

Conference Program

Thursday, November 3

7:00 p.m.-8:00 p.m. Opening Keynote Lecture

Introduction and Welcome

The neurofibroma story: A role for mast cells in tumor potentiation and clinical implications

Luis F. Parada, UT Southwestern Medical Center, Dallas, TX

8:00 p.m.-10:00 p.m. Welcome Reception

Friday, November 4

7:30 a.m.-8:30 a.m. Continental Breakfast

8:30 a.m.-10:30 a.m. Session 1

Translating Our Knowledge of the Tumor Microenvironment (From Bench to Bedside and Back)

Chairperson: Lisa M. Coussens, Knight Cancer Institute, Oregon Health & Science University, Portland, OR, and UCSF Helen Diller Family Comprehensive Cancer Center, San Francisco, CA

Environment-mediated drug resistance: A form of de novo drug resistance

William S. Dalton, H. Lee Moffitt Cancer Center and Research Institute, Tampa, FL

Influence of macrophage-cancer cell fusion on metastatic tumor progression*

Melissa Wong, Oregon Health & Science University, Portland, OR

Bone-intrinsic and -extrinsic roles of RANKL in tumorigenesis and metastasis

William Dougall, AMGEN, Inc., Seattle, WA

Patient-derived tumor grafts authentically reflect tumor pathology, growth, metastasis, and disease outcomes*

Alana L. Welm, University of Utah Huntsman Cancer Institute, Salt Lake City, UT

Targeting the stroma in pancreas cancer

Sunil R. Hingorani, Fred Hutchinson Cancer Research Center, Seattle, WA

10:30 a.m.-11:00 a.m. Break

*Short talks from proffered papers

11:00 a.m.-1:00 p.m.

Session 2

Heterogeneity in the Tumor Microenvironment

Chairperson: Valerie Weaver, University of California, San Francisco, CA

Mammary stroma as an NSAID target: Implications for pregnancy-associated breast cancer

Pepper Jo Schedin, University of Colorado Denver, Aurora, CO

Basement membrane localized tumor cells are protected from HER2-targeted therapy in vivo*

Jason J. Zoeller, Harvard Medical School, Boston, MA

The breast tumor microenvironment: A predictor of clinical outcome and tumor heterogeneity

Morag Park, McGill University Goodman Cancer Center, Montréal, QC, Canada

Tumor-associated macrophages and stromal TNF- α play central roles in the regulation of collagen structure as visualized by second harmonic generation and immunofluorescence*

Ryan M. Burke, University of Rochester, Rochester, NY

Tension fields and tumor evolution

Valerie Weaver

1:00 p.m.-3:00 p.m.

Poster Session A and Lunch

3:00 p.m.-5:00 p.m.

Session 3

Chronic Inflammation: Autoimmunity versus Cancer

Chairperson: Lisa M. Coussens, Knight Cancer Institute, Oregon Health & Science University, Portland, OR, and UCSF Helen Diller Family Comprehensive Cancer Center, San Francisco, CA

Dendritic cell subsets and function in the tumor microenvironment

Michael R. Shurin, University of Pittsburgh Medical Center, Pittsburgh, PA

Modulating immune response to improve therapy for solid tumors

Lisa M. Coussens

A microRNA switch regulates pro- versus antitumoral activity of macrophages

Michele De Palma, San Raffaele Scientific Institute (HSR), Milan, Italy

Targeting cytokine networks in malignancy

Frances R. Balkwill, Barts Cancer Institute, Queen Mary University of London, London, United Kingdom

*Short talks from proffered papers

5:00 p.m.-6:00 p.m. **NCI Workshop**
The National Cancer Institute-Supported Tumor
Microenvironment Network (TMEN) Consortium:
Goals and Objectives
Co-Chairpersons: Suresh Mohla, National Cancer Institute,
Bethesda, MD, and Yves A. DeClerck, University of Southern
California/Children's Hospital, Los Angeles, CA

Saturday, November 5

7:30 a.m.-8:30 a.m. **Continental Breakfast**

8:30 a.m.-10:30 a.m. **Session 4**
Mesenchymal Cells in Cancer Progression
Chairperson: Yves A. DeClerck, University of Southern California/
Children's Hospital, Los Angeles, CA

Decitabine therapy in a stroma-rich model of pancreatic carcinoma
 Benjamin Tycko, Columbia University, New York, NY

Depletion of fibroblast activation protein- α expressing cells during cancer progression is associated with the development of cancer cachexia in the mouse*
 Ed Roberts, University of Cambridge, Cambridge, United Kingdom

Mesenchymal stem cells and drug resistance: Lessons for neuroblastoma
 Yves A. DeClerck

Human ovarian carcinoma associated MSCs (CA-MSC) are Hedgehog responsive and promote tumor growth by increasing ovarian cancer stem cell proportion*
 Yunjung Choi, University of Michigan, Ann Arbor, MI

