CONFERENCE PROGRAM

Tuesday, November 27

5:00 p.m.-7:00 p.m.  Opening Keynote Lectures

5:00 p.m.-6:00 p.m.  Turning the heat up on pancreatic cancer: Lessons on overcoming a “cold” immunologic microenvironment
Elizabeth M. Jaffee, Johns Hopkins Bloomberg-Kimmel Institute for Cancer Immunotherapy, Baltimore, MD

6:00 p.m.-7:00 p.m.  Precision CAR T therapy
Carl H. June, Abramson Cancer Center at the University of Pennsylvania, Philadelphia, PA

7:00 p.m.-9:00 p.m.  Opening Reception

Wednesday, November 28

7:00 a.m.-8:00 a.m.  Breakfast

8:00 a.m.-10:30 a.m.  Plenary Session 1: Microbiome Influences on Cancer Development and Response to Therapy
Session Chair: Jennifer Wargo, The University of Texas MD Anderson Cancer Center, Houston, TX

8:00 a.m.-8:30 a.m.  The role of the microbiome in response to cancer therapy
Jennifer Wargo

8:30 a.m.-9:00 a.m.  The microbiome associations of colon cancer
Cynthia L. Sears, Johns Hopkins University School of Medicine, Baltimore, MD

9:00 a.m.-9:15 a.m.  Leveraging gut microbiota networks to impact tumor immunotherapy*
Lata Jayaraman, Seres Therapeutics, Cambridge, MA

9:15 a.m.-9:30 a.m.  *Bacteroides fragilis* toxin-induced epithelial-mesenchymal transition and stem-like phenotype in breast epithelial cells and concomitantly activated Notch1 and βcatenin axes*
Sheetal Parida, Sidney Kimmel Comprehensive Cancer Center, Johns Hopkins University School of Medicine, Baltimore, MD
9:30 a.m.-10:00 a.m.  Microbiota: Key modulator of the tumor microenvironment
Romina Goldszmid, NIH, Bethesda, MD

10:00 a.m.-10:30 a.m.  Tumor and host factors regulating antitumor immunity and immunotherapy efficacy
Thomas Gajewski, The University of Chicago, Chicago, IL

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

11:00 a.m.-1:00 p.m.  Plenary Session 2: Tools for Discovery: Systems Biology and High-Density Analytics
Session Chair: Paul G. Thomas, St. Jude Children’s Research Hospital, Memphis, TN

11:00 a.m.-11:30 a.m.  Hitting the target: T-cell receptors, cross-reactivity, and tumors
Paul G. Thomas

11:30 a.m.-11:45 a.m.  Immuno-mass spectrometric identification of serum biomarkers of response and toxicity to pembrolizumab*
Milena Music, University of Toronto, Toronto, ON, Canada

11:45 a.m.-12:00 p.m.  Single-cell analysis illuminates dysfunctional CD8+ T cells as a proliferative, dynamically regulated compartment within human melanoma*
Ido Yofe, Weizmann Institute of Science, Rehovot, Israel

12:00 p.m.-12:30 p.m.  Learning the rules of human cancer immunity
Nir Hacohen, Broad Institute/Massachusetts General Hospital, Charlestown, MA

12:30 p.m.-1:00 p.m.  Using high-dimensional machine-assisted analysis for biomarkers detection and guidance of immunotherapy to cancer
Carsten Krieg, Medical University of South Carolina, Charleston, SC

1:00 p.m.-3:30 p.m.  Lunch and Poster Session A

3:30 p.m.-6:00 p.m.  Plenary Session 3: Metabolic Regulation in Tumors: Implications for Therapy
Session Chair: Matthew G. Vander Heiden, David H. Koch Institute for Integrative Cancer Research at MIT, Cambridge, MA

3:30 p.m.-4:00 p.m.  Metabolic regulation of cell proliferation
Matthew G. Vander Heiden
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<tr>
<th>Time</th>
<th>Topic</th>
<th>Speaker(s)</th>
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<tr>
<td>4:00 p.m.</td>
<td>The LXR/ApoE pathway regulates the innate immune system in cancer</td>
<td>Masoud Tavazoie, Rgenix, Inc., New York, NY</td>
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<td>4:30 p.m.</td>
<td>Blockage of AHR activation by IDO/TDO-derived kynurenine restricts cancer immune suppression*</td>
<td>Luis Felipe Campesato, Memorial Sloan Kettering Cancer Center, New York, NY</td>
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<td>4:45 p.m.</td>
<td>Fueling T cells in inflammation and cancer</td>
<td>Jeffrey C. Rathmell, Vanderbilt University Medical Center, Nashville, TN</td>
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<td>5:15 p.m.</td>
<td>LC3-associated phagocytosis in inflammation and anticancer immunity</td>
<td>Douglas R. Green, St. Jude Children’s Research Hospital, Memphis, TN</td>
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<td>5:45 p.m.</td>
<td>Dinner on Own</td>
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**Thursday, November 29**

