes in Antiviral Responses
Short Talk Chosen from Abstracts

Poster Session 2

WEDNESDAY, JANUARY 22

Induction of Immunity at Epithelial Surfaces (Joint)

Miriam Merad, Mount Sinai Medical Center, USA
Dendritic Cells as Initiators of Antiviral Lung Immunity
Tracy Hussell[†], University of Manchester, UK
Airway Immune Homeostasis
Akiko Iwasaki[†], Yale University School of Medicine, USA
Detection of Viruses by DC in Mucosa
Caetano Reis e Sousa, Cancer Research UK, London Research Institute, UK
Recognition of Cell Death in Immunity to Respiratory Viruses
Short Talk(s) Chosen from Abstracts

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Workshop 2: Antiviral Strategies (J6)

Short Talks Chosen from Abstracts

Specific Immunity: The Good and the Bad (J5)

Peter J.M. Openshaw, Imperial College London, UK
RSV Immunity

Rafi Ahmed[†], Emory University School of Medicine, USA
Antibody Responses to Influenza Virus Infection

Rino Rappuoli, Novartis Vaccines & Diagnostics, Italy
Respiratory Virus Vaccines

Short Talk Chosen from Abstracts

Defense from Retroviruses (J6)

Stephen P. Goff, Columbia University, USA
Silencing of Retroviral Genomes in Embryonic Stem Cells

Jeremy Luban, University of Massachusetts Medical School, USA
TRIM Proteins

Jan Rehwinkel, Weatherall Institute of Molecular Medicine, University of Oxford, UK
Cell-Intrinsic Restriction of Retrovirus Replication

Short Talk Chosen from Abstracts

Poster Session 3

THURSDAY, JANUARY 23

Virulence and Coinfections (J5)

Adolfo García-Sastre, Mount Sinai School of Medicine, USA
Subversion of Innate Pathways by Influenza Virus

Thomas J. Braciale, University of Virginia, USA
Immunity and Autoimmunity in Respiratory Virus Infection

Menno de Jong, Academic Medical Center/University of Amsterdam, Netherlands
Pathogenesis of Human Influenza Virus Infections

Jonathan A. McCullers, St. Jude Children's Research Hospital, USA
Cross-Talk of Bacteria and Viruses during Respiratory Infections

Short Talk(s) Chosen from Abstracts

IFNs and ISGs (J6)

Alexander (Sasha) Tarakhovsky, Rockefeller University, USA
Epigenetic Regulation of Antiviral Immunity

Andreas Pichlmair, Max-Planck Institute of Biochemistry, Germany
Global Analysis of Viral Immune Modulators

Charles M. Rice, Rockefeller University, USA
Antiviral Activities of Interferon Stimulated Genes

Michael S. Diamond, Washington University School of Medicine, USA
Cell-intrinsic Immune Gene Control of Viral Infections

Short Talk(s) Chosen from Abstracts

Regulation and Resolution of Inflammation (J5)

Bali Pulendran, Emory University, USA
Immunoregulatory Networks

Bruce D. Levy, Brigham and Women's Hospital, USA
Specialized Pro-Resolving Mediators Promote The Resolution of Pathogen-Mediated Inflammation

Speaker to be Announced

Short Talk Chosen from Abstracts

Antiviral Innate Immunity in Disease (J6)

Yanick Crow, University of Manchester, UK
Human Type I Interferonopathies

Ann Marshak-Rothstein[†], University of Massachusetts Medical School, USA
Virus Sensors and Lupus in Mice and Man

Roland W. Kolbeck, MedImmune, LLC, USA
New Approaches to the Treatment of Interferon-Driven Autoimmunity

Short Talk Chosen from Abstracts

FRIDAY, JANUARY 24