FRIDAY, FEBRUARY 5

Arrival and Registration

SATURDAY, FEBRUARY 6

Organizer Welcome and Keynote Session (Joint)
* Paul G. Thomas, St. Jude Children's Research Hospital, USA
* Carolina B. López, University of Pennsylvania, USA
Eva Harris, University of California, Berkeley, USA
Barney S. Graham, NIAID, National Institutes of Health, USA

Dengue and Zika Virus Pathogenesis and Immunity
* Carolina B. López, University of Pennsylvania, USA

Overview of Respiratory Virus Vaccines

Inflammation and Innate Immunity in Viral Infections (Q1)
Siddharth Balachandran, Fox Chase Cancer Center, USA
Lisa P. Daley-Bauer, Emory University, USA
Catherine A. Blish, Stanford University School of Medicine, USA
Ken H. Cadwell, New York University School of Medicine, USA

Short Talks Chosen from Abstracts

Beyond Acute Disease: Consequences of Respiratory Virus Infections (Q2)
Katelyn M. Gostic, University of Chicago, USA
Tina Hartert, Vanderbilt University School of Medicine, USA
Andrew E. Vaughan, University of Pennsylvania, USA

Short Talks Chosen from Abstracts

Workshop 1: Innate Immunity in Viral Infections (Q1)

Workshop 1: Zoonoses (Q2)

SENSING THE VIRUS AND ANTIGEN PRESENTATION (Q1)
Jonathan W. Yewdell, NIAID, National Institutes of Health, USA
Ana Fernandez-Sesma, Icahn School of Medicine at Mount Sinai, USA

Poster Session 1

SUNDAY, FEBRUARY 7

Mucosal Immunity (Joint)
Peter J.M. Openshaw, Imperial College London, UK
Stacey Lynne Schultz-Cherry, St. Jude Children's Research Hospital, USA
David B. Masopust, University of Minnesota, USA
Ali H. Ellebedy, Washington University School of Medicine, USA

Short Talks Chosen from Abstracts

Human Immunity in Blood and Tissues (Q1)
Katherine Kedzierska, University of Melbourne, Australia
Donna L. Farber, Columbia University Medical Center, USA
Frances E. Lund, University of Alabama at Birmingham, USA

Short Talks Chosen from Abstracts

New Approaches to Studying Respiratory Viruses I (Q2)
Susanne Herold, University of Giessen Lung Center, Germany
Seema Lakdawala, University of Pittsburgh School of Medicine, USA
Rebecca Dutch, University of Kentucky, USA

Short Talks Chosen from Abstracts

* Session Chair † Invited but not yet accepted  Program current as of June 22, 2020. Program subject to change. Meal formats are based on meeting venue. For the most up-to-date details, visit https://www.keystonesymposia.org.
**Poster Session 2**

**MONDAY, FEBRUARY 8**

**T Cells, B Cells and their Receptors (Q1)**
- **Paul G. Thomas**, St. Jude Children's Research Hospital, USA  
  *Specificity of the CD8 T Cell Compartment in Viral Infections*
- **Bryan Briney**, The Scripps Research Institute, USA  
  *Diversity in the Human Antibody Repertoire*
- **Dirk Hans Busch**, Technical University Munich, Germany  
  *CD8+ T Cells in CMV Infection*
- **Sophie A. Valkenburg**, University of Hong Kong, Hong Kong  
  *The Coordinated B and T Cell Response in Influenza Vaccination*

**Short Talks Chosen from Abstracts**

**Novel Insights into Respiratory Virus Biology (Q2)**

- **Andrew B. Ward**, The Scripps Research Institute, USA  
  *Monitoring Antibody Responses to Influenza and Coronaviruses using Electron Microscopy*
- **Speaker to be Announced**
- **Rachel Fears**, Boston University, USA  
  *Viral Transcription and Replication Mechanisms*

**Workshop 2: Adaptive Immunity in Viral Infections (Q1)**

**Pre-Existing Immunity and Co-Infections (Q1)**

- **Patricia T. Bozza**, Instituto Oswaldo Cruz, Brazil  
  *Yellow Fever, Dengue and HIV*
- **Tiffany A. Reese**, University of Texas Southwestern Medical Center, USA  
  *Herpesvirus and Helminth Co-Infections*

**Prevention and Treatment Strategies: Vaccines and Antivirals (Q2)**

- **Kanta Subbarao**, WHO Collaborating Centre for Reference and Research on Influenza, Australia  
  *Progress on Influenza Vaccines*
- **Pedro J. Cejas**, Merck & Co., Inc., USA  
  *RSV Therapies Designed from Human Disease Learnings: Vaccines and Antiviral Biologics*
- **Silke Stertz**, University of Zürich, Switzerland  
  *Host Factors as Antiviral Targets*

**Short Talks Chosen from Abstracts**

**Kena Swanson**, Pfizer Inc., USA  
*RSV Vaccines – Lessons Learned from Recent Experience*

**Poster Session 3**

**TUESDAY, FEBRUARY 9**

**Translational and Developmental Aspects of Antibodies (Joint)**

- **Galit Alter**, MIT and Harvard University, USA  
  *Systems Serology to Characterize Antibody Responses*
- **Nicole L. Kallewaard**, MedImmune, USA  
  *Antibodies as Vaccine Surrogates – Successes and Challenges*
- **Jesse D. Bloom**, Fred Hutchinson Cancer Research Center, USA  
  *Mapping Person-to-Person Variation in Viral Mutations that Escape Polyclonal Immunity*

**Short Talks Chosen from Abstracts**

**Workshop 2: Transmission (Q2)**

**New Approaches to Anti-Viral Vaccines (Q1)**

- **Florian Krammer**, Icahn School of Medicine at Mount Sinai, USA  
  *Novel Antigenic Targets for Influenza Vaccination*
- **Andrea J. Sant**, University of Rochester Medical Center, USA  
  *Influenza Specific CD4 T Cell Responses to Vaccination and Infection*

**Boerries Brandenburg**, Janssen Vaccine, Netherlands  
*Talk Title to be Announced*

**Short Talks Chosen from Abstracts**

**New Approaches to Studying Respiratory Viruses II (Q2)**

**Meeting Wrap-Up: Outcomes and Future Directions (Organizers) (Q1)**

**Meeting Wrap-Up: Outcomes and Future Directions (Organizers) (Q2)**
KEYSTONE SYMPOSIA
on Molecular and Cellular Biology

Viral Immunity: Basic Mechanisms and Therapeutic Applications (Q1)
Scientific Organizers: Katherine Kedzierska and Paul G. Thomas
Part of the Keystone Symposia Global Health Series, supported by the Bill & Melinda Gates Foundation

Respiratory Viruses: New Frontiers (Q2)
Scientific Organizers: Kanta Subbarao, JoAnn A. Suzich and Carolina B. López
February 5-9, 2021 • Fairmont Banff Springs • Banff, AB, Canada
Part of the Keystone Symposia Global Health Series, supported by the Bill & Melinda Gates Foundation

Global Health Travel Award Deadline: September 1, 2020 / Scholarship Deadline: October 22, 2020 / Abstract Deadline: November 5, 2020 / Discounted Registration Deadline: December 4, 2020

WEDNESDAY, FEBRUARY 10
Departure