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<tr>
<th>Time</th>
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<td>7:00 a.m.</td>
<td>Breakfast</td>
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<td>8:00 a.m.</td>
<td>Plenary Session 4: Myeloid and Vascular Programs in Cancer: Key Regulators of Antitumor Immunity</td>
<td>Matthew F. Krummel, University of California San Francisco, San Francisco, CA</td>
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<td>8:00 a.m.</td>
<td>The key role for IRF8+ dendritic cells in cancer immunity</td>
<td>Miriam Merad, Icahn School of Medicine at Mount Sinai, New York, NY</td>
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<td>8:30 a.m.</td>
<td>Vascular reprogramming for enhancing cancer immunotherapy</td>
<td>Michele De Palma, Swiss Federal Institute of Technology, Lausanne, Switzerland</td>
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<td>9:00 a.m.</td>
<td>Targeting CD47 as a novel immunotherapy for multiple myeloma*</td>
<td>Jennifer Sun, Washington University in St. Louis, St. Louis, MO</td>
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<td>9:15 a.m.</td>
<td>Human chimeric antigen receptor (CAR) macrophages for cancer immunotherapy*</td>
<td>Michael Klichinsky, University of Pennsylvania, Philadelphia, PA (not eligible for CME credit)</td>
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9:30 a.m.-10:00 a.m. Imaging a world beyond checkpoints: Classes of immune responses in cancer
Matthew F. Krummel

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

10:30 a.m.-1:00 p.m. Plenary Session 5: Novel Checkpoints for Tumor Immunity
Session Chair: Elizabeth M. Jaffee, Johns Hopkins Bloomberg-Kimmel Institute for Cancer Immunotherapy, Baltimore, MD

10:30 a.m.-11:00 a.m. Molecular mechanisms of T cell exhaustion and implications for immunotherapy
E. John Wherry, University of Pennsylvania, Philadelphia, PA

11:00 a.m.-11:30 a.m. The mechanistic basis of cancer immunotherapy
Ira Mellman, Cancer Immunology, Genentech, Inc., South San Francisco, CA

11:30 a.m.-12:00 p.m. Lymphatic vessels: Barriers to adaptive immunity in melanoma
Amanda Lund, Oregon Health & Science University, Portland, OR

12:00 p.m.-12:15 p.m. Discovery of immune regulators in primary human T cells using genome-wide CRISPR screens*
Julia Carnevale, University of California San Francisco, San Francisco, CA

12:15 p.m.-12:30 p.m. ADU-S100 (MIW815) synergizes with checkpoint blockade to elicit an antitumor CD8+ T-cell response to control distal tumors*
Weiwen Deng, Aduro Biotech, Inc., Berkeley, CA

12:30 p.m.-1:00 p.m. Immune checkpoint blockade in cancer therapy: New insights and opportunities, and prospects for cures
James P. Allison, The University of Texas MD Anderson Cancer Center, Houston, TX

1:00 p.m.-2:30 p.m. Lunch on Own

2:30 p.m.-5:00 p.m. Plenary Session 6: New Combinations and Biomarkers
Session Chair: Sandra S. McAllister, Harvard Medical School, Boston, MA

2:30 p.m.-3:00 p.m. From the clinic to the lab: Investigating response and resistance mechanisms to immune checkpoint therapy
Padmanee Sharma, The University of Texas MD Anderson Cancer Center, Houston, TX
3:00 p.m.-3:30 p.m.  Pharmacologic and physiologic processes that affect response to immunotherapy  
Sandra S. McAllister

3:30 p.m.-3:45 p.m.  Heterogeneous activation of multiple suppressive pathways by scRNAseq may underscore resistance to PD-1 therapy in metastatic castration-resistant prostate cancer*  
Amy Moran, Oregon Health & Science University, Portland, OR

3:45 p.m.-4:00 p.m.  Tumor cell-intrinsic factors underlie the heterogeneity of immune infiltration and response to immunotherapy in pancreatic cancer*  
Jinyang Li, University of Pennsylvania, Philadelphia, PA

