

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

Poster Session 1

Workshop

Short Talks Chosen from Abstracts

Pattern Recognition and Evasion

Speaker to be Announced

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

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

Phosphoribosyl-dependent Ubiquitination in regulation of Host-Pathogen Interface

Speaker to be Announced

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

Interim Immune Functions

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

TUESDAY, MARCH 27

Departure