

## SATURDAY, APRIL 1

## ● EDUCATIONAL SESSIONS • 8:00 a.m.–10:00 a.m.

Room 150, Level 1, Washington Convention Center

### Epigenetics and Cancer

**Chair:** Richard A. Young, Cambridge, MA

- 8:00 a.m.**     **Title to be announced.** Richard A. Young, Cambridge, MA
- 8:30 a.m.**     **Title to be announced.** Scott A. Armstrong, Boston, MA
- 9:00 a.m.**     **ATP-dependent chromatin remodeling complexes in human cancer.** Cigall Kadoch, Boston, MA
- 9:30 a.m.**     **Speaker to be announced**

Room 147, Level 1, Washington Convention Center

### From Chemistry to the Clinic: Part 1: Chemical Probes in Identifying and Validating Drug Targets

**Chair:** David E. Uehling, Toronto, Ontario, Canada

- 8:00 a.m.**     **Lessons and opportunities for probe development in cancer research.** David E. Uehling, Toronto, Ontario, Canada
- 8:30 a.m.**     **Value proposition of chemical probes in the development of translational phenotypic bioassays towards target discovery and validation.** Ivan Cornella-Taracido, Boston, MA
- 9:00 a.m.**     **Exploring new mechanisms to modulate deregulated transcription in cancer.** Angela N. Koehler, Cambridge, MA
- 9:30 a.m.**     **Chemical probes of chromatin regulation: Case histories.** Stephen V. Frye, Chapel Hill, NC

Room 207, Level 2, Washington Convention Center

### Functional Genomic Approaches to Cancer Target Identification

**Chair:** Scott W. Lowe, New York, NY

- 8:00 a.m.**     **Title to be announced.** Scott W. Lowe, New York, NY
- 8:30 a.m.**     **Title to be announced.** Christof Fellmann, Berkeley, CA
- 9:00 a.m.**     **Title to be announced.** Luke A. Gilbert, San Francisco, CA
- 9:30 a.m.**     **Title to be announced.** Christopher J. Kemp, Seattle, WA

Room 152, Level 1, Washington Convention Center

### **Polygenetic Susceptibility to Cancer and the Exposome**

**Chair:** Paul D. Pharoah, Cambridge, United Kingdom

- 8:00 a.m.**      **Gene-panel testing in clinical cancer genetics: Opportunities and limitations.** Mark E. Robson, New York, NY
- 8:30 a.m.**      **Polygenic cancer susceptibility: Where lies the missing heritability?** Peter Kraft, Boston, MA
- 9:00 a.m.**      **From association to function: Understanding the molecular mechanisms behind common cancer susceptibility alleles.** Simon A. Gayther, Los Angeles, CA
- 9:30 a.m.**      **Application of next generation sequencing to cancer epidemiology studies.** Paul D. Pharoah, Cambridge, United Kingdom

Room 201, Level 2, Washington Convention Center

### **Resistance Mechanisms to MAPK Pathway Targeting across Cancer**

**Chair:** Roger S. Lo, Los Angeles, CA

- 8:00 a.m.**      **Title to be announced.** Willy Hugo, Los Angeles, CA
- 8:00 a.m.**      **Title to be announced.** Ryan B. Corcoran, Boston, MA

Room 206, Level 2, Washington Convention Center

### **Synthetic Lethality for DNA Repair Defect in Human Cancer**

**Chair:** Simon N. Powell, New York, NY

- 8:00 a.m.**      **Treating/defining DNA repair defects in human cancer.** Simon N. Powell, New York, NY
- 8:30 a.m.**      **Synthetic lethality for Fanconi anemia/BRCA pathway defects.** Alan D. D'Andrea, Boston, MA
- 9:00 a.m.**      **PARP trapping, replicative damage and Schlafen 11.** Yves G. Pommier, Bethesda, MD
- 9:30 a.m.**      **Emerging synthetic lethality concepts in DNA repair.** Thomas U. Helleday, Stockholm, Sweden

Ballroom A-B, Level 3, Washington Convention Center

### **Tumor Immunology and Immunotherapy for Non-immunologists: Immune Suppression and Overcoming It to Enhance Antitumor Therapies**

**Chair:** Ellen Puré, Philadelphia, PA

- 8:00 a.m.**     **Immune modulation by stroma in solid tumors.** Ellen Puré, Philadelphia, PA
- 8:30 a.m.**     **Innate immune signaling in cancer: New concepts.** Glen N. Barber, Miami, FL
- 9:00 a.m.**     **Tumor-derived exosomes suppress functions of immune cells and may interfere with immune therapies.** Theresa L. Whiteside, Pittsburgh, PA
- 9:30 a.m.**     **Overcoming immune checkpoints to treat cancer.** Charles G. Drake, New York, NY

Room 202, Level 2, Washington Convention Center

### **Tumor Microenvironment and Its Role in Drug Resistance and Metastasis**

**Chair:** Ilaria Malanchi, London, United Kingdom

- 8:00 a.m.**     **The metastatic niche.** Ilaria Malanchi, London, United Kingdom
- 8:30 a.m.**     **Dissecting the low-grade glioma ecosystem.** David H. Gutmann, St. Louis, MO
- 9:00 a.m.**     **Co-evolution of tumor and tumor microenvironment facilitates metastasis and therapeutic resistance.** Dihua Yu, Houston, TX
- 9:30 a.m.**     **A way by which the tumor microenvironment can impact resistance to antiangiogenic therapy.** Robert S. Kerbel, Toronto, Ontario, Canada

## **METHODS WORKSHOPS • 8:00 a.m.–10:00 a.m.**

Room 146, Level 1, Washington Convention Center

### **Advances in Cancer Evolution**

**Chair:** Charles Swanton, London, United Kingdom

- 8:00 a.m.**     **How single-cell genomics is revolutionizing cancer research.** Nicholas E. Navin, Bellaire, TX
- 8:00 a.m.**     **Deciphering selection in lung cancer evolution.** Thomas Watkins, London, United Kingdom
- 8:00 a.m.**     **Insights into cancer evolution and selection from whole genome sequencing studies?** Peter J. Campbell, Cambridge, United Kingdom
- 8:00 a.m.**     **Advances in analytical methods for clonal evolution inference at single-cell and bulk resolution.** Sohrab Shah, Vancouver, British Columbia, Canada

Room 151, Level 1, Washington Convention Center

### Application of Novel Models to Guide Individual Therapies

**Chair:** James H. Doroshow, Bethesda, MD

- 8:00 a.m.**      **The broad cell line factory: Developing early passage cell lines for cancer biology and drug development.** Jesse S. Boehm, Cambridge, MA
- 8:30 a.m.**      **Utility of patient-derived xenograft models to mirror precision oncology clinical trials.** James H. Doroshow, Bethesda, MD
- 9:00 a.m.**      **Pharmacodynamic modeling to predict biologically effective drug dosing.** Ralph E. Parchment, Frederick, MD
- 9:30 a.m.**      **Spontaneous canine malignancies: Models for precision cancer medicine.** Amy K. Leblanc, Bethesda, MD

Room 145, Level 1, Washington Convention Center

### Clinical Trials Design Workshop—Part 1: Clinical Trials for Targeted Therapies

**Chair:** Mithat Gönen, New York, NY

- 8:00 a.m.**      **Title to be announced.** Edith A. Perez, South San Francisco, CA
- 8:30 a.m.**      **Progress in NCI basket trials of targeted therapies in solid tumors.** Speaker to be announced
- 9:00 a.m.**      **Update of biomarker prevalence identified by next-generation sequencing.** Speaker to be announced
- 9:30 a.m.**      **Novel clinical trial designs for targeted agents.** Mithat Gönen, New York, NY

Ballroom C, Level 3, Washington Convention Center

### Current and Future Pathology in the Era of Immunotherapy

**Chair:** Janis Marie Taube, Baltimore, MD

- 8:00 a.m.**      **Illuminating the tumor microenvironment using single and multiplex immunohistochemistry.** Janis Marie Taube, Baltimore, MD
- 8:30 a.m.**      **Next-generation pathology: Quantitative immunofluorescence and imaging mass cytometry.** Kurt Alex Schalper, New Haven, CT
- 9:00 a.m.**      **Tissue-based genomic biomarkers for immunotherapy.** Matthew David Hellmann, New York, NY
- 9:30 a.m.**      **The MANA functional expansion of specific T cells (MANAFEST) assay: A sensitive molecular approach for clinical monitoring of peripheral antitumor immunity.** Kelly N. Smith, Baltimore, MD

## SATURDAY, APRIL 1

● **PROFESSIONAL ADVANCEMENT SESSION**  
9:30 a.m.–11:30 a.m.

Constitution Ballroom C-E, Level 3B, Grand Hyatt Washington  
**Editor Tips for Publication Success**  
(not eligible for CME credit)

**Chair:** Victor E. Velculescu, Baltimore, MD

**Speakers:** Linda J. Miller, Philadelphia, PA  
Judy N. Quong, Philadelphia, PA

● **PROFESSIONAL ADVANCEMENT SESSION**  
9:30 a.m.–4:00 p.m.

