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
Beyond Blocking Infection (Z5)
Galit Alter, MIT and Harvard University, USA
Programming Fc Effector Functions via Vaccination/System Serology
Speaker to be Announced
Katharina Ribbeck†, Massachusetts Institute of Technology, USA
Exploiting Mucus for Pathogen Trapping and Attenuation of Pathogenicity
Short Talks Chosen from Abstracts
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

* Session Chair  † Invited but not yet accepted  Program current as of March 28, 2020. Program subject to change. Meal formats are based on meeting venue. For the most up-to-date details, visit 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

Short Talks Chosen from Abstracts

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

Poster Session 3

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 Bhardwaj, 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
Speaker to be Announced
RNA based Vaccines

Short Talks Chosen from Abstracts

Combination Therapy with Oncolytic Virus and Viral Delivery Systems (Z6)
John C. Bell, Ottawa Hospital Research Institute, Canada
Oncolytic Viruses: Multiplex Cancer Therapeutics
Kevin Harrington, Institute of Cancer Research, UK
Physical & Pharmacological Modulation of Oncolytic Virotherapy
Alan J. Korman, Vir Biotechnology, Inc., USA
Virus as an Antigen Delivery System

Short Talks Chosen from Abstracts

Adjuvants and Novel Vaccine Platforms (Z5)

* Session Chair † Invited but not yet accepted     Program current as of March 28, 2020. Program subject to change. Meal formats are based on meeting venue. For the most up-to-date details, visit https://www.keystonesymposia.org.
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
June 27-July 1, 2021 • Fairmont Hotel Vancouver • Vancouver, BC, Canada
Supported by the Directors' Fund

Ana Jaklenec, Massachusetts Institute of Technology, USA  
_Time-Controlled Particles for Vaccine Delivery_

Robin Shattock, Imperial College London, UK  
_Use of 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**