SUNDAY, MARCH 20
Arrival and Registration (4pm Start)

MONDAY, MARCH 21
Welcome and Keynote Address (8am Start)
*Charles G. Drake, Janssen, USA
Cancer Immunotherapy: Understanding the Mechanistic Basis of Response and Resistance

Imaging Cancer Immunity (9am Start)
*Matthew F. Krummel, University of California, San Francisco, USA
Cancer Immunity: From Imaging to Archetypes
Elisabeth G.E. de Vries, Universitair Medisch Centrum Groningen, Netherlands
Remote Presentation: Immunotherapy and Information of Molecular Imaging
*Philippe Bousso, Institute Pasteur, France
Single-Cell Imaging of CAR-T Cells
Vivien Ileana Maltez, National Institutes of Health, USA
Short Talk: Multiplex Microscopy Reveals Unique Spatiotemporal Effects of Cancer Immunotherapies
Roy Zvi Granit, Compugen LTD, Israel
Short Talk: Exploring the Immune-Tumor Microenvironment using High Resolution Single-Cell Spatial Transcriptomics

Career Roundtable (2:30pm Start)
Avery August, Cornell University, USA
Agnete B. Fredriksen, Nykode Therapeutics, Norway
Anna Christina Obenauf, Research Institute of Molecular Pathology, Austria

Molecular Programs and Anti-Tumor Immunity (5pm Start)
*Andrea Schietinger, Memorial Sloan Kettering Cancer Center, USA
Clinical Targeting of Suppressive Myeloid Components in the TME
Nadine Jahchan, Pionyr Immunotherapeutics, USA
Short Talk: Tuning the Tumor Microenvironment by Targeting Immunosuppressive Myeloid Cells to Unleash Anti-Tumor Immunity
Siri Tahtinen, Genentech, Inc., USA
Short Talk: IL-1 Family Members are Key Regulators of the Inflammatory Response to RNA Vaccines
Bana Jabri, University of Chicago, USA
Remote Presentation: Role of Microbial Signals in Cancer Development

Workshop 1: Molecular Programs (3:30pm Start)
*Andrea Schietinger, Memorial Sloan Kettering Cancer Center, USA
Kelli Connolly, Yale University, USA
An Untapped Reservoir of Stem-like CD8 T Cells in the Tumor-Draining Lymph Node
Hannah M. Egan, National University of Ireland, Galway, Ireland
The T-Cells Sweet Tooth: T-Cells Exposed to Highly Sialylated Cancer associated Fibroblasts Present an Exhausted Phenotype, which can be Reversed through Desialylation
Amanda Gill, Emory University School of Medicine, USA
Does PD-1 Blockade during Chronic Infection Deplete the PD-1+TCF-1+ Stem-Like CD8 T Cells?
Nataliya Prokhnevskaya, Emory University, USA
CD8 T Cell Activation in Cancer is Comprised of Two Distinct Phases

Myeloid Cells and Fibroblasts in the Tumor Microenvironment (5pm Start)
*Ira Mellman, Genentech, Inc., USA
Akshay Krishnamurty, Genentech, Inc., USA
TGFβ-dependent LRRC15+ Myofibroblasts Dictate the Tumor Fibroblast Setpoint to Promote Cancer Immunotherapy Resistance
Niroshana Anandadasabapathy, Weill Cornell Medicine, USA
Shaping Peripheral Memory to Alter T Cell Persistence and Anti-Tumoral Immunity
Gerald S. Shadel, The Salk Institute for Biological Studies, USA
Rewiring the Mitochondrial Electron Transport Chain Enhances Tumor Antigen Presentation and Immunogenicity
Jad I. Belle, Washington University School of Medicine, USA
Short Talk: Senescent Fibroblasts Orchestrate an Immunosuppressive Niche in Pancreatic Cancer
Young Kim, Regeneron Pharmaceutical, USA
Short Talk: CAF Atlas Defines Unique Subpopulations that can Predict Immunotherapy Response in Head and Neck Cancer
Elizabeth Koch, Phenomic AI, Canada
Short Talk: AI/ML-Driven Discovery of a Novel Proteoglycan for Precision Targeting of Stromal Barriers in Immune Excluded Tumors

* Session Chair † Invited but not yet accepted     Program current as of July 25, 2022. 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 Immunotherapy: Decoding the Cancer Immunity Interactome (C1)
March 20-24, 2022 • Fairmont Chateau Whistler • Whistler, BC, Canada
Scientific Organizers: Charles G. Drake, Ira Mellman and Andrea Schietinger
Held in honor of cancer immunotherapy research pioneers Dr. Alan Korman and Dr. Nils Lonberg, thanks to generous support from an anonymous donor. Sponsored by AstraZeneca, BioLegend, Cell Research, Genentech, Inc., Genmab A/S, Incyte Corporation, Infinity Pharmaceuticals, Inc., Surface Oncology, and TCR² Therapeutics.