Renaissance Ballroom, Ballroom Level, Renaissance Hotel  
**Twelfth Annual AACR Undergraduate Student Caucus**  
**and Poster Competition**  
(not eligible for CME credit)

**Chair:** Kathleen W. Scotto, New Brunswick, NJ

**Moderator:** Jose G. Trevino, Gainesville, FL

- 9:30 a.m. Registration and morning refreshments**
- 10:00 a.m. Welcome**
- 10:10 a.m. Understanding cancer.** Ernest T. Hawk, Houston, TX
- 10:30 a.m. Message from a cancer survivor.** Jameisha B. Brown, Bryan, TX
- 10:45 a.m. Navigating the Annual Meeting**
- 11:00 a.m. Remarks from lead judge and introduction to judges.** Beverly D. Lyn-Cook, Jefferson, AR
- 11:30 a.m. Poster session**
- 1:00 p.m. Break; lunch served**
- 1:30 p.m. Professional development panel and Q&A**  
**Moderator:** Jose G. Trevino II, Gainesville, FL
- 3:00 p.m. Remarks from 2016 first-prize winner.** Maryam Bainazar, Columbus, OH

- 3:05 p.m. Prize distribution
- 3:50 p.m. Closing remarks and evaluation

## ● EDUCATIONAL SESSIONS • 10:15 a.m.–12:15 p.m.

Room 147, Level 1, Washington Convention Center

### From Chemistry to the Clinic: Part 2: Lessons from Medicinal Chemistry Cancer Drug Discovery Experiences

**Chair:** Vinod F. Patel, Waltham, MA

- 10:15 a.m. Lessons from the discovery of mediator complex associated kinase (CDK8/19) inhibitors: Phenotypic screen to clinical candidate.** Julian Blagg, Sutton, Surrey, United Kingdom
- 10:45 a.m. Inventing epacadostat: Following the data, not the “rules.”** Andrew Paul Combs, Wilmington, DE  
(not eligible for CME credit)
- 11:15 a.m. Solving medicinal chemistry challenges towards discovering drug candidates to treat cancer.** Michael J. Luzzio, Cambridge, MA

Room 152, Level 1, Washington Convention Center

### Biology of Disparities with Emphasis on Prostate, Breast, and Colorectal Cancer: A Study of African Americans and Caucasians

**Chair:** John M. Carethers, Ann Arbor, MI

- 10:15 a.m. Breast cancer disparities: A study of African Americans and Caucasians.** Foluso O. Ademuyiwa, St Louis, MO
- 10:45 a.m. Epigenetic drivers of aggressive prostate tumors in African Americans.** Clayton C. Yates, Tuskegee, AL
- 11:15 a.m. Genetic contributions to colon cancer: Cancer disparities in African Americans.** Sanford D. Markowitz, Cleveland, OH
- 11:45 a.m. Mitigating the biologic basis of colorectal cancer disparities.** Adeyinko O. Laiyemo, Washington, DC

Independence Ballroom E-H, Meeting Level 4, Marriott Marquis DC

### Cancer Immunology for the Non-immunologist: Tutorial

**Chair:** Steven M. Dubinett, Los Angeles, CA

#### Roundtable Topics:

**Chemokines and cancer.** Steven M. Dubinett, Los Angeles, CA

**Innate immune signaling in cancer: New concepts.** Glen N. Barber, Miami, FL

**The interaction of radiotherapy with immunotherapy.** Sandra DeMaria, New York, NY

**Natural killer cells and the tumor microenvironment.** Julie Y. Djeu, Tampa, FL

**Myeloid-derived suppressor cells.** Dmitry I. Gabrilovich, Philadelphia, PA

**Immune targeting in breast cancer.** Leisha A. Emens, Baltimore, MD

**Myeloid-derived suppressor cells.** Dmitry I. Gabrilovich, Philadelphia, PA

**Inflammation and cancer.** Sergei I. Grivennikov, Philadelphia, PA

**Immunotherapy combination strategies.** James L. Gulley, Bethesda, MD

**Oncolytic viruses.** Howard L. Kaufman, New Brunswick, NJ

**Brain cancer immunotherapy.** Hideho Okada, San Francisco, CA

**Topic to be announced.** George C. Prendergast, Wynnewood, PA

**Personalized immunotherapy for glioblastoma.** Robert M. Prins, Los Angeles, CA

**Tumor stroma: Immunomodulatory functions and a target of immunotherapy.** Ellen Puré, Philadelphia, PA

**Microbiome and cancer.** Laurence Zitvogel, Villejuif, France

Ballroom C, Level 3, Washington Convention Center

### Deciphering Biomarkers and Mechanisms of Stromal-Mediated Drug Responses and Resistance

**Chair:** Sandra S. McAllister, Boston, MA

**10:15 a.m. Title to be announced.** Sandra S. McAllister, Boston, MA

**10:45 a.m. Deciphering mechanisms of resistance to macrophage-targeted therapies.** Daniela F. Quail, Montreal, Quebec, Canada

**11:15 a.m. Imaging reveals contributions of the microenvironment to therapy responses and resistance.** Mikala Egeblad, Cold Spring Harbor, NY

**11:45 a.m. Title to be announced.** Jennifer A. Wargo, Houston, TX

Room 144, Level 1, Washington Convention Center

### Enhancing Research Reproducibility

**Chair:** Jeremy Berg, Washington, DC

- 10:15 a.m.**    **Title to be announced.** Jeremy Berg, Washington, DC
- 10:40 a.m.**    **Title to be announced.** Chi Van Dang, Philadelphia, PA
- 11:10 a.m.**    **Title to be announced.** Lawrence Tabak, Bethesda, MD
- 11:40 a.m.**    **Title to be announced.** Speaker to be announced

Room 206, Level 2, Washington Convention Center

### Environmental Carcinogenesis: A Pathway to Prevention?

**Chair:** Margaret L. Kripke, Houston, TX

- 10:15 a.m.**    **Introduction: Why study environmental carcinogenesis?** Margaret L. Kripke, Houston, TX
- 10:45 a.m.**    **Environmental carcinogenesis: Progress, challenges, and opportunities.** John R. Bucher, Research Triangle Park, NC
- 11:15 a.m.**    **Endocrine disruptors and reproductive cancers.** Joan V. Ruderman, Princeton, NJ
- 11:45 a.m.**    **Contribution of environmental exposures to childhood cancers.** Philip J. Landrigan, New York, NY

Room 150, Level 1, Washington Convention Center

### Histone Modifiers in Cancer

**Chair:** Jonathan D. Licht, Gainesville, FL

- 10:15 a.m.**    **Introduction.** Jonathan D. Licht, Gainesville, FL
- 10:45 a.m.**    **Update on histone modifications.** Yingming Zhao, Chicago, IL
- 11:15 a.m.**    **Histone variants and cancer.** Steven Henikoff, Seattle, WA
- 11:45 a.m.**    **Histone methylation and cancer.** Ali Shilatifard, Chicago, IL



Ballroom A-B, Level 3, Washington Convention Center

### **Integrating Genomic Analyses of Immunotherapy**

**Chair:** Eliezer M. Van Allen, Brookline, MA

**10:15 a.m. Somatic HLA mutations and neoantigen identification for immunotherapy analyses.** Sachet A. Shukla, Boston, MA

**10:45 a.m. Dynamics of genomic and neoantigen landscape during immune checkpoint blockade.** Victor E. Velculescu, Baltimore, MD

**11:15 a.m. Integrative clinical and genomic analysis of solid tumors treated with immune checkpoint blockade.** Jeffrey E. Hammerbacher, New York, NY

**11:45 a.m. Infiltrating immune cell signatures and genomic determinants of immune recognition in diverse tumors.** Ash A. Alizadeh, Stanford, CA

Room 151, Level 1, Washington Convention Center

### **Taming the Tumor Microenvironment in Pancreatic Cancer**

**Chair:** David A. Tuveson, Cold Spring Harbor, NY

**10:15 a.m. Fibroblast heterogeneity in pancreatic cancer.** David A. Tuveson, Cold Spring Harbor, NY

**10:45 a.m. Pancreatic cancer matrix biology.** Daniel Ohlund, Cold Spring Harbor, NY

**11:15 a.m. Tissue tension: The extracellular matrix and PDAC phenotype.** Valerie M. Weaver, San Francisco, CA

**11:45 a.m. Immune vulnerabilities in pancreatic cancer.** Robert H. Vonderheide, Philadelphia, PA

## **METHODS WORKSHOPS • 10:15 a.m.–12:15 p.m.**

Room 146, Level 1, Washington Convention Center

### **Applications of Proteomics and Proteogenomics in Cancer Research**

**Chair:** Anthony Whetton, Manchester, United Kingdom

**10:15 a.m. Relative quantification proteomics for cancer research.** Anthony Whetton, Manchester, United Kingdom

**10:45 a.m. Digging deeper: Approaches for proteogenomics analyses.** Akhilesh Pandey, Baltimore, MD

**11:15 a.m. Quantitative proteomics: Procedures and benefits of surveillance by selected reaction monitoring.** Robert Moritz, Seattle, WA

**11:45 a.m. Development and validation of quantitative mass spectrometry-based assays for cancer-related targets.** Jeffrey R. Whiteaker, Seattle, WA

Room 145, Level 1, Washington Convention Center

### Clinical Trials Design Workshop—Part 2: Development of Immuno-oncologic Treatments

**Chair:** Edith A. Perez, South San Francisco, CA

- 10:15 a.m.**    **Title to be announced.** Paul B. Chapman, New York, NY
- 10:45 a.m.**    **Title to be announced.** Speaker to be announced
- 11:15 a.m.**    **Clinical and diagnostic considerations for a personalized cancer immunotherapy paradigm.** Priti S. Hegde, South San Francisco, CA
- 11:45 a.m.**    **Title to be announced.** Speaker to be announced

Room 202, Level 2, Washington Convention Center

### Computational Analysis of Cancer

**Chair:** Gad Getz, Charlestown, MA

- 10:15 a.m.**    **Analysis of mutational signatures in cancer.** Jaegil Kim, Cambridge, MA
- 10:45 a.m.**    **Analysis of DNA methylation in cancer.** Hui Shen, Grand Rapids, MI
- 11:15 a.m.**    **Analysis of structural variations and copy number alterations in cancer.** Marcin Imielinski, New York, NY
- 11:45 a.m.**    **Discovery of cancer genes.** Gad Getz, Charlestown, MA

