

KEYSTONE SYMPOSIA

on Molecular and Cellular Biology

Myeloid Cells and Innate Immunity in Solid Tumors (EK4)

September 21-23, 2020 • Virtual at your computer

Scientific Organizers: Judith A. Varner, Lisa M. Coussens and Dmitry I. Gabilovich

Part of the Keystone Symposia Global Health Series, supported by the Bill & Melinda Gates Foundation

Sponsored by AbbVie Inc., AstraZeneca, and Gilead Sciences, Inc.

MONDAY, SEPTEMBER 21

Opening Remarks and Keynote Address (8am Denver/Mountain Time Start)

***Judith A. Varner**, University of California, San Diego, USA

Robert H. Vonderheide, University of Pennsylvania, USA
CD40 as a Gateway Pathway in the Tumor Microenvironment

Ontogeny of Myeloid Cells in Cancer (8:30am Denver/Mountain Time Start)

Miriam Merad, Mount Sinai School of Medicine, USA
Identification of a Dendritic Cells Immunoregulatory Program that Dampens Tumor Specific Immunity

***Judith A. Varner**, University of California, San Diego, USA
Mechanisms Governing Accumulation of Macrophages in Cancer

David G. DeNardo, Washington University Medical School, USA
Origins of Macrophages in Pancreatic Cancer

***Dmitry I. Gabilovich**, AstraZeneca, USA
Monocyte-Like Precursors of Granulocytes in Cancer

Chang Su, Duke University, USA
Short Talk: Dissecting the Role of MerTK Signaling in Promoting Alternatively Activated Macrophages Polarization

Danielle N. Huggins, University of Minnesota, USA
Short Talk: Single Cell Sequencing Identifies Novel Metastasis-Associated Macrophage Subsets in the Lung

Poster Session (1:30pm Denver/Mountain Time Start)

Epigenetics, Metabolism and Metastasis of Myeloid Cells in Cancer (3pm Denver/Mountain Time Start)

Gwendalyn J. Randolph, Washington University, USA
Serous Cavity Macrophages and Ovarian Cancer in the Peritoneum-Studies in Mice

***Catherine Hedrick**, La Jolla Institute for Immunology, USA
Myeloid Cells in Modulating Cancer Metastasis

***Weiping Zou**, University of Michigan, USA
Impact of Autophagy on Tumor-Associated Macrophages and Cancer Metastasis

Diana Hargreaves, The Salk Institute for Biological Studies, USA
Epigenetic Control of Myeloid Cells in Cancer

Florent Ginhoux, Singapore Immunology Network, Singapore
Macrophage and Dendritic Cell Biology: From Development to Functions

Ferdinando Pucci, Oregon Health & Science University, USA
Short Talk: Tumor-Immune Communication via Extracellular Vesicles: A Lymph Node Macrophage Link

Rachel Cederberg, BC Cancer Research Centre, Canada
Short Talk: Eosinophils Inhibit Pulmonary Metastasis and Directly Kill Tumor Cells

Immune Suppression and Metastasis Mediated by Myeloid Cells (8am Denver/Mountain Time Start)

***Jeffrey W. Pollard**, Queen's Medical Research Institute, UK
Re-tuning the Tumor Microenvironment to Promote Immunotherapy

Jo A. Van Ginderachter, VIB-Vrije Universiteit Brussel, Belgium
Transcriptional Profiling of Glioblastoma-Associated Myeloid Cells across Species and Disease Stage Reveals Macrophage Competition and Functional Specialization

***Vincenzo Bronte**, University of Verona, Italy
DAB2-Expressing TAMs Promote Cancer Cell Invasion

Antonio Sica, University of Eastern Piedmont, Italy
Metabolic Regulation of Myeloid Derived Suppressor Cells in Cancer

Michael C. Schmid, University of Liverpool, UK
Myeloid Cells in Pancreatic Cancer Metastasis

Pierre Close, Fondation Leon Fredericq, Belgium
Short Talk: Wobble tRNA Modification and Translation Reprogramming in the Tumour Microenvironment during Breast Cancer Development

Hafsa Munir, University of Cambridge, UK
Short Talk: Amyloid β Secreted by the Tumor Microenvironment Drives Neutrophil Extracellular Traps Production to Support Tumor Progression

Career Roundtable (12:30pm Denver/Mountain Time Start)

Simon T. Barry, AstraZeneca, UK

Claudia Jakubzick, Dartmouth College, USA

Rosandra Natasha Kaplan, NCI, National Institutes of Health, USA

Poster Session (1:30pm Denver/Mountain Time Start)

Promotion of Tumor Progression by Myeloid Cells (3pm Denver/Mountain Time Start)

***Mikala Egeblad**, Cold Spring Harbor Laboratory, USA
Activating a Collaborative Innate-Adaptive Immune Response to Control Metastasis

