

KEYSTONE SYMPOSIA

on Molecular and Cellular Biology

Origins of Allergic Disease: Microbial, Epithelial and Immune Interactions (M3)

March 24-27, 2019 • Granlibakken Tahoe • Tahoe City, California, USA

Scientific Organizers: Marsha Wills-Karp, Donald Leung and Kari Nadeau

Supported by the Directors' Fund

Abstract & Scholarship Deadline: November 27, 2018 / Abstract Deadline: December 13, 2018 / Discounted Registration Deadline: January 23, 2019

SUNDAY, MARCH 24

Arrival and Registration

MONDAY, MARCH 25

Welcome and Keynote Address

Cezmi A. Akdis, Swiss Institute of Allergy and Asthma Research, Switzerland
Origins of Allergic Disease: Microbial, Epithelial and Immune Interactions

Allergic Disease Phenotypes

Kari Nadeau, Stanford University, USA
Is There a Scientific Basis for Allergy as a "Systems Disease"?
Sally Wenzel-Morganroth, University of Pittsburgh, USA
A Wounded Epithelium in the Cross Hairs of Asthma Pathogenesis
Hugh A. Sampson, Icahn School of Medicine at Mount Sinai, USA
Phenotypes and Endotypes of Food Allergy
Short Talk(s) Chosen from Abstracts

Workshop 1: Novel Approaches to Defining Epithelial-Microbial Interactions in Allergy

Short Talks Chosen from Abstracts

Immunological Mechanisms of Allergic Disease and Tolerance

Marsha Wills-Karp, Johns Hopkins Bloomberg School of Public Health, USA
Dysfunction in Epithelial-Cell Dectin-1/IL-33 Signaling and Susceptibility to Allergic Disorders
Steven F. Ziegler, Benaroya Research Institute, University of Washington School of Medicine, USA
Epithelial Cytokines and Type-2 Inflammation
Willem van de Veen, Swiss Institute of Allergy and Asthma Research, Switzerland
The Role of B Cells in the Induction and Maintenance of Allergen Tolerance
Short Talk Chosen from Abstracts

Poster Session 1

TUESDAY, MARCH 26

Early Life Origins of Allergic Disease

Fernando D. Martinez, University of Arizona, USA
Molecular Basis of Asthma Protection
James E. Gern, University of Wisconsin, USA
Rhinoviruses, Allergy and Asthma
Maria G. Dominguez-Bello, Rutgers University, USA
Delivery Mode, Gut-Microbiota Structure and Metabolic Function
Susan Prescott, University of Western Australia, Australia
An Exposome Perspective: Early-Life Events and Immune Development
Short Talk(s) Chosen from Abstracts

Microbes, and Metabolites Controlling Tolerance in Allergic Disease

Eran Elinav, Weizmann Institute of Science, Israel
Microbiome at the Frontier of Personalized Medicine
Cathryn Nagler, University of Chicago, USA
The Microbiome, Timing, and Barrier Function in the Context of Allergic Disease
Benjamin J. Marsland, Centre Hospitalier Universitaire Vaudois, University of Lausanne, Switzerland
Influence of Diet, Microbes and Metabolites on Allergic Disease
Short Talk Chosen from Abstracts

Poster Session 2

WEDNESDAY, MARCH 27

Barrier Dysfunction in Allergic Diseases

Alan Irvine, Trinity College Dublin, Ireland
Role of Filaggrin and Epidermal Differentiation Complex in Atopic Dermatitis
Donald YM Leung, National Jewish Health, USA
Role of Lipids in Skin Barrier Function
Marc E. Rothenberg, Cincinnati Children's Hospital Medical Center, USA
Barrier Dysfunction in Eosinophilic Esophagitis
Gideon Lack, King's College London, UK
Targeting the Epithelial Barrier to Prevent Food Allergy
Short Talk(s) Chosen from Abstracts

Workshop 2: Exploring the System Disease Concept of Allergic Disorders

Short Talks Chosen from Abstracts

Immunotherapeutic Opportunities in Allergic Disease

Corinne Keet, Johns Hopkins School of Medicine, USA
Successes and Failures of Immunotherapy in Allergic Diseases
Dale T. Umetsu, Genentech, USA
Modulation of IgE in Allergic Disease
George D. Yancopoulos, Regeneron Pharmaceuticals, Inc., USA
IL-4R Modulation in Atopic Dermatitis and Asthma

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

THURSDAY, MARCH 28

Departure