Room 207, Level 2, Washington Convention Center

### High Throughput Screening: From Reagent Development to Clinical Implementation

**Cochairs:** Darren C. Tomlinson, Leeds, United Kingdom ; Robert J. Kinders, Frederick, MD

- 10:15 a.m.**    **Novel protein reagents for target validation and studying cancer signaling pathways.** Darren C. Tomlinson, Leeds, United Kingdom
- 10:40 a.m.**    **The Affimer technology platform: A novel scaffold for cancer biotherapeutics.** Amrik Basran, Cambridge, United Kingdom  
(not eligible for CME credit)
- 11:05 a.m.**    **Phenotypic screens for developmental modulators in zebrafish: A rich ore to mine for future cancer therapeutics.** Charles C. Hong, Nashville, TN
- 11:30 a.m.**    **Challenges in application of quantitative high-content pharmacodynamic extraction assays for MET activation.** Apurva K. Srivastava, Frederick, MD
- 11:45 a.m.**    **PD analysis of MET signaling in fixed tissue specimens by quantitative multiplex immunofluorescence and concordance with extraction assays.** Tony Navas, Frederick, MD
- 12:05 p.m.**    **Summary.** Robert J. Kinders, Frederick, MD

## SATURDAY, APRIL 1

● **PROFESSIONAL ADVANCEMENT SESSION**

12:00 p.m.–5:00 p.m.

Constitution Ballroom A-B, Level 3B, Grand Hyatt Washington  
**Twentieth Annual Grant Writing Workshop, Organized by  
 the Associate Member Council (AMC)**  
**(not eligible for CME credit)**

**Introduction: Message from a past attendee.** Michael S. Rogers, Boston, MA

**Constructing a strong career development proposal.** Javed Khan, Bethesda, MD

**Developing a compelling scientific argument and structuring your specific aims.** Danny R. Welch, Kansas City, KS

**Mock study section chair.** Ann Richmond, Nashville, TN

**Roundtable Mentors:** Ethan Dmitrovsky, Houston, TX

Mien-Chie Hung, Houston, TX

Javed Khan, Bethesda, MD

Anthony G. Letai, Boston, MA

John M. Maris, Philadelphia, PA

Laura Pasqualucci, New York, NY

Ann Richmond, Nashville, TN

Michael S. Rogers, Boston, MA

Lisa B. Signorello, Bethesda, MD

Dan Theodorescu, Aurora, CO

Danny R. Welch, Kansas City, KS

Dihua Yu, Houston, TX

Jean J. Zhao, Boston, MA

● **REGULATORY SCIENCE AND POLICY SESSION**

1:00 p.m.–2:45 p.m.

Room 143, Level 1, Washington Convention Center

**Understanding Mechanism-Based, Cardiovascular Adverse Events  
 Associated with Immune Checkpoint Blockade: Implications for  
 Prevention and Management**

**Cochairs:** Laleh Amiri-Kordestani, Silver Spring, MD; Javid M. Moslehi, Nashville, TN

**Speakers:** David Feltquate, New York, NY

Shiv Pillai, Cambridge, MA

Suzanne L. Topalian, Baltimore, MD

**Panelist:** George D. Demetri, Boston, MA

● **EDUCATIONAL SESSIONS** • 1:00 p.m.–3:00 p.m.

Room 150, Level 1, Washington Convention Center

**Cell Death Programs in Cancer Biology and Therapy**

**Chair:** Douglas R. Green, Memphis, TN

- 1:00 p.m.**     **How cells die.** Douglas R. Green, Memphis, TN
- 1:30 p.m.**     **Mitochondria expose cancer cell vulnerabilities.** Anthony G. Letai, Boston, MA
- 2:00 p.m.**     **Ferroptosis: Iron-dependent cancer cell death.** Scott Dixon, Stanford, CA
- 2:30 p.m.**     **How inflammation conditions tissue macrophage immune responses to dying cells.** Michael R. Elliott, Rochester, NY

Room 151, Level 1, Washington Convention Center

**Chromatin Regulation in Pediatric Cancer**

**Chair:** Suzanne J. Baker, Memphis, TN

- 1:00 p.m.**     **Oncohistones and the epigenetic landscape of pediatric high-grade gliomas.**  
Suzanne J. Baker, Memphis, TN
- 1:30 p.m.**     **Histone modifications in pediatric sarcomas: Implications and possibilities.**  
Janet Shipley, Sutton, United Kingdom
- 2:00 p.m.**     **De-BAF-ling the role of SWI/SNF complex mutations in pediatric cancer development.** Bernard E. Weissman, Chapel Hill, NC
- 2:30 p.m.**     **Histone methylation in pediatric leukemias: A chance to rewrite the leukemic fate?** Kathrin Maria Bernt, Philadelphia, PA

Room 147, Level 1, Washington Convention Center

**From Chemistry to the Clinic: Part 3: Advances in Antibody Drug Conjugates**

**Chair:** Christopher J. O'Donnell, Groton, CT

- 1:00 p.m.**     **Enabling the next generation of calicheamicin-based antibody-drug conjugates.** Russell G. Dushin, Groton, CT
- 1:30 p.m.**     **Influence of payload physiochemical properties and linker structure on antibody-drug conjugate activity.** Peter S. Dragovich, South San Francisco, CA
- 2:00 p.m.**     **Expanding the payload scope and drug load of ADCs through drug-linker design.** Patrick J. Burke, Bothell, WA (not eligible for CME credit)

Room 201, Level 2, Washington Convention Center

### **Molecular Classification and Epigenomic Discoveries in Brain Tumors**

**Chair:** Stefan M. Pfister, Heidelberg, Germany

- 1:00 p.m.**     **Overview on molecular brain tumor classification.** Stefan M. Pfister, Heidelberg, Germany
- 1:30 p.m.**     **Genome-epigenome interplay in medulloblastoma.** Paul A. Northcott, Memphis, TN
- 2:00 p.m.**     **Histone mutations in brain tumors.** Viviane Tabar, New York, NY
- 2:30 p.m.**     **Delineating disease progression of adult glioma.** Roel Verhaak, Farmington, CT

Ballroom A-B, Level 3, Washington Convention Center

### **Rationale and Design of Immune Checkpoint Combination Therapy**

**Chair:** Roy S. Herbst, New Haven, CT

- 1:00 p.m.**     **Rational combination cancer immunotherapy: The yin and yang of immunity.** Daniel S. Chen, South San Francisco, CA
- 1:30 p.m.**     **Combination microtherapy approaches through understanding the tumor, the host, and the microbiota.** Thomas Frank Gajewski, Chicago, IL
- 2:00 p.m.**     **Novel biologically based clinical trials using immune phenotyping: Battle immunotherapy.** Roy S. Herbst, New Haven, CT

Room 145, Level 1, Washington Convention Center

### **Targeting CDKs in the Treatment of Breast Cancers**

**Chair:** Nicholas C. Turner, London, United Kingdom

- 1:00 p.m.**     **Targeting the cell cycle for cancer treatment.** Nicholas C. Turner, London, United Kingdom
- 1:30 p.m.**     **Transforming breast cancer treatment with CDK4/6 inhibitors.** Hope S. Rugo, San Francisco, CA
- 2:00 p.m.**     **Biomarkers and mechanisms of resistance to CDK4/6 inhibition.** Fabrice Andre, Villejuif, France
- 2:30 p.m.**     **CDKs beyond the cell cycle.** Jean J. Zhao, Boston, MA

Room 206, Level 2, Washington Convention Center

### Translation Control in Cancer: From Basic Science to Therapeutic Approaches

**Chair:** Davide Ruggero, San Francisco, CA

- 1:00 p.m.**      **Translating the cancer genome one codon at a time and its therapeutic implications.** Davide Ruggero, San Francisco, CA
- 1:30 p.m.**      **The role of eIF4E in cancer metastasis.** Nahum Sonenberg, Montreal, Quebec, Canada
- 2:00 p.m.**      **Targeting oncogenic translation programs.** Hans-Guido Wendel, New York, NY
- 2:30 p.m.**      **Ribosome heterogeneity in translating the genetic code.** Maria Barna, Stanford, CA

Room 152, Level 1, Washington Convention Center

### When Epidemiology and Pathology Meet: Incorporating Cutting-Edge Molecular Pathology Tools into Population Studies

**Chair:** Alison P. Klein, Baltimore, MD

- 1:00 p.m.**      **Improving cancer detection and treatment with ctDNA.** Luis A. Diaz, New York, NY
- 1:30 p.m.**      **Enabling the early detection of pancreatic cancer.** Alison P. Klein, Baltimore, MD
- 2:00 p.m.**      **Incorporating pathology into epidemiology studies of colorectal cancer.** Ulrike Peters, Seattle, WA
- 2:30 p.m.**      **Speaker to be announced**

## METHODS WORKSHOPS • 1:00 p.m.–3:00 p.m.

Ballroom C, Level 3, Washington Convention Center

### Immune Monitoring and Biomarker Development in the Human Model System

**Chair:** F. Stephen Hodi, Boston, MA

- 1:00 p.m.**      **Response to checkpoint therapy and exhausted CTL in the tumor microenvironment.** Adil I. Daud, San Francisco, CA
- 1:30 p.m.**      **Title to be announced.** Mario Sznol, New Haven, CT
- 2:00 p.m.**      **Using CyTOF to measure global immune competence.** Holden T. Maecker, Stanford, CA
- 2:30 p.m.**      **Pathologic analyses of patient specimens in patients receiving immune checkpoint blockade.** Scott Rodig, Boston, MA

