

# AACR Virtual Special Conference: Tumor Immunology and Immunotherapy

## October 19-20, 2020

### Conference Cochairs

Timothy A. Chan, Cleveland Clinic, Cleveland, OH

Charles G. Drake, Columbia University Medical Center, New York, NY

Marcela V. Maus, Massachusetts General Hospital, Boston, MA

Arlene H. Sharpe, Harvard Medical School, Charlestown, MA

**\*Five-minute (5 slide max) audio poster short talks in a single poster session will be released at the start of the conference and available on-demand throughout\***

**\*\*Presentations will be prerecorded. Presentation times are as follows: Keynote (30 minutes and 10 minutes for live Q&A); other invited presentations (20 minutes and 10 minutes for live Q&A), short talks selected from proffered abstracts (10 minutes and 5 minutes for live Q&A)\*\***

## MONDAY, OCTOBER 19, 2020

- 10:00 AM-11:20 AM**    **Opening Keynote Lectures**  
*Welcome and Introduction by Marcela V. Maus, Massachusetts General Hospital, Boston, MA and Timothy A. Chan, Cleveland Clinic, Cleveland, OH*
- 10:00 AM-10:40 AM**    **Clinical development of BCMA-directed therapies in multiple myeloma**  
Kristen M. Hege, Bristol Myers Squibb, San Francisco, CA  
*(not eligible for CME credit)*
- 10:40 AM-11:20 AM**    **A case for priming, not checkpoint**  
Robert H. Vonderheide, Abramson Cancer Center of the University of Pennsylvania, Philadelphia, PA
- 11:20 AM-11:35 AM**    **Break**
- 11:35 AM-12:50 PM**    **Plenary Session 1: Synthetic Biology and Novel Approaches to Immune Engineering**  
*Session chair: Jonathan P. Schneck, Johns Hopkins University School of Medicine, Baltimore, MD*
- 11:35 AM-12:05 PM**    **Engineering artificial Antigen Presenting Complexes, aAPC, for cancer immunotherapy: From bench to bedside**  
Jonathan P. Schneck

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- 12:05 PM-12:20 PM     **Cancer stem cells as origin of tumor associated immune cells\***  
Ghmkin Hassan, Okayama University, Okayama, Japan
- 12:20 PM-12:35 PM     **Highly parallel knock-in targeting for genome engineering of cellular therapies\***  
Theodore Roth, University of California San Francisco, San Francisco, CA
- 12:35 PM-12:50 PM     **Single-cell profiling of acute myeloid leukemia (AML) and its microenvironment reveals a CD8 continuum and adaptable T cell plasticity in response to PD-1 blockade-based therapy\***  
Hussein Abbas, MD Anderson Cancer Center, Houston, TX
- 12:50 PM-1:05 PM     Break**
- 1:05 PM-2:35 PM     Plenary Session 2: Innate and Adaptive Checkpoints**  
*Session chair: Timothy A. Chan, Cleveland Clinic, Cleveland, OH*
- 1:05 PM-1:35 PM     **Targeting macrophages to promote anti-tumor immunity**  
Judith A. Varner, UCSD Moores Cancer Center, San Diego, CA
- 1:35 PM-2:05 PM     **Innate immune defenses against cancer: Potential for mobilizing NK cells for cancer immunotherapy**  
David H. Raullet, University of California, Berkeley, Berkeley, CA
- 2:05 PM-2:20 PM     **Genetic ablation of adipocyte PD-L1 reduces tumor growth but accentuates obesity-associated inflammation\***  
Bogang Wu, The George Washington University, Washington, DC
- 2:20 PM-2:35 PM     **Highly potent fully human anti-VISTA antibodies – A new target checkpoint inhibitor against immunosuppressive myeloid cells\***  
Thierry Guillaudeux, Kineta Inc., Seattle, WA
- 2:35 PM-2:50 PM     Break**
- 2:50 PM-4:50 PM     Plenary Session 3: Novel Combinations**  
*Session chair: Charles G. Drake, Columbia University Irving Medical Center, New York, NY*
- 2:50 PM-3:20 PM     **Combination immunotherapy targeting myeloid populations**  
Charles G. Drake
- 3:20 PM-3:50 PM     **The QuEST for an effective immunotherapy for prostate cancer**

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James L. Gulley, National Cancer Institute, Bethesda, MD

3:50 PM-4:20 PM **What are some different ways to evaluate immunotherapy combinations?**  
Michael Postow, Memorial Sloan Kettering Cancer Center, New York, NY

4:20 PM-4:35 PM **27-Hydroxycholesterol acts on myeloid immune cells to induce T cell dysfunction, promoting breast cancer progression\***  
Liqian Ma, University of Illinois Urbana-Champaign, Urbana, IL

