

KEYSTONE SYMPOSIA

on Molecular and Cellular Biology

Cells vs. Pathogens: Intrinsic Defenses and Counterdefenses (C4)

March 23-26, 2018 • Hyatt Regency Monterey • Monterey, California, USA

Scientific Organizers: Sara R. Cherry, Craig R. Roy and Harmit S. Malik

Supported by the Directors' Fund

Abstract & Scholarship Deadline: November 21, 2017 / Abstract Deadline: December 19, 2017 / Discounted Registration Deadline: January 16, 2018

FRIDAY, MARCH 23

Arrival and Registration

SATURDAY, MARCH 24

Welcome and Keynote Address

Akiko Iwasaki, HHMI/Yale University School of Medicine, USA
Intrinsic Antiviral Defenses

Cellular Barriers to Infection

Carolyn B. Coyne, University of Pittsburgh, USA

Breaking Barriers-Virus Infection of Polarized Host Cells

Emily Troemel, University of California, San Diego, USA
C. elegans Barriers to Microsporidia

Andreas J. Bäuml, University of California, Davis, USA
Intestinal Barriers, the Microbiome and Metabolic Regulation

Short Talk(s) Chosen from Abstracts

Workshop

Short Talks Chosen from Abstracts

Pattern Recognition and Evasion

Kate A. Fitzgerald, University of Massachusetts Medical School, USA
Viral RNA Recognition by Sensors

John C. Boothroyd, Stanford University School of Medicine, USA
Toxoplasma's Manipulation of Host Cell Defenses

Luciano A. Marraffini, Rockefeller University, USA
Bacterial Immunity and Viral Evasion

Short Talk Chosen from Abstracts

Poster Session 1

SUNDAY, MARCH 25

Metabolic Control as a Defense

Nihal Altan-Bonnet, NHLBI, National Institutes of Health, USA
Infection by Population-A New Mode of Viral Transmission

Brian Lichty, McMaster University, Canada
Integration of Viral Sensing with Metabolic Regulators

Ken H. Cadwell, New York University School of Medicine, USA
Autophagy in Resistance versus Tolerance during Infectious Disease

Speaker to be Announced

Short Talk(s) Chosen from Abstracts

Cell Biological Control of Infection through Capture

Craig R. Roy, Yale University School of Medicine, USA
Manipulation of Autophagy by Intracellular Pathogens

Ivan Dikic, Goethe University Medical School, Germany
Ubiquitin Networks in Regulation of Host-Pathogen Interface

Beth Levine, University of Texas Southwestern Medical Center, USA
Intracellular Pathogens and Selective Autophagy

Short Talk Chosen from Abstracts

Poster Session 2

MONDAY, MARCH 26

Evolution and Co-Evolution of Intrinsic Defenses

Harmit S. Malik, Fred Hutchinson Cancer Research Center, USA
Molecular Arms Races between Host and Viral Genomes

Speaker to be Announced

Jörn Coers, Duke University, USA

Antibacterial Host Defense by IFN-Inducible GTPases

Speaker to be Announced

Short Talk(s) Chosen from Abstracts

Systems Approaches to Discover Intrinsic Effectors

Sara R. Cherry, University of Pennsylvania School of Medicine, USA
Functional Genomic Strategies to Identify Intrinsic Regulators of Infection

Nevan J. Krogan, University of California, San Francisco, USA
Using System Approaches to Studying Disease

Nels C. Elde, University of Utah, USA
Disposable Immune Functions

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

TUESDAY, MARCH 27

Departure