Room 202, Level 2, Washington Convention Center

### High-Dimensional Analysis of Immune Monitoring

**Chair:** Garry P. Nolan, Stanford, CA

- 1:00 p.m.**     **Title to be announced.** Garry P. Nolan, Stanford, CA
- 1:30 p.m.**     **Title to be announced.** Michael Angelo, Palo Alto, CA
- 2:00 p.m.**     **In situ single-cell transcriptomics with MEFISH.** Jeffrey Moffitt, Cambridge, MA
- 2:30 p.m.**     **Title to be announced.** Long Cai, Pasadena, CA

Room 144, Level 1, Washington Convention Center

### Methods to Investigate the Microbiota

**Chair:** Laurence Zitvogel, Villejuif, France

- Title to be announced.** Curtis Huttenhower, Boston, MA
- High-resolution microbiome profiling with implications for cancer research.**  
James R. White, Baltimore, MD
- Additional speakers to be announced**

Room 207, Level 2, Washington Convention Center

### Multimodal Imaging of Tumor Microenvironment and Immune Response

**Chair:** Alex Yee-Chen Huang, Cleveland, OH

- 1:00 p.m.**     **Molecular imaging and image-guided therapy: Recent developments with ultrasound and positron emission tomography.** Katherine W. Ferrara, Davis, CA
- 1:30 p.m.**     **Molecular and theranostic imaging of cancer.** Zaver M. Bhujwalla, Baltimore, MD
- 2:00 p.m.**     **Therapeutic and diagnostic targeting of the lymphatics to mediate and detect immune responses.** Sunkuk Kwon, Houston, TX
- 2:30 p.m.**     **High-resolution imaging of heterogeneity in the tumor microenvironment.** David Entenberg, Bronx, NY

## ● PROFESSIONAL ADVANCEMENT SESSION

1:00 p.m.–3:00 p.m.

Independence Ballroom B-E, Level 5B, Grand Hyatt Washington

### **WICR Professional Advancement Session: Intentional Yes and Graceful No— How to Take Charge of Your Career (not eligible for CME credit)**

**Cochairs:** Lori S. Friedman, South San Francisco, CA; Cathrin Briskén, Lausanne, Switzerland

**1:00 p.m. Opening remarks and introduction**

**1:05 p.m. Shonda Rhimes: My year of saying yes to everything (TED Talk)**

**1:15 p.m. Panel discussion**

**Moderator:** Lori S. Friedman, South San Francisco, CA

**Panelists:** Susan M. Galbraith, Macclesfield, United Kingdom  
Karen E. Knudsen, Philadelphia, PA  
Brigette B. Ma, Hong Kong, Hong Kong  
Suzanne L. Topalian, Baltimore, MD  
Karen H. Vousden, Glasgow, United Kingdom

**2:05 p.m. Roundtable discussions**

**Roundtable Mentors:** Jessie M. English, Billerica, MA

**Additional mentors to be announced**

## ● REGULATORY SCIENCE AND POLICY SESSION

3:00 p.m.–4:45 p.m.

Room 143, Level 1, Washington Convention Center

### **Real World Evidence in Oncology and Its Implications**

**Chair:** Amy P. Abernethy, New York, NY

**Speakers:** Kassa Ayalew, Silver Spring, MD  
Sean Khozin, Silver Spring, MD  
Jeff D. Allen, Washington, DC  
Jacqueline Law, San Francisco, CA **(not eligible for CME credit)**



## SATURDAY, APRIL 1

## ● EDUCATIONAL SESSIONS • 3:15 p.m.–5:15 p.m.

Room 145, Level 1, Washington Convention Center

### Functional Diagnostics for Precision Cancer Care

**Chair:** Mathew Garnett, Cambridge, United Kingdom

- 3:15 p.m.**      **Pharmacogenomic profiling using in vitro patient models.** Mathew Garnett, Cambridge, United Kingdom
- 3:45 p.m.**      **Identification of personalized and subset-specific drugs for leukemia patients using ex vivo functional testing.** Jeffrey W. Tyner, Portland, OR
- 4:15 p.m.**      **Personalized in vitro and in vivo cancer models to guide precision medicine.** Mark A. Rubin, New York, NY
- 4:45 p.m.**      **Dynamic BH3 profiling measures primary cancer cell response to drugs without prolonged ex vivo culture.** Anthony G. Letai, Boston, MA

Room 201, Level 2, Washington Convention Center

### Induction of Senescence as an Anticancer Strategy

**Chair:** René Bernards, Amsterdam, Netherlands

- 3:15 p.m.**      **Cancer and aging: Rival demons?** Judith Campisi, Novato, CA
- 3:45 p.m.**      **The bright and the dark side of cancer cell senescence.** Clemens A. Schmitt, Berlin, Germany
- 4:15 p.m.**      **How senolysis inhibits tumorigenesis.** Jan M. Van Deursen, Rochester, MN
- 4:45 p.m.**      **Inducing senescence in cancer cells.** René Bernards, Amsterdam, Netherlands

Room 146, Level 1, Washington Convention Center

### Inflammation and Immune Cells as Modifiers of Outcome in Cancer Patients

**Chair:** Lisa M. Coussens, Portland, OR

- 3:15 p.m.**      **Introduction.** Lisa M. Coussens, Portland, OR
- 3:45 p.m.**      **Title to be announced.** Jerome Galon, Paris, France
- 4:15 p.m.**      **Inflammation-associated genetic instability and its significance on the prognosis of colorectal cancers.** Minoru Koi, Ann Arbor, MI
- 4:45 p.m.**      **Applications of ctDNA for cancer detection and therapy.** Luis A. Diaz, New York, NY

Room 147, Level 1, Washington Convention Center

### Interpretation of Cancer Genomic Variants

**Chair:** Nuria Lopez-Bigas, Barcelona, Spain

- 3:15 p.m.**      **Making cancer genomics data interpretable through recurrence analysis, annotation of prior knowledge, and effective visualization.** Nikolaus Schultz, New York, NY
- 3:45 p.m.**      **Community contributions to interpretation of cancer genomic variants.** Obi Lee Griffith, Saint Louis, MO
- 4:15 p.m.**      **Coding and noncoding cancer variants interpretation.** Nuria Lopez-Bigas, Barcelona, Spain
- 4:45 p.m.**      **Identifying positively selected rearrangements.** Rameen Beroukhim, Boston, MA

Ballroom A-B, Level 3, Washington Convention Center

### Opportunities for Small-Molecule Immune-Enhancing Drugs (IEDs) to Fight Cancer

**Chair:** Axel Hoos, Collegeville, PA

**Speakers to be announced**

Room 150, Level 1, Washington Convention Center

### Present and Future Directions in Drugging the Epigenome

**Chair:** Nilofer S. Azad, Baltimore, MD

- 3:15 p.m.**      **The complexity of epigenetics in cancer.** James G. Herman, Pittsburgh, PA
- 3:45 p.m.**      **Title to be announced.** Cheryl Arrowsmith, Toronto, Ontario, Canada
- 4:15 p.m.**      **Title to be announced.** Ari M. Melnick, New York, NY
- 4:45 p.m.**      **Title to be announced.** Nilofer S. Azad, Baltimore, MD

Room 151, Level 1, Washington Convention Center

### Prevention and Early Detection in the Era of Genomics

**Chair:** Avrum E. Spira, Boston, MA

- 3:15 p.m.**      **Title to be announced.** Powel H. Brown, Houston, TX
- 3:45 p.m.**      **Novel genomic approaches for cancer interception.** Avrum E. Spira, Boston, MA

Room 207, Level 2, Washington Convention Center

### Single Cell Analysis

**Chair:** Christoph Bock, Vienna, Austria

**3:15 p.m.**      **Title to be announced.** Christoph Bock, Vienna, Austria

**3:45 p.m.**      **Title to be announced.** Itay Tirosh, Cambridge, MA

## METHODS WORKSHOPS • 3:15 p.m.–5:15 p.m.

Room 152, Level 1, Washington Convention Center

### Clinical Cancer Genomic Testing: From Comprehensive Cancer Gene Panels to Whole Exome/Transcriptome/Genome Sequencing

**Chair:** Marc Ladanyi, New York, NY

**3:15 p.m.**      **Detection of gene fusions in solid tumors.** A John Iafrate, Boston, MA

**3:55 p.m.**      **The MSK-IMPACT program: Comprehensive clinical testing for cancer gene alterations and oncogenic fusions in over 15,000 patients with advanced solid cancers.** Marc Ladanyi, New York, NY

**4:35 p.m.**      **The application of integrative sequencing for precision oncology.** Arul M. Chinnaiyan, Ann Arbor, MI

Ballroom C, Level 3, Washington Convention Center

### New Laboratory Techniques to Monitor Tumor Genomes with Liquid Biopsies

**Chair:** Michael R. Speicher, Graz, Austria

**3:15 p.m.**      **Monitoring tumor heterogeneity with CTCs.** Shyamala Maheswaran, Charlestown, MA

**3:55 p.m.**      **Tumor genome evolution deduced from ctDNA.** Michael R. Speicher, Graz, Austria

**4:25 p.m.**      **Profiling the tumor genome in circulating extracellular vesicles (EVs).** Dolores Di Vizio, Los Angeles, CA

**4:45 p.m.**      **Implementation of ctDNA as a liquid biopsy in cancer medicine.** Carlos M. Caldas, Cambridge, United Kingdom

