

KEYSTONE SYMPOSIA

on Molecular and Cellular Biology

Innate Immunity: Mechanisms and Modulation (D1)

April 11-15, 2021 • INEC Killarney Convention Centre • Killarney, Co. Kerry, Ireland

Scientific Organizers: Kate A. Fitzgerald, Arturo Zychlinsky and Kate Schroder

Supported by the Directors' Fund

Scholarship Deadline: January 5, 2021 / Abstract Deadline: January 13, 2021 / Discounted Registration Deadline: February 11, 2021

SUNDAY, APRIL 11

Arrival and Registration

MONDAY, APRIL 12

Welcome and Keynote Address

Hao Wu, Harvard Medical School, Boston Children's Hospital, USA
Structural Insights into Innate Immune Receptors and Signaling

Nucleic Acid Sensing

Andrea Ablasser, Ecole Polytechnique Fédérale de Lausanne, Switzerland
DNA Sensing Pathways

Scott Pesiridis, GSK, USA
Therapeutic Modulation of the STING Pathway

Kate A. Fitzgerald, University of Massachusetts Medical School, USA
Regulation of Inflammation by Nucleic Acid Binding Proteins and Non-Coding RNAs

Short Talks Chosen from Abstracts

Innate Immunity Gone Awry

Raphaela Theresia Goldbach-Mansky, NIAID, National Institutes of Health, USA
Genetic Basis of Autoinflammatory Diseases

Mariana J. Kaplan, NIAMS, National Institutes of Health, USA
Targeting Innate Immunity in Systemic Autoimmune Diseases

Thirumala-Devi Kanneganti, St. Jude Children's Research Hospital, USA
Targeting the Inflammasome for the Treatment of Inflammatory and Infectious Diseases

Short Talks Chosen from Abstracts

Poster Session 1

TUESDAY, APRIL 13

Immunometabolism

Luke A. J. O'Neill, Trinity Biomedical Sciences Institute, Ireland
Krebs Cycle Repurposed for Cytokines

Tiffany Horng, ShanghaiTech University, China
Metabolic Regulation of Macrophage Biology

Kathryn J. Moore, New York University Medical Center, USA
Macrophage Function in Metabolic Diseases

Barbara Rehermann, NIDDK, National Institutes of Health, USA
Impact of Gut Microbiota on Inflammation and Immunity

Short Talks Chosen from Abstracts

Inflammatory Cell Death

Arturo Zychlinsky, Max Planck Institute for Infection Biology, Germany
NETosis

Vishva M. Dixit, Genentech, Inc., USA
Pyroptosis

Iain Kilty, Quench Bio, USA
Gasdermins

Short Talks Chosen from Abstracts

Poster Session 2

WEDNESDAY, APRIL 14

Epigenetics and Gene Regulation

Gioacchino Natoli, Humanitas University, Italy
Regulatory Landscape of Inflammatory Gene Expression

Xuetao Cao, Nankai University and Chinese Academy of Medical Sciences, China
Immune Gene Regulation: From Basic Mechanisms to Clinical Implications

Susan B. Carpenter, University of California, Santa Cruz, USA
Regulation of Inflammation by Long Non-Coding RNAs

Kate L. Jeffrey, Massachusetts General Hospital, Harvard Medical School, USA
Epigenetic Regulation of Intestinal Inflammation

Short Talks Chosen from Abstracts

Innate Immune Defense against Infection

Rotem Sorek, Weizmann Institute of Science, Israel
Origin of Innate Immune Systems in Bacterial Defense against Phage

Stacy M. Horner, Duke University Medical Center, USA
Regulation of Anti-Viral Defense through RNA Methylation

Venizelos Papayannopoulos, Francis Crick Institute, UK
Neutrophil NETs and Host-Defense

Short Talks Chosen from Abstracts

Poster Session 3

THURSDAY, APRIL 15

Inflammasomes

Veit Hornung, Ludwig-Maximilians-University Munich, Germany
Innate Immune Responses in Human Myeloid Cells

Kate Schroder, University of Queensland, Australia
Inflammatory Caspases in Host Defense and Disease

Clare E. Bryant, University of Cambridge, UK
Inflammasomes and Anti-Bacterial Defense

Gary Glick, University of Michigan and IFM Therapeutics, USA
Targeting NLRP3

Short Talks Chosen from Abstracts

Innate Cells at Barrier Surfaces

Gregory F. Sonnenberg, Weill Cornell Medicine, USA
Immune Regulation of Intestinal Health

Stephanie C. Eisenbarth, Yale University, USA
Dendritic Cells at the Interface of Innate and Adaptive Immunity

Megan H. Orzalli, University of Massachusetts Medical School, USA
Innate Immunity in the Skin

Short Talks Chosen from Abstracts

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

FRIDAY, APRIL 16

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Departure