4:35 PM-4:50 PM **Is sex an effect modifier for cancer immune checkpoint inhibitors? – A population-based study\***  
Se Ryeong Jang, Thomas Jefferson University, Philadelphia, PA

**TUESDAY, OCTOBER 20, 2020**

**10:00 AM-10:40 AM Day Two Keynote Lecture**

**The IRE1 ER stress sensor activates natural killer cell immunity by regulating c-Myc**

Laurie H. Glimcher, Dana-Farber Cancer Institute, Boston, MA

**10:40 AM-10:55 AM Break**

**10:55 AM-12:25 PM Plenary Session 4: Vaccines, Neoantigens, and Oncolytic Viruses**

*Session chair: Catherine J. Wu, Dana-Farber Cancer Institute, Boston, MA*

10:55 AM-11:25 AM **Building improved personal cancer vaccines**  
Catherine J. Wu

11:25 AM-11:55 AM **Viral vectored vaccines for prostate cancer**  
Adrian Hill, Jenner Institute at Oxford University, Oxford, England

11:55 AM-12:10 PM **Armed Myxoma virus demonstrates therapeutic activity alone and in combination with immune checkpoint inhibitors in pre-clinical models\***

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Leslie Sharp, OncoMyx Therapeutics, Phoenix, AZ  
(not eligible for CME credit)

- 12:10 PM-12:25 PM    **The functional genomic landscape of recurrent glioblastoma\***  
Sheila Singh, McMaster University, Hamilton, ON
- 12:25 PM-12:40 PM    Break**
- 12:40 PM-2:10 PM    Plenary Session 5: Non-T-Cell Therapies**  
*Session chair: Marcela V. Maus, Massachusetts General Hospital, Boston, MA*
- 12:40 PM-1:10 PM    **Informing therapy by elucidating natural mechanisms of tissue immunosurveillance**  
Adrian C. Hayday, The Francis Crick Institute, London, England
- 1:10 PM-1:40 PM    **The future of CAR therapies**  
Elizabeth J. Shpall, The University of Texas MD Anderson Cancer Center, Houston, TX
- 1:40 PM-1:55 PM    **Potentiating the efficacy of immune checkpoint blockade by targeting the epithelial-to-mesenchymal transition (EMT) in breast carcinomas\***  
Anushka Dongre, Whitehead Institute for Biomedical Research, Cambridge, MA
- 1:55 PM-2:10 PM    **Selective inhibition of VEGF binding to VEGFR2 promotes an immune stimulatory microenvironment in murine models of breast cancer\***  
Yuqing Zhang, University of Texas Southwestern Medical Center, Dallas, TX
- 2:10 PM-2:25 PM    Break**
- 2:25 PM-3:55 PM    Plenary Session 6: T-Cell Therapies**  
*Session chair: Marcela V. Maus, Massachusetts General Hospital, Boston, MA*
- 2:25 PM-2:55 PM    **The sweet side of CAR-T cells: Reprogramming T cells to target glycopeptide epitopes**  
Avery D. Posey, University of Pennsylvania, Philadelphia, PA
- 2:55 PM-3:25 PM    **Next generation CAR T cells for cancer therapy**  
Renier J. Brentjens, Memorial Sloan Kettering Cancer Institute, New York, NY
- 3:25 PM-3:40 PM    **Adoptive transfer of T cells surface-tethered with IL-12 activates a natural killer/dendritic cell axis to promote antigen spreading for enhanced anti-**

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**tumor efficacy\***

Kate Stokes, Repertoire Immune Medicines, Cambridge, MA

**3:40 PM-3:55 PM      Microfluidic purification of T lymphocytes separated from blood for chimeric antigen receptor T-cell manufacturing\***

Mona Elsemary, University of South Australia, Mawson Lakes, Australia

**3:55 PM-4:10 PM      Break**

**4:10 PM-5:40 PM      Plenary Session 7: Defining Novel Immunotherapy Targets**

*Session chair and closing remarks: Arlene H. Sharpe, Harvard Medical School, Boston, MA*

**4:10 PM-4:40 PM      Discovery of new IO targets and mechanisms leveraging CRISPR**

Arlene H. Sharpe

**4:40 PM-5:10 PM      Probing the immune system in cancer**

Stephen J. Elledge, Harvard Medical School, Boston, MA

**5:10 PM-5:25PM      A novel immunotherapy for relapsed/refractory pediatric T-cell acute lymphoblastic leukemia\***

Christopher Foley, Allterum Therapeutics, Inc. and Fannin Innovation Studio, Houston, TX

*(not eligible for CME credit)*

**5:25 PM-5:40 PM      IL33 cytokine signalling in gastrointestinal cancers - a therapy target?\***

Moritz Eissmann, Olivia Newton-John Cancer Research Institute, Heidelberg, Victoria, Australia

\*Short talk from proffered abstract