Room 206, Level 2, Washington Convention Center

## Preclinical Biomarkers

**Chair:** Angelo M. De Marzo, Baltimore, MD

Room 202, Level 2, Washington Convention Center

### Tissue-Localized Endpoints in Clinical Trials

**Chair:** Cornelia Liu Trimble, Baltimore, MD

**3:15 p.m.**      **Title to be announced.** Keith Thomas Flaherty, Boston, MA

## ● MEET-THE-EXPERT SESSION • 3:30 p.m.-4:30 p.m.

Room 144, Level 1, Washington Convention Center

### Title to be announced

Mina J. Bissell, Berkeley, CA

## ● SPECIAL SESSION • 5:00 p.m.-6:30 p.m.

Marquis Ballroom Salons 12-13, Meeting Level 2, Marriott Marquis DC

### Third Annual Clinical Oncology Fellows/Junior Faculty Networking Reception (not eligible for CME credit)

**Moderator:** Carlos L. Arteaga, Nashville, TN

## SATURDAY, APRIL 1

## ● SPECIAL SESSIONS • 5:15 p.m.-6:45 p.m.

Room 207, Level 2, Washington Convention Center

### Unsolved Mysteries: Why Do We Get Cancer as We Age and Why Don't We Get More Cancer?

**Chair:** James V. DeGregori, Aurora, CO

**Moderator:** James V. DeGregori, Aurora, CO

**5:15 p.m. Introduction.** James V. DeGregori, Aurora, CO

**5:30 p.m. Title to be announced.** Abraham Aviv, Newark, NJ

**5:55 p.m. Title to be announced.** Judith Campisi, Novato, CA

**6:20 p.m. Panel Discussion**

Room 202, Level 2, Washington Convention Center

### Unsolved Mysteries: Why Is Pancreatic Cancer So Difficult to Treat?

**Chair:** Ralph H. Hruban, Baltimore, MD

**Moderator:** Ralph H. Hruban, Baltimore, MD

**5:15 p.m. Introduction.** Ralph H. Hruban, Baltimore, MD

**5:30 p.m. A beginner's guide to perplexing clinical issues in pancreatic adenocarcinoma.** Margaret A. Tempero, San Francisco, CA

**5:55 p.m. Scientific hurdles to beating pancreatic cancer.** Christine A. Iacobuzio-Donahue, New York, NY

  
**● PROFESSIONAL ADVANCEMENT SESSION****5:30 p.m.-7:30 p.m.**

Independence Ballroom B-E, Level 5B, Grand Hyatt Washington  
**Careers in Clinical and Translational Cancer Research**  
**(not eligible for CME credit)**

**5:30 p.m.**      **Introduction and overview.** Michelle M. Le Beau, Chicago, IL

**5:45 p.m.**      Judy E. Garber, Boston, MA

**6:00 p.m.**      **Invited.** Gregory H. Reaman, Silver Spring, MD

**6:15 p.m.**      Sandra J. Horning, San Francisco, CA

**6:30 p.m.**      **General discussion with the Mentors at the tables**

**7:30 p.m.**      **Adjournment**

**● MEET AND GREET • 6:30 p.m.-8:30 p.m.**

Independence Ballroom I-F, Level 5B, Grand Hyatt Washington  
**New Member Networking Mixer**  
**(not eligible for CME credit)**

**6:30 p.m.**      **Invited Speaker.** Michael A. Caligiuri, Columbus, OH

## ● MEET-THE-EXPERT SESSIONS • 7:00 a.m.–8:00 a.m.

Room 146, Level 1, Washington Convention Center

### **Nonessential Amino Acid Metabolism in Cancer Cells**

Karen H. Vousden, Glasgow, United Kingdom

Room 204, Level 2, Washington Convention Center

### **Cancer in Africa: Where Does Our Knowledge Come From?**

D. Maxwell Parkin, Oxford, United Kingdom

East Salon A-B, Level 1, Washington Convention Center

### **Computational Biology in Translational Cancer Research**

X. Shirley Liu, Boston, MA

Ballroom C, Level 3, Washington Convention Center

### **Crosstalk between VEGF and Modulators of the Immune System: Therapeutic Implications**

Napoleone Ferrara, La Jolla, CA

Room 201, Level 2, Washington Convention Center

### **Designing Pediatric Drug Development Trials in an Era of Molecularly Targeted New Agents**

Peter C. Adamson, Philadelphia, PA

Room 152, Level 1, Washington Convention Center

### **Epitranscriptomics: Nucleotide Modifications in mRNA and lncRNA**

Samie Jaffrey, New York, NY

Room 144, Level 1, Washington Convention Center

### **Evaluating the Evidence: Menopausal Hormones and Cancer**

Garnet L. Anderson, Seattle, WA

Room 150, Level 1, Washington Convention Center

### **Immunosuppressive Networks, PD-L1 Expression, and Blueprint Project**

Weiping Zou, Ann Arbor, MI

East Salon C, Level 1, Washington Convention Center

### **Title to be announced**

Speaker to be announced

Room 145, Level 1, Washington Convention Center

**Novel Ways to Activate NK Cells and Increase Their Specificity for Cancer Therapy**

Jeffrey S. Miller, Minneapolis, MN

Room 103, Level 1, Washington Convention Center

**Pathogenesis and Genomics of Ovarian Cancer: Converging on New Opportunities**

Ronny I. Drapkin, Philadelphia, PA

Room 151, Level 1, Washington Convention Center

**Secondary Breast Cancer: A Paradigm for Survivorship Research**

Kevin Oeffinger, Durham, NC

Ballroom A-B, Level 3, Washington Convention Center

**The Cancer-Immune Set Point and the Future of Cancer Immunotherapy**

Daniel S. Chen, South San Francisco, CA

Room 147, Level 1, Washington Convention Center

**The Dynamic Interplay between Cancer and Aging**

Norman E. Sharpless, Chapel Hill, NC

Room 207, Level 2, Washington Convention Center

**The Genomics of Outstanding Responders**

Barry S. Taylor, New York, NY

Room 202, Level 2, Washington Convention Center

**Tissue Heterogeneity and Molecular Pathology**

Mark E. Sherman, Rockville, MD

Room 206, Level 2, Washington Convention Center

**Understanding and Intervening in Cancer Cell Invasion**

Sara A. Courtneidge, Portland, OR

Room 143, Level 1, Washington Convention Center

**Understanding the Role of Estrogen Receptor in Breast Cancer**

Jason Carroll, Cambridge, United Kingdom



## ● NCI/NIH-SPONSORED SESSION • 7:00 a.m.–8:00 a.m.

Marquis Ballroom Salons 3-4, Meeting Level 2, Marriott Marquis DC

### **NIH Grants Session: Changes in Review, Funding, and Funding Opportunities at the NCI** **(not eligible for CME credit)**

**Chair:** Daniel L. Gallahan, Bethesda, MD

**Speakers:** Daniel L. Gallahan, Bethesda, MD  
Nywana Sizemore, Bethesda, MD

## ● OPENING CEREMONY • 8:15 a.m.–10:00 a.m.

Hall D-E, Level 2, Washington Convention Center

### **(not eligible for CME credit)**

Join us on Sunday for the Annual Meeting Opening Ceremony, a yearly tradition marking the start of four days filled with outstanding and innovative science.

AACR CEO Margaret Foti will address attendees and discuss the tremendous progress the AACR has made over the past year.

AACR President Nancy E. Davidson will highlight the dramatic advances in cancer research and today's challenges in the cancer field.

The Opening Ceremony will also feature the presentation of some of the AACR's most prestigious awards, including:

- The 2017 AACR Distinguished Public Service Awards
- Recognition of the newly inducted Fellows of the AACR Academy
- The Eleventh Annual AACR Team Science Award
- The Fourteenth Annual AACR Award for Lifetime Achievement in Cancer Research
- The Eleventh Annual AACR Margaret Foti Award for Leadership and Extraordinary Achievements in Cancer Research
- The Second Annual AACR June L. Biedler Prize for Cancer Journalism

**Don't miss this exciting event, which leads directly into the Opening Plenary Session!**

## ● OPENING PLENARY SESSION • 10:00 a.m.–12:00 p.m.

Hall D-E, Level 2, Washington Convention Center

### The Road to Cancer Cures: Discover, Predict, Prevent, and Treat

**Chair:** Kornelia Polyak, Boston, MA

- 9:45 a.m. New approaches for finding tiny tumors: Towards early detection and treatment of ovarian cancer.** Angela M. Belcher, Cambridge, MA
- 9:45 a.m. Breast cancer intratumor heterogeneity landscapes: What, when, and where.** Carlos M. Caldas, Cambridge, United Kingdom
- 9:45 a.m. Earlier detection as a key to lower cancer death rates.** Bert Vogelstein, Baltimore, MD [PL01-03]\*
- 9:45 a.m. New twists on cancer drug resistance.** Charles L. Sawyers, New York, NY

## ● MEET AND GREET • 1:00 p.m.–2:00 p.m.

AACR Publications Booth (2731), Lower Level, Washington Convention Center

### Meet the Editors-in-Chief of *Cancer Discovery*: Lewis C. Cantley, PhD and José Baselga, MD, PhD (not eligible for CME credit)

Lewis C. Cantley, New York, NY

Jose Baselga, New York, NY

## ● NCI/NIH-SPONSORED SESSION • 1:00 p.m.–2:30 p.m.

Marquis Ballroom Salons 3-4, Meeting Level 2, Marriott Marquis DC

### NCI-Sponsored Training Awards and Opportunities (not eligible for CME credit)

**Chair:** Ming Lei, Rockville, MD

**Speakers:** Mark Damico, Bethesda, MD  
Jonathan S. Wiest, Bethesda, MD  
Susan Lim, Rockville, MD  
Michael K. Schmidt, Rockville, MD

\*An extended abstract for this presentation is available in the Invited Abstracts section of the *Proceedings* (the abstract number is listed in brackets above).

