**SUNDAY, JUNE 27**

Arrival and Registration

**MONDAY, JUNE 28**

Welcome and Keynote Address (Z6)
Rafi Ahmed, Emory University School of Medicine, USA
*T Cell Functional State, from Viruses to Cancer*

Welcome and Keynote Address (Z5)
Rino Rappuoli, GlaxoSmithKline Vaccines, Italy
*Vaccines 2030*

Cellular Interactions Critical to Effective Tumor Immunity (Z6)
Jannie Borst†, Netherlands Cancer Institute, Netherlands
*Role of CD4 T Cell Help, and Impact of CD27 Costimulation*

Robert D. Schreiber, Washington University School of Medicine, USA
*Macrophage Subpopulations in Cancer Immune Response*

Nir Hacohen, Massachusetts General Hospital, USA
*TCF7 Expression in CD8+ T Cells and Its Role in Cancer Immunotherapy*

Short Talks Chosen from Abstracts

**TUESDAY, JUNE 29**

Novel Antigen Targets (Z6)
Maxim Artyomov, Washington University in St. Louis, USA
*Computational Informatic Approaches for Prediction of Neoantigens*

Jonathan W. Yewdell†, NIAID, National Institutes of Health, USA
*Ribosomal Profiling/Novel ORFs*

Michal Bassani-Sternberg, University Hospital of Lausanne, Ludwig Institute for Cancer Research, Switzerland
*Mass Spectrometry and Proteogenomics Based Approaches for Antigen Detection*

Thorwald van Hall, Leiden University Medical Center, Netherlands
*Novel Cancer Antigens in the Setting of TAP Deficiency*

Short Talks Chosen from Abstracts

Shifting the Paradigm in Global Health and AMR (Z5)
Gordon Dougan, University of Cambridge, UK
*Challenges and Solutions for Global Health*

Elizabeth Klemm, Wellcome Trust, UK
*The Role of Vaccines in Combatting Antimicrobial Resistance (AMR)*

Gagandeep Kang, Christian Medical College/Translational Health Science and Technology Institute, India
*Oral Vaccine Induced Immunity in Lower Income Settings*

Firdausi Qadri†, International Centre for Diarrhoeal Disease Research, Bangladesh
*Challenges in the Field*

Short Talks Chosen from Abstracts

Reprogramming the Microenvironment (Z6)
Kai W. Wucherpfennig, Dana-Farber Cancer Institute, USA
*Single Cell Approaches to Identify Negative Immunoregulatory Circuits*

Jennifer Ann Wargo†, University of Texas MD Anderson Cancer Center, USA
*Microbiome and Cancer Immunotherapy*

Garry P. Nolan, Stanford University, USA
*Direct Spatial Visualization of Microenvironment Changes with Immunotherapy*

Short Talks Chosen from Abstracts


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* Session Chair † Invited but not yet accepted     Program current as of June 20, 2020. Program subject to change. Meal formats are based on meeting venue.
For the most up-to-date details, visit [https://www.keystonesymposia.org](https://www.keystonesymposia.org).
"In vivo" and “in vitro” Model Systems (Z5)
Andrew J. Pollard, University of Oxford, UK
Exploiting the Controlled Human Challenge Model
Stephen Gordon, Liverpool School of Tropical Medicine, UK
Pneumococcal Human Infection Study in Malawi to Understand Vaccine Efficacy
Andrew Steer, Murdoch Children's Research Institute, Australia
Human Infection Model of Group A Streptococcus Pharyngitis
Thomas Rudel, University of Würzburg, Germany
Innovative 3D Infection Models as Validation Tools for Vaccine Research

Short Talks Chosen from Abstracts
Poster Session 2

WEDNESDAY, JUNE 30

Vaccines in Cancer and Other Non Infectious Syndromes (Z6)
Gerald P. Linette, University of Pennsylvania, USA
Dendritic-Based Targeting of Tumor Neoantigens
Ugur Sahin, BioNTech AG, Germany
Individualized RNA-Based Cancer Vaccines
William Gillanders, Washington University School of Medicine, USA
Targeting Breast Cancer Neoantigens
Catherine J. Wu, Dana-Farber Cancer Institute, USA
SLPs for Personal Neoantigen-Targeting Vaccines