Minna Roh-Johnson, University of Utah, USA
Horizontal Transfer of Macrophage Mitochondria in Cancer

Claudia Jakubzick, Dartmouth College, USA
Rediscovering the Role of B Cells in Cancer Immune Surveillance

Shruti Naik, New York University Langone Health, USA
Eavesdropping on the Conversation between Immune and Epithelial Stem Cells during Tissue Repair

***Rosandra Natasha Kaplan**, NCI, National Institutes of Health, USA
Myeloid Cells as Regulators of Immune Suppression in the Pre-Metastatic Niche and Myeloid Based Approaches to Rebalance the Dysregulated Niche

Mingjian Fei, Genentech, USA
Short Talk: Blocking Dying Tumor Cell Clearance Enhances Antitumor Immune Response

TUESDAY, SEPTEMBER 22

KEYSTONE SYMPOSIA

on Molecular and Cellular Biology

Myeloid Cells and Innate Immunity in Solid Tumors (EK4)

September 21-23, 2020 • Virtual at your computer

Scientific Organizers: Judith A. Varner, Lisa M. Coussens and Dmitry I. Gabrilovich

Part of the Keystone Symposia Global Health Series, supported by the Bill & Melinda Gates Foundation

Sponsored by AbbVie Inc., AstraZeneca, and Gilead Sciences, Inc.

Ziyan Zoe Xu, The Salk Institute, USA

Short Talk: Lipid Metabolism Controls Macrophage Functional Reprogramming in Tumor Microenvironment

WEDNESDAY, SEPTEMBER 23

Targeting Myeloid Cells in Cancer Therapy I (8am Denver/Mountain Time Start)

***Lisa M. Coussens**, Oregon Health & Science University, USA
Therapeutic Targeting of Macrophages: Lessons Learned from Mouse Models and Their Translation to the Clinic

Limin Shang, Light Chain Bioscience, Switzerland
CD47 Targeting in Cancer Therapy

***Simon T. Barry**, AstraZeneca, UK
Therapeutic Targeting of Macrophages and Neutrophils

Nagy A. Habib, Imperial College London and MiNA Therapeutics, UK
MTL - CEBPA - Next Generation Immunotherapy Targeting Myeloid Cell Differentiation

Sven Brandau, University Hospital Essen, Germany
Short Talk: Unravelling the Identity and Function of MDSC in Human Cancer Patients

Yolanda Calle, University of Roehampton, UK
Short Talk: Therapeutic Drugs Promote Differentiation of AML Blasts to a Mixed M1/M2 and Migratory Phenotype Resistant to Treatment Facilitated by the Bone Marrow Microenvironment.

Natalie Horvat, European Molecular Biological Laboratories, Germany
Short Talk: Polarization of TAMs by Iron Nanoparticles as an Adjuvant Lung Cancer Therapy

Poster Session (1:30pm Denver/Mountain Time Start)

Targeting Myeloid Cells in Cancer Therapy II (3pm Denver/Mountain Time Start)

Brenda C. O'Connell, Infinity Pharmaceuticals, Inc, USA
Targeting PI3K-gamma with IPI-549, a Tumor Macrophage-Reprogramming Small Molecule, in Patients with Advanced Solid Tumors

***Jennifer Guerriero**, Brigham and Women's Hospital, USA
Differentiating Macrophages are Regulated by PARP Inhibitors and can be Harnessed to Overcome PARP-Inhibitor Resistance in BRCA-Associated Triple-Negative Breast Cancer

***David A. Cheresch**, University of California, San Diego, USA
Arming Tumor-Associated Macrophages to Reverse Epithelial Cancer Progression

Caroline Bonnans, Immune-Onc Therapeutics, USA
Short Talk: Antagonistic Antibodies Targeting LAIR1 Promote Inflammatory Phenotypes in Myeloid Cells and Activate Lymphocytes

Shadi Swaidani, Cleveland Clinic Foundation, USA
Short Talk: Elevated Systemic Myeloid-Derived Suppressor Cells and Interleukin 8 Correlate with Increased Incidence of Venous Thromboembolism in Cancer Patients Receiving Immune-Checkpoint Inhibitors

Mehdi Chaib, University of Tennessee Health Science Center, USA
Short Talk: PKC Delta Activation Restricts Innate Immune Suppression and Promotes antigen Presentation in Triple Negative Breast Cancer

Jihong Bae, Korea Advanced Institute of Science and Technology, South Korea
Short Talk: Extracellular Vesicles Derived from a Commensal Bacteria Enhance Anticancer Immunity by Modulating Tumor Infiltrating Immune Cells

Closing Remarks (Organizers) (5:45pm Denver/Mountain Time Start)