## ● CLINICAL TRIALS PLENARY SESSION 1 • 1:00 p.m.–2:45 p.m.

Ballroom C, Level 3, Washington Convention Center

### Clinical Trials Plenary Session 1

## ● MAJOR SYMPOSIA • 1:00 p.m.–2:45 p.m.

East Salon, Level C, Level 1, Washington Convention Center

### Artificial Intelligence-Enabled Cancer Care and Research: Potential and Challenges

**Chair:** Lynda Chin, Houston, TX

**1:00 p.m.**      **Introduction.** Lynda Chin, Houston, TX

**1:05 p.m.**      **PathAI: Advancing medicine with intelligent pathology.** Andrew H. Beck, Cambridge, MA

**1:35 p.m.**      **Big mechanism: How machines read the cancer literature and build cell-signaling models.** Paul Cohen, Arlington, VA

**2:05 p.m.**      **Title to be announced.** Mark DePristo, Mountain View, CA **(not eligible for CME credit)**

Room 147, Level 1, Washington Convention Center

### Lung Cancer Outcome: Clinical Implications for Smoking

**Chair:** Peter G. Shields, Columbus, OH

**1:00 p.m.**      **Introduction**

**1:05 p.m.**      **Precision medicine: Lung biomarkers.** Curtis C. Harris, Bethesda, MD

**1:35 p.m.**      **Reducing harm by targeting the addictiveness of combusted tobacco products through regulated reductions in nicotine content.** Eric Donny, Pittsburgh, PA [SY01-03]\*

**2:05 p.m.**      **Smoking and lung cancer: Implications for pathogenesis, prevention, and treatment.** Roy S. Herbst, New Haven, CT

\*An extended abstract for this presentation is available in the Invited Abstracts section of the *Proceedings* (the abstract number is listed in brackets above).

Ballroom A-B, Level 3, Washington Convention Center  
**Cancer Metabolism: Moving towards the Clinic**

**Chair:** Ralph J. Deberardinis, Dallas, TX

- 1:00 p.m. Introduction**
- 1:05 p.m. Understanding metabolic phenotypes in human tumors.** Ralph J. Deberardinis, Dallas, TX [SY02-01]\*
- 1:35 p.m. Exploring the lung cancer metabolome, in vivo and ex vivo, for individualized medicine.** Teresa W. Fan, Lexington, KY [SY02-02]\*
- 2:05 p.m. Imaging cancer metabolism in patients: FDG PET and beyond.** David A. Mankoff, Philadelphia, PA [SY02-03]\*

Hall D-E, Level 2, Washington Convention Center  
**Emerging Targets in Immunotherapy**

**Chair:** Andrew D. Weinberg, Portland, OR

- 1:00 p.m. Introduction**
- 1:05 p.m. OX40 agonists: Past, present, and future.** Andrew D. Weinberg, Portland, OR
- 1:35 p.m. Preclinical assessment of JTX-2011, an agonist antibody targeting ICOS, supports evaluation in ICONIC clinical trial.** Jennifer S. Michaelson, Cambridge, MA [SY03-02]\* (not eligible for CME credit)
- 2:05 p.m. Isotype choice for antibody immunotherapy: Lessons from engineering anti-CD73 and anti-TIGIT therapeutic antibodies.** Bryan C. Barnhart, Redwood City, CA

Room 146, Level 1, Washington Convention Center

**Genetic Predisposition to Cancer: Implications for Risk Management and Clinical Care**

**Chair:** Peter Kraft, Boston, MA

- 1:00 p.m. Introduction**
- 1:05 p.m. Rare and common risk alleles: Cancer prevention and care for individuals and populations.** Peter Kraft, Boston, MA
- 1:35 p.m. The evolving landscape of cancer susceptibility associated with high-penetrance gene mutations.** Katherine L. Nathanson, Philadelphia, PA
- 2:05 p.m. Three components of inherited cancer risk and their implications in personalized cancer screening.** Jianfeng Xu, Evanston, IL [SY04-03]\*

\*An extended abstract for this presentation is available in the Invited Abstracts section of the *Proceedings* (the abstract number is listed in brackets above).

Room 145, Level 1, Washington Convention Center

### Lung Cancer Disparities and Behavioral Strategies for Equity

**Chair:** Robert A. Winn, Chicago, IL

**1:00 p.m. Introduction**

**1:05 p.m. Landscape of disparities in lung cancer care.** M. Patricia Rivera, Chapel Hill, NC

**1:35 p.m. Lung cancer screening in a high-risk rural Appalachian population.** Kathryn Cardarelli, Lexington, KY

**2:05 p.m. The landscape of tobacco disparities: Initiation, addiction, and cessation.** Enid Neptune, Baltimore, MD

Room 206, Level 2, Washington Convention Center

### Myelomonocytic Cells and Stroma as Therapeutic Targets

**Chair:** Alberto Mantovani, Rozzano, Milano, Italy

**1:00 p.m. Introduction**

**1:05 p.m. Tumor-associated myelomonocytic cells as therapeutic targets.** Alberto Mantovani, Rozzano, Milano, Italy [SY06-01]\*

**1:35 p.m. Macrophage-targeted cancer immunotherapy.** Carola Ries, Penzberg, Germany [SY06-02]\*

**2:05 p.m. Reprogramming the tumor microenvironment to improve responses to therapy.** David G. Denardo, Saint Louis, MO [SY06-03]\*

Room 207, Level 2, Washington Convention Center

### Obesity, Inflammation, and the Adipose Microenvironment in Cancer

**Chair:** Liza Makowski, Chapel Hill, NC

**1:00 p.m. Introduction**

**1:05 p.m. Obesity and metabolic reprogramming of macrophages in triple-negative breast cancer.** Liza Makowski, Chapel Hill, NC

**1:35 p.m. Adipose stromal cells: A player in cancer progression and a therapeutic target.** Mikhail Kolonin, Houston, TX [SY07-02]\*

**2:05 p.m. Breast adipose inflammation: A silent killer.** Andrew J. Dannenberg, New York, NY

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## ● RECENT ADVANCES IN DIAGNOSTICS AND THERAPEUTICS RESEARCH • 1:00 p.m.–2:45 p.m.

Room 202, Level 2, Washington Convention Center

### High Dimensional Tumor Imaging

**Chair:** Robert J. Gillies, Tampa, FL

- 1:00 p.m. Tumor immune-pathology from the molecular scale on up.** Garry P. Nolan, Stanford, CA
- 1:30 p.m. To image and imagine: Molecular imaging and theranostics of cancer.** Zaver M. Bhujwala, Baltimore, MD
- 2:00 p.m. Imaging tumor habitats: Life at the edge.** Robert J. Gillies, Tampa, FL

## ● RECENT ADVANCES IN ORGAN SITE RESEARCH 1:00 p.m.–2:45 p.m.

Room 150, Level 1, Washington Convention Center

### Immunotherapy of Lymphoid Malignancies

**Chair:** Margaret A. Shipp, Boston, MA

- 1:00 p.m. Targetable genetic bases of immune evasion in lymphoma.** Margaret A. Shipp, Boston, MA
- 1:30 p.m. The Myc oncogene is a master regulator of the immune response.** Dean W. Felsher, Stanford, CA
- 2:00 p.m. Understanding success and failure of T-cell therapy for B-cell malignancies.** Stanley R. Riddell, Seattle, WA

Room 151, Level 1, Washington Convention Center

### Pediatric Brain Tumors: Developmental Connections to Disease Pathogenesis

**Chair:** Suzanne J. Baker, Memphis, TN

- 1:00 p.m. Tracking brain tumors with regional accents.** Richard J. Gilbertson, Cambridge, United Kingdom
- 1:30 p.m. Neuronal activity drives pediatric high-grade glioma growth.** Michelle L. Monje, Stanford, CA
- 2:00 p.m. Oncohistones: Genetic and epigenetic drivers of pediatric high-grade glioma.** Suzanne J. Baker, Memphis, TN

## ● RECENT ADVANCES IN PREVENTION RESEARCH

1:00 p.m.–2:45 p.m.

Room 152, Level 1, Washington Convention Center

### A Precancer Genome Atlas

**Chair:** Avrum E. Spira, Boston, MA

**1:00 p.m. Molecular determinants of lung premalignancy.** Avrum E. Spira, Boston, MA

**1:30 p.m. Cancer interception in time and space: Why we need a PCGA.** Brian J. Reid, Seattle, WA

**2:00 p.m. Clonal hematopoiesis as a precancerous state.** Rafael Bejar, Seattle, WA

Room 144, Level 1, Washington Convention Center

### Periodontal Disease, Oral Bacteria, and Orodigestive Cancers

**Chair:** Jiyoung Ahn, New York, NY

**1:00 p.m. Periodontal disease, microbiota dissemination, and cancer.** Dominique S. Michaud, Boston, MA

**1:30 p.m. Oral microbiome, alcohol and smoking, and risk of orodigestive cancers.** Jiyoung Ahn, New York, NY

**2:00 p.m. Oral health: Associations with oral HPV natural history and disease.** Anna R. Giuliano, Tampa, FL

## ● REGULATORY SCIENCE AND POLICY SESSION

1:00 p.m.–2:45 p.m.