Short Talks Chosen from Abstracts

Structure Inspired Vaccine Design (Z5)
Bruno Emanuel Correia, École Polytechnique Fédérale de Lausanne, Switzerland
Driving Epitope-Specific Antibody Responses with Computationally Designed Immunogens
Peter H. Seeberger, Max Planck Institute of Colloids and Interfaces, Germany
Synthetic Carbohydrate Vaccine Design
Paul R. Young, University of Queensland, Australia
Repair and Stabilize- Sequence Based Trimer Design
Björn Högborg, Karolinska Institutet, Sweden
DNA Origami – Playing with the Natural and Artificial Order of Antigens to Drive Immunity

Short Talks Chosen from Abstracts

Immune Targeting against Viral Antigens (Z6)
Helen Heslop, Baylor College of Medicine, Houston Methodist Hospital and Texas Childrens, USA
Adaptive T Cells and in vivo / ex vivo Vaccines
Cornelis J. M. Melief, Leiden University Medical Center & ISA Pharmaceuticals BV, Netherlands
Vaccines Targeting HPV Antigens

Eric Vivier, Aix Marseille University, France
Unleashing Anti-Viral and Anti-Tumor Responses with NK Cell-Targeting Therapy

New Strategies on Cancer and Infectious Diseases (Z5)
Catherine J. Wu, Dana-Farber Cancer Institute, USA
SLPs for Personal Neoantigen-Targeting Vaccines
Speaker to be Announced
Speaker to be Announced
Short Talks Chosen from Abstracts

THURSDAY, JULY 1

Novel Combinatorial Approaches (Z6)
Padmanee Sharma, University of Texas MD Anderson Cancer Center, USA
Role of ICOS in Checkpoint Blocking Therapy
Nina Bhawarij, Icahn School of Medicine at Mount Sinai, USA
Combination of Flt3L and Vaccine
Irving L. Weissman, Stanford University, USA
Normal and Neoplastic Stem Cells
David J. Mooney, Harvard University, USA
Biomaterials to Generate T Cell Immunity

Short Talks Chosen from Abstracts

Alternative Emerging Technologies (Z5)
Paul Kellam, Kymab, UK
Using B Cell Repertoires and Human Monoclonals to Explore Antigen Structure and Immunogenicity
Mariagrazia Pizza, GlaxoSmithKline Vaccines, Italy
GMMA as Antigen and Delivery System
Gavin J. Wright, Wellcome Trust Sanger Institute, UK
Identifying Protective Antigens for Neglected Tropical Diseases

Short Talks Chosen from Abstracts

Adjuvants and Novel Vaccine Platforms (Z5)
KEYSTONE SYMPOSIA
on Molecular and Cellular Biology

Cancer Neoantigens, Vaccines and Viruses (Z6)
Scientific Organizers: Catherine J. Wu, Robert D. Schreiber and Cornelis J.M. Melief
Supported by the Directors' Fund

Innovative Vaccine Approaches (Z5)
Scientific Organizers: Mariagrazia Pizza, Galit Alter and Gordon Dougan
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Ana Jaklenec, Massachusetts Institute of Technology, USA
Time-Controlled Particles for Vaccine Delivery

Robin Shattock, Imperial College London, UK
Using OMICs to Dissect Adjuvant Effects on Vaccine Immunity

Darrell J. Irvine, Massachusetts Institute of Technology, USA
Adjuvant Discovery

Short Talks Chosen from Abstracts

Closing Keynote Address (Z6)

James P. Allison, University of Texas MD Anderson Cancer Center, USA
Where We Are Going as a Field

Meeting Wrap-Up: Outcomes and Future Directions (Organizers) (Z6)

Meeting Wrap-Up: Outcomes and Future Directions (Organizers) (Z5)

FRIDAY, JULY 2

Departure