The participation and contribution of mesenchymal stem cells in tumor stroma formation
 Frank C. Marini, Wake Forest Comprehensive Cancer Center, Winston-Salem, NC

10:30 a.m.-11:00 a.m. **Break**

*Short talks from proffered papers

11:00 a.m.-1:00 p.m. Session 5
Vascular Programs in the Tumor Microenvironment
Chairperson: Gabriele Bergers, University of California, San Francisco, CA

Integrating immunoregulatory and vascular signaling programs in cancer through galectin-glycan interactions

Gabriel Rabinovich, Instituto de Biología y Medicina Experimental, Buenos Aires, Argentina

Role of HIF-2 α in tumor-associated macrophage function and implications for therapy of colitis-associated colon cancer*

Jessica E.S. Shay, University of Pennsylvania School of Medicine, Philadelphia, PA

Microenvironment and tumor cell crosstalk in tumor resistance

Gabriele Bergers

Exploring the potential of macrophage-targeted modulation of NF-kappaB for breast cancer therapy*

Fiona Yull, Vanderbilt University, Nashville, TN

Hypoxic response and regulation of vascular response in metastasis

Randall S. Johnson, University of California, San Diego, La Jolla, CA

1:00 p.m.-3:00 p.m. Poster Session B and Lunch

3:00 p.m.-5:00 p.m. Session 6
Microbiomes and Cancer
Chairperson: Drew Pardoll, Johns Hopkins Kimmel Comprehensive Cancer Center, Baltimore, MD

Stromal contributions to APC-mediated tumorigenesis

Monica Bertagnolli, Brigham and Women's Hospital, Boston, MA

Antibiotics administration alters the microenvironment and impairs responsiveness to CpG-based immunotherapy in murine tumors*

Noriho Iida, National Cancer Institute, Frederick, MD

Altering the tumor microenvironment via specific blockade of immune checkpoint pathways

Drew Pardoll

B cells are required for immunosuppressive activity in Ly6C^{hi} monocytes during inflammation initiated by epidermally restricted H-RAS expression*

Andrew J. Gunderson, The Pennsylvania State University, University Park, PA

The role of DNA repair in response to inflammation

Leona D. Samson, Massachusetts Institute of Technology, Cambridge, MA

5:00 p.m.-5:30 p.m. Break

*Short talks from proffered papers

5:30 p.m.-7:30 p.m.

Session 7**The Microenvironment of the Niche***Chairperson: David C. Lyden, Cornell University Weill Medical College, New York, NY***The evolving metastatic niche**

David C. Lyden

Exosomal transfer of stromal microRNA 21 to ovarian cancer cells increases invasion and migration potential through upregulation of matrix metalloproteinase 1*

Ngai Na Chloe Co, University of Texas MD Anderson Cancer Center, Houston, TX

Solid tumors target the hematopoietic stem cell niche for metastasis

Russell S. Taichman, University of Michigan School of Dentistry, Ann Arbor, MI

Stromal SPARC critically regulates secondary lymphoid tissues homeostasis and has a role in B lymphoma development*

Sabina Sangaletti, Fondazione IRCCS Istituto Nazionale Tumori, Milan, Italy

Intravital imaging of metastasis

Eric Sahai, Cancer Research UK, London, United Kingdom

Sunday, November 6

7:30 a.m.-8:30 a.m.

Continental Breakfast

8:30 a.m.-10:30 a.m.

Session 8**Lymphatics: New Roles in the Tumor Microenvironment***Chairperson: Melody A. Swartz, Swiss Institute for Experimental Cancer Research, Swiss Federal Institute of Technology (EPFL), Lausanne, Switzerland***Tumor and lymph node lymphangiogenesis in cancer progression**

Michael J. Detmar, ETC Zurich Institute of Pharmaceutical Sciences, Zurich, Switzerland

E μ -c-myc B lymphocytes promote lymphogenous metastasis of lymphoma and melanoma*

Alanna Ruddell, Fred Hutchinson Cancer Research Center, Seattle, WA

Tumor lymphangiogenesis: Escape route or manipulator of host immunity?

Melody A. Swartz

Tumor infiltration by naive T cells is dependent on location of growth, presence of endogenous lymphocytes, and acquisition of lymphoid-like characteristics*

J. David Peske, University of Virginia School of Medicine, Charlottesville, VA

Molecular mechanisms of tumor invasion into lymphatic vessels

Dontscho Kerjaschki, University of Vienna, Vienna, Austria

*Short talks from proffered papers

PROGRAM

10:30 a.m.-10:45 a.m. Break

10:45 a.m.-11:45 a.m. Closing Keynote Lecture

In the footsteps of Virchow: Lymphocyte-produced cytokines in tumor development progression and responses to therapy

Michael Karin, University of California, San Diego, La Jolla, CA

11:45 a.m.-12:00 p.m. Closing Remarks/Departure

*Short talks from proffered papers