4:00 p.m.-4:30 p.m.  Marker-guided targeted therapy, PARP inhibitors, and novel post-translational modification of PD-L1  
Mien-Chie Hung, The University of Texas MD Anderson Cancer Center, Houston, TX

4:30 p.m.-5:00 p.m.  Understanding mechanisms for combination immunotherapy  
Jedd D. Wolchok, Memorial Sloan Kettering Cancer Center, New York, NY

5:00 p.m.-7:00 p.m.  Reception and Poster Session B

Friday, November 30

7:00 a.m.-8:00 a.m.  Breakfast

8:00 a.m.-9:30 a.m.  Special Session: Novel Targets, Pathways and Tools  
Session Chairs: Drew Pardoll, Johns Hopkins Bloomberg-Kimmel Institute for Cancer Immunotherapy, Baltimore, MD

8:00 a.m.-8:10 a.m.  Assessing in vivo mechanisms regulating the therapeutic activity of bispecific T cell engager (BiTE®) molecules in immune-competent mice expressing a chimeric human/mouse CD3ε receptor*  
Brian Belmontes, Amgen Discovery Research, Amgen Inc., Thousand Oaks, CA  
(not eligible for CME credit)

8:10 a.m.-8:20 a.m.  Development of chimeric forms of IFN-alpha for “on demand” in vivo
cancer gene therapy*
Nadia Coltella, San Raffaele Telethon Institute for Gene Therapy (SR-Tiget), Milan, Italy

8:20 a.m.-8:30 a.m. CD123CAR displays clinical activity in relapsed/refractory (r/r) acute myeloid leukemia (AML) and blastic plasmacytoid dendritic cell neoplasm (BPDCN): Safety and efficacy results from a phase 1 study*
Lihua Budde, City of Hope National Medical Center, Duarte, CA

8:30 a.m.-8:40 a.m. A novel NK cell-targeted therapeutic strategy against pancreatic cancer*
Kamiya Mehla, University of Nebraska Medical Center, Omaha, NE

8:40 a.m.-8:50 a.m. RNA aptamers specific for tumor-infiltrating myeloid cells*
Dimitri Van Simaeys, Sylvester Cancer Center, Miami, FL

8:50 a.m.-9:00 a.m. Targeted blockade of FcγRIIB on dendritic cells and macrophages enhances cellular activation and Fc-dependent immune responses*
Ryan Molony, Novartis Institutes for BioMedical Research, Cambridge, MA

9:00 a.m.-9:10 a.m. A novel immunomodulatory strategy of targeting glycol-immune checkpoints using EAGLE technology to treat cancer*
Li Peng, Palleon Pharmaceuticals, Waltham, MA
(not eligible for CME credit)

9:10 a.m.-9:20 a.m. Utilizing novel oncolytic vaccinia virus for selective expression of immunotherapeutic payloads in metastatic tumors*
Adrian Pelin, Ottawa Hospital Research Institute, Ottawa, ON, Canada

9:20 a.m.-10:00 a.m. Break

10:00 a.m.-12:30 p.m. Plenary Session 7: Emerging Molecular and Cellular Targets
Session Chair: Lisa M. Coussens, Oregon Health & Science University Knight Cancer Institute, Portland, OR

10:00 a.m.-10:30 a.m. Macrophage control of antitumor immunity
Judith A. Varner, University of California San Diego, San Diego, CA

10:30 a.m.-10:45 a.m. A novel combination immunotherapy with a vaccine targeting tumor neoepitopes that mediates immune cascade in murine tumor models*
Karin Lee, Center for Cancer Research, National Cancer Institute, National Institutes of Health, Bethesda, MD
10:45 a.m.-11:00 a.m.  
**IL-35+ B cells establish immunosuppressive network in pancreatic ductal adenocarcinoma**
Bhalchandra Mirlekar, The Lineberger Comprehensive Cancer Center, University of North Carolina at Chapel Hill, Chapel Hill, NC

11:00 a.m.-11:30 a.m.  
**Dynamic interactions between myeloid and lymphoid cells regulate response to therapy in solid tumors**
Lisa M. Coussens

11:30 a.m.-12:00 p.m.  
**Tissue-specific immune tolerance promotes tumor-immune escape**
Niroshana Anandasabapathy, Weill Cornell Medical College, New York, NY

12:00 p.m.-12:30 p.m.  
**Repertoire and expression profiles and function of neoantigens-specific T cells**
Drew M. Pardoll, Johns Hopkins Bloomberg-Kimmel Institute for Cancer Immunotherapy, Baltimore, MD

12:30 p.m.  
**Conclusion**

*Short talk from proffered abstract.*