Room 143, Level 1, Washington Convention Center

### Tables Turned: A Conversation with the Press about the Future of Cancer Research and Treatment

**Chair:** Richard Pazdur, Silver Spring, MD

**Speakers:** Adam Feuerstein, New York, NY  
Matthew Herper, New York, NY  
Laurie McGinley, Washington, DC  
Meg Tirrell, Englewood, NJ

● **DRUG DEVELOPMENT TRACK: SPECIAL SESSION**

1:00 p.m.–3:00 p.m.

East Salon A-C, Level 1, Washington Convention Center

**New Drugs on the Horizon 1**  
(not eligible for CME credit)

**Cochairs:** Melissa M. Vasbinder, Lexington, MA; Saul H. Rosenberg, North Chicago, IL

- 1:00 p.m.**      **The discovery and preclinical characterization of AMG 176: A first-in-class Mcl-1 inhibitor in clinical development for multiple myeloma.** Paul E. Hughes, Thousand Oaks, CA [DDT01-01]\*
- 1:24 p.m.**      **AZD5991: A potent and selective macrocyclic inhibitor of Mcl-1 for treatment of hematologic cancers.** Alexander W. Hird, Waltham, MA [DDT01-02]\*
- 1:48 p.m.**      **ABBV-621: A best-in-class TRAIL-receptor agonist fusion protein that enhances optimal clustering for the treatment of solid and hematologic tumors.** Susan E. Morgan-Lappe, North Chicago, IL [DDT01-03]\*
- 2:12 p.m.**      **Discovery and development of H3B-6545: A novel, oral, selective estrogen receptor covalent antagonist (SERCA) for the treatment of breast cancer.** Peter G. Smith, Cambridge, MA [DDT01-04]\*
- 2:36 p.m.**      **Durable efficacy and anticancer immunity following intratumoral administration of a combination of messenger RNAs encoding the costimulatory molecule OX40L and the cytokines IL-36g and IL-23.** Josh P. Frederick, Charlestown, MA

\*An extended abstract for this presentation is available in the Invited Abstracts section of the *Proceedings* (the abstract number is listed in brackets above).



## ● PROFESSIONAL ADVANCEMENT SESSION

1:00 p.m.–3:00 p.m.

Constitution Ballroom C-E, Level 3B, Grand Hyatt Washington

### **Forging Successful Partnerships with Industry, Organized by the Associate Member Council (AMC)**

**(not eligible for CME credit)**

**Panelist:** Renier J. Brentjens, New York, NY

**What is an industry-academia partnership or collaboration?** William Pao, Basel, Switzerland

**How to initiate an industry collaboration as an academic researcher.** William C. Hahn, Boston, MA

**Collaboration from an industry perspective.** William N. Hait, Raritan, NJ

#### **Panel Discussion**

Panelists to be announced

## ● POSTER SESSIONS • 1:00 p.m.-5:00 p.m.

Exhibit Hall, Lower Level, Washington Convention Center

**(not eligible for CME credit)**

Complete titles and author listings for abstracts in the poster sessions are available in the online Itinerary Planner, the Annual Meeting App (available at [www.AACR.org/AACR2017](http://www.AACR.org/AACR2017)), and the print Poster Sessions and Exhibits Guide. A limited number of copies of the print guide are available in the Exhibit Hall.

## EXPERIMENTAL AND MOLECULAR THERAPEUTICS

- Section 1      Alternative Small-Molecule Therapies
- Section 2      Antibodies, Bispecifics, and Antibody-Drug Conjugates
- Section 3      Antibody Technology
- Section 4      Gene Expression of Drug Resistance
- Section 5      Novel Agents
- Section 6      Targeting the PI3K Pathway
- Section 7      Tumor Microenvironment in Drug Development

## Cancer Chemistry

- Section 8 Basic and Applied Nanotechnologies and Therapeutic Approaches
- Section 9 Proteomics and Mass Spectrometry 1

## Prevention Research

- Section 10 Diet and Cancer

## Epidemiology

- Section 12 Descriptive Epidemiology Including Trends in Incidence and Prognosis

## Molecular and Cellular Biology / Genetics

- Section 13 Cell Cycle Checkpoint and Progression
- Section 14 Cell Growth Signaling Pathways 1
- Section 15 Cell Growth Signaling Pathways 2
- Section 16 Genomic Analyses across Cancer Types
- Section 17 Genomic Screening for Cancer Dependencies and Drug Response
- Section 18 Metabolic Pathways in Cancer
- Section 19 MicroRNA Regulation of Cancer Biology 1
- Section 21 Molecular Carcinogenesis and Chromosomal Alternations
- Section 22 Oncogenic Growth Factors and Signal Transducers
- Section 36 Late-Breaking Research: Molecular and Cellular Biology 1

## Bioinformatics and Systems Biology

- Section 23 Bioinformatics and Analysis for Therapy and Immune System
- Section 34 Late-Breaking Research: Bioinformatics and Systems Biology

## Scientist↔Survivor Program

- Section 24 Advocates Poster Session 1

## Immunology

- Section 25 Checkpoints 1
- Section 26 T-cell Immunity to Cancer: New Progress
- Section 27 Tumor Antigens and Adaptive Immunity

## Clinical Research

- Section 28 Checkpoint Inhibitor and Prognostic Biomarkers
- Section 29 Childhood Cancer Clinical Translational Research
- Section 30 Early Detection
- Section 31 Molecular Diagnostics
- Section 32 Special Populations/Biostatistics in Clinical Trials

## Clinical Trials

- Section 33 Clinical Trials

## Tumor Biology

- Section 37 Angiogenesis and Vascular Biology 1
- Section 38 Cell Culture and Animal Models of Cancer 1
- Section 39 Cellular Responses to Ionizing Radiation
- Section 40 Epithelial to Mesenchymal Transitions in Metastasis
- Section 41 Imaging Cancer Immunotherapy, Tumor Microenvironment, and Other Aspects of Tumor Biology
- Section 42 Migration and Invasion 1
- Section 43 Stem Cell Heterogeneity
- Section 44 Tumor Microenvironment 1

## ● SPECIAL SESSION • 1:15 p.m.–1:45 p.m.

AACRcentral Amphitheater (Booth 1125), Lower Level, Washington Convention Center

### **Molecular Epidemiology Working Group (MEG) Networking Session with Early-Career Researchers, Part 1: Meet the MEG Leadership (not eligible for CME credit)**

**Chair:** Melissa L. Bondy, Houston, TX

**Past Chair:** Susan E. Hankinson, Amherst, MA

**Chair-elect:** Ellen L. Goode, Rochester, MN

● **MEET AND GREETs** • 2:00 p.m.–4:00 p.m.

AACRcentral (Booth 1125), MICR Resource Center, Lower Level, Washington Convention Center

**Minorities in Cancer Research Council Meet and Greet  
(not eligible for CME credit)**

**Chair:** Rick A. Kittles, Tucson, AZ

**Past Chair:** Edith A. Perez, South San Francisco, CA

**Chair-Elect:** John M. Carethers, Ann Arbor, MI

**Council Members:** Lisa L. Baumbach-Reardon, Phoenix, AZ

Claudia R. Baquet, Columbia, MD

Laura Fejerman, Berkeley, CA

Christopher S. Lathan, Boston, MA

Beverly D. Lyn-Cook, Jefferson, AR

Coleman K. Obasaju, Indianapolis, IN

Brian M. Rivers, Atlanta, GA

Sanya A. Springfield, Bethesda, MD

John H. Stewart, Durham, NC

Robert A. Winn, Chicago, IL

AACRcentral (Booth 1125), WICR Resource Center, Lower Level, Washington Convention Center

**Women in Cancer Research Council Meet and Greet  
(not eligible for CME credit)**

**Chair:** Patricia M. LoRusso, New Haven, CT

**Past Chair:** Victoria M. Richon, Lexington, MA

**Chair-Elect:** Judith S. Sebolt-Leopold, Ann Arbor, MI

**Council Member:** Lucile L. Adams-Campbell, Washington, DC

**Council Members:** Cathrin Brisken, Lausanne, Switzerland

Caroline Dive, Manchester, United Kingdom

Lori S. Friedman, South San Francisco, CA

S. Percy Ivy, Rockville, MD

Brigette B. Ma, Hong Kong, Hong Kong

Lisa A. Newman, Detroit, MI

Morag Park, Montréal, Quebec, Canada

Kornelia Polyak, Boston, MA

AACRcentral Amphitheater (Booth 1125), Lower Level, Washington Convention Center

**Meet the AACR Foundation: Learn More About The Dr. Bayard D. Clarkson Legacy Society (not eligible for CME credit)**

**Moderator:** Anizia Karmayzn, Philadelphia, PA

● **NCI/NIH-SPONSORED SESSION • 2:45 p.m.–4:15 p.m.**

Marquis Ballroom Salons 3-4, Meeting Level 2, Marriott Marquis DC

**The NCI RAS Initiative at the Frederick National Laboratory for Cancer Research (not eligible for CME credit)**

**Speakers:** Frank McCormick, San Francisco, CA  
Frederick Streitz, Livermore, CA  
Andrew G. Stephen, Frederick, MD  
Frantz L. Jean-Francois, Frederick, MD  
Thomas J. Turbyville, Frederick, MD

● **MEET THE RESEARCH ICON • 3:00 p.m.–3:30 p.m.**

AACRcentral Amphitheater (Booth 1125), Lower Level, Washington Convention Center

**Meet the Research Icon: Bruce M. Alberts, PhD, Organized by the Associate Member Council (AMC) (not eligible for CME credit)**

Bruce M. Alberts, San Francisco, CA

● **MEET AND GREET • 3:00 p.m.–4:00 p.m.**

AACR Publications Booth (2731), Lower Level, Washington Convention Center

**Meet the Editor-in-Chief of *Clinical Cancer Research*: Keith T. Flaherty, MD (not eligible for CME credit)**

Keith T. Flaherty, Boston, MA

## ● PROFESSIONAL ADVANCEMENT SESSION

3:00 p.m.–4:30 p.m.