Poster Session 2 (7:30pm Start)

WEDNESDAY, MARCH 23

Determinants Shaping Cancer-Immune Interactions (8am Start)

* Avery August, Cornell University, USA
  Tuning CD8+ T Cell Responses

Daniela Thommen, Netherlands Cancer Institute, Netherlands
Remote Presentation: Dissecting and Modulating Reactive Anti-Tumor Immunity in Human Cancer

*Sergio A. Quezada, University College London, UK
Deciphering T Cell Evolution and Differentiation in Cancer

Thorsten R. Mempel, Massachusetts General Hospital, USA
Organizing the Cellular Interactions that Shape T Cell Differentiation in Tumor Tissue

Melanie Girard, University of Toronto, Canada
Short Talk: STING Agonists Drive IFN-I Responses in Monocytes for Optimal Anti-tumor Immunity

Christina von Roemeling, University of Florida, USA
Short Talk: STAT3 at the Crossroads of Innate Immune Activation in Glioblastoma

Workshop 2: Suppressive Myeloid Cells / TME and Translational Research (2:30pm Start)

*Charles G. Drake, Janssen, USA
Daniel Haensel, Stanford University, USA
Tumor Assembly of the Spatially Organized Self-Propagating Myeloid Niche

Marit J. van Elsas, Leiden University Medical Center, Netherlands
CD163hi Tissue-resident Macrophages as Drivers of Cancer Immunotherapy Resistance

Jan Martinek, The Jackson Laboratory for Genomic Medicine, USA
Transcriptional Profiling of Macrophages in situ in Metastatic Melanoma Reveals Localization-Dependent Phenotypes and Function

Fadi Sheban, Weizmann Institute of Science, Israel
Coupled Single Cell RNA-seq and Intracellular Protein Activity Reveals Trem2 Immune-Suppressive Role in Cancer

Junko Sawada, Johns Hopkins All Children's Hospital, USA
Transcriptome Analysis Identifies Molecular Signatures of Tumor-Associated High Endothelial Venules that Predict Breast Cancer Survival

Etienne Melese, University of British Columbia, Canada
Longitudinal Alteration to Immune Response during Anti-Programmed Cell Death Protein (PD-1) Treatment of Stage IV Non-Small Cell Lung Cancer Patients

Varintra E. Lander, Washington University in St. Louis, USA
Stromal Reprogramming by FAK Inhibition Overcomes Radiotherapy Resistance to Allow for Immune Priming and Response to Checkpoint Blockade

Next Generation Bioinformatics and Cancer Immunotherapy (5pm Start)

*Charles G. Drake, Janssen, USA
Ido Yofe, Weizmann Institute, Israel
Single-cell Profiling Reveals Distinct Temporal and Spatial Immune Landscapes of Breast Cancer Metastasis

Zemin Zhang, Peking University, China
Remote Presentation: Single Cell Sequencing of the TME, Lessons Learned and Future Directions

Harlan Robins, Adaptive Biotechnologies, USA
The Specificity of T Cell Receptors in Cancer

Xi Chen, RootPath Genomics, Inc., USA
Short Talk: Functional Decoding of Tumor Immune Repertoire through Massively Parallel TCR Gene Synthesis and Screening

THURSDAY, MARCH 24

Natural Killer and Helper Cells in Cancer Immunotherapy (8am Start)

*David H. Raulet, University of California, Berkeley, USA
Activation, Inhibition and Desensitization of NK Cells in the Tumor Microenvironment

Mikala Egeblad, Cold Spring Harbor Laboratory, USA
Education of Pro-Metastatic Neutrophils by Physiological Stress and Primary Tumors

Ming O. Li, Memorial Sloan Kettering Cancer Center, USA
Immunological Mechanisms of Epithelial Cancer Defense

Peter Chockley, St Jude, USA
Short Talk: Immune Synapse Tuning Augments CAR-NK Cell Anti-Tumor Activity

Ramiro Andrei RamirezValdez, NIH/NIAID/VRC, USA
Short Talk: Intravenous Heterologous Prime Boost Vaccination Activates Innate and Adaptive Immunity to Promote Tumor Regression

The Expanding Spectrum of Immunotherapy Resistance (5pm Start)

*Ira Mellman, Genentech, Inc., USA
Sandra Demaria, Weill Cornell Medical College, USA
Barriers to Radiation-Driven Anti-Tumor Immunity

Anna Christina Obenauf, Research Institute of Molecular Pathology, Austria
Cross-Resistance to Immunotherapy and Targeted Therapies

Robert A. Seder, NIAID, National Institutes of Health, USA
Remote Presentation: IV Vaccination: A Paradigm for Inducing Protective Tissue Resident T Cells Against TB and Malaria

Casey Ager, Columbia University, USA
Short Talk: Elucidating and Targeting Master Regulators of Tumor Infiltrating Regulatory T Cells

Maria Xydia, RCI Regensburg Center for Interventional Immunology, Germany
Short Talk: Conversion of Conventional T Cells into Suppressive Regulatory T Cells in Breast Cancer Patients

Meeting Wrap-Up: Outcomes and Future Directions (Organizers)
(7pm Start)
FRIDAY, MARCH 25

Departure