Room 204, Level 2, Washington Convention Center

**Careers in Science Policy and Advocacy: Industry, Government, and Nonprofit Organizations, Organized by the Associate Member Council (AMC) (not eligible for CME credit)**

**3:00 p.m. Introduction**

**3:05 p.m. Defining science policy.** George D. Demetri, Boston, MA

**3:20 p.m. From inside the lab to inside the Beltway: Careers in science policy.** Carrie D. Wolinetz, Bethesda, MD

**3:35 p.m. Career exploration and panel discussion**

**Panelists:** Anna D. Barker, Scottsdale, AZ  
Mohamad A. Hussein, Summit, NJ  
Tatiana M. Prowell, Silver Spring, MD

## ● REGULATORY SCIENCE AND POLICY SESSION

3:00 p.m.–4:45 p.m.

Room 143, Level 1, Washington Convention Center

**Regulatory Considerations for Utilizing Liquid Biopsies in Drug and Diagnostic Development**

**Speakers:** Abraham Tzou, Silver Spring, MD

Suzanne Jenkins, Cheshire, United Kingdom **(not eligible for CME credit)**

Gary J. Kelloff, Rockville, MD

Walter H. Koch, Pleasonton, CA

Howard Scher, New York, NY

Phil Stephens, Cambridge, MA **(not eligible for CME credit)**

AmirAli Talasaz, Redwood City, CA

## ● CLINICAL TRIALS MINISYMPOSIUM 1 • 3:00 p.m.–5:00 p.m.

Ballroom C, Level 3, Washington Convention Center

### Clinical Trials Minisymposium 1

## ● CLINICAL TRIALS PLENARY SESSION 2 • 3:00 p.m.–5:00 p.m.

Ballroom C, Level 3, Washington Convention Center

### Clinical Trials Plenary Session 2

## ● DRUG DEVELOPMENT TRACK: SPECIAL SESSION

3:00 p.m.–5:00 p.m.

East Salon A-B, Level 1, Washington Convention Center

### New Drugs on the Horizon 2

**Cochairs:** Cynthia Seidel-Dugan, Belmont, MA; Indrawan J. Mcalpine, San Diego, CA

- 3:00 p.m.**      **Discovery of GDC-0077, a highly isoform selective inhibitor of PI3K $\alpha$  that promotes selective loss of mutant-p110 $\alpha$ .** Steven T. Staben, Emerald Hills, CA [DDT02-01]\*
- 3:24 p.m.**      **SGN-2FF: A novel small molecule inhibitor of fucosylation with preclinical antitumor activity through multiple immune mechanisms.** Stephen C. Alley, Bothell, WA [DDT02-02]\*
- 3:48 p.m.**      **PRMT5 inhibitor: Novel clinical agent with therapeutic potential in heme and solid cancers.** Olena Barbash, Collegeville, PA
- 4:12 p.m.**      **A novel PRMT5 inhibitor with potent in vitro and in vivo activity in preclinical lung cancer models.** Dirk Brehmer, Beerse, Belgium [DDT02-04]\*
- 4:36 p.m.**      **BLU-285: A potent and highly selective inhibitor designed to target malignancies driven by PDGFRA and KIT mutations.** Erica K. Evans, Cambridge, MA

\*An extended abstract for this presentation is available in the Invited Abstracts section of the *Proceedings* (the abstract number is listed in brackets above).

● **MINISYMPOSIA** • 3:00 p.m.–5:00 p.m.

Room 151, Level 1, Washington Convention Center

**Bioinformatics and Systems Biology**

**Computational Cancer Biology**

**Cochairs:** Rachel Karchin, Baltimore, MD; Christina Leslie, New York, NY

**3:00 p.m.**      **Introduction**

**3:05 p.m.**      **971 Genome directed diagnosis informs clinical cancer care.** Alexander Penson, New York City, NY

**3:20 p.m.**      **972 Improving preclinical cancer pharmacogenomics with novel drug sensitivity metrics based on growth rate inhibition.** Marc Hafner, Boston, MA

**3:35 p.m.**      **973 Methylation accurately predicts age of cancer onset in patients with Li Fraumeni Syndrome.** Benjamin M. Brew, Toronto, Ontario, Canada

**3:50 p.m.**      **974 Automating deconvolution of heterogeneous bulk tumor genomic data.** Theodore Roman, Pittsburgh, PA

**4:05 p.m.**      **975 A multiscale computational model for spatio-temporal tumor immune response.** Chang Gong, Baltimore, MD

**4:20 p.m.**      **976 ImmunoMap: A novel bioinformatics tool for immune cell repertoire analysis.** John-William Sidhom, Baltimore, MD

**4:35 p.m.**      **977 Phenotypic analysis of single-cell breast cancer inhibition data reveals insights into EMT.** William S. Chen, New Haven, CT



Room 201, Level 2, Washington Convention Center

### Cancer Chemistry

## Novel Therapeutic Targets, Molecules, and Approaches for the Treatment of Cancer

**Cochairs:** Christian Rommel, Basel, Switzerland; Andrew J. Phillips, Cambridge, MA

### 3:00 p.m. Introduction

**3:05 p.m. 978 Spatial-temporal delivery of OX40 agonist and PD-1 inhibitor using nanoparticles improves therapeutic efficacy of cancer immunotherapy.** Yu Mi, Chapel Hill, NC

**3:20 p.m. 979 Discovery of the JAK1 selective kinase inhibitor AZD4205.** Jason G. Kettle, Stockport, United Kingdom

**3:35 p.m. 980 BAY-299, a novel chemical probe for in-depth analysis of the function of the bromodomain proteins BRPF2 and TAF1.** Léa Bouché, Berlin, Germany

**3:50 p.m. 981 The design and characterization of a selective TRIM24 degrader.** Lara N. Gechjian, Boston, MA

**4:05 p.m. 982 Development of homogeneous dual-drug ADCs: Application to the codelivery of auristatin payloads with complementary antitumor activities.** Matthew R. Levensgood, Bothell, WA

**4:20 p.m. 983 Identification of potent, highly selective and orally available ATR inhibitor BAY 1895344 with favorable PK properties and promising efficacy in monotherapy and combination in preclinical tumor models.** Ulrich T. Luecking, Berlin, Germany

**4:35 p.m. 984 Identification of potent and highly selective PTEFb inhibitor BAY 1251152 for the treatment of cancer: From p.o. to i.v. application via scaffold hops.** Ulrich T. Luecking, Berlin, Germany

East Salon C, Level 1, Washington Convention Center

### Clinical Research

## Cancer Survivorship and Quality of Life

**Cochairs:** Tara Sanft, Chicago, IL; Jack F. Whelan, Andover, MA

### 3:00 p.m. Introduction

**3:05 p.m. 985 Adipose tissue inflammation in breast cancer survivors: Effects of a 16-week aerobic and resistance exercise intervention.** Christina M. Dieli-Conwright, Los Angeles, CA

**3:20 p.m. 986 Targeting nicotinic acetylcholine receptors for the prevention and reversal of chemotherapy-induced peripheral neuropathy.** S. Lauren Kyte, Richmond, VA

- 3:35 p.m. **987 Unanticipated cardiotoxicity due to targeted anticancer therapy in hematologic malignancies patients: Natural history and risk factors.** Chintan Shah, Gainesville, FL
- 3:50 p.m. **988 Effect of a supervised exercise intervention on sarcopenic obesity and metabolic syndrome in prostate cancer patients: A randomized pilot study.** Jacqueline L. Kiwata, Los Angeles, CA
- 4:05 p.m. **989 Do physician-reported toxicities accurately reflect patient-reported symptom burden? An analysis of ESAS and CTCAE for patients with lung cancer.** Hsiang-Hsuan M. Yu, Tampa, FL
- 4:20 p.m. **990 Patterns of racial disparities in health-related quality of life among colorectal cancer patients and relationship with survival.** Michelle A. T. Hildebrandt, Houston, TX
- 4:35 p.m. **991 Association of high-sensitivity C-reactive protein with health-related quality of life among breast cancer survivors.** Hyun Jeong Cho, Seoul, Republic of Korea

Room 145, Level 1, Washington Convention Center

#### Clinical Research

#### Laboratory and Computational Tools to Enhance Clinical Decision Making

- 3:00 p.m. **Introduction**
- 3:05 p.m. **992 Patient-derived tumor organoids of neuroendocrine prostate cancer.** Loredana Puca, New York, NY
- 3:20 p.m. **993 Diagnostic leukapheresis (DLA): Molecular characterization and organoid culture of circulating tumor cells (CTC) from metastatic castration resistant prostate cancer (mCRPC).** Maryou B. Lambros, London, United Kingdom
- 3:35 p.m. **994 Diagnosing leukemia structural variations via a novel genome mapping approach.** Christopher Pool, Hershey, PA
- 3:50 p.m. **995 Impact of molecular subtypes on predicting chemotherapy response and survival in muscle invasive bladder cancer.** Woonyoung Choi, Houston, TX
- 4:05 p.m. **996 A translational phosphoproteomic approach to study differences in KRAS signaling in pancreatic, colorectal, and lung cancers.** Udai Banerji, London, United Kingdom
- 4:20 p.m. **997 Impact of a personalized medicine research program (PMRP), using targeted tumor profiling and a cloud based clinical trials matching platform, on clinical decision-making.** Thomas D. Brown, Seattle, WA
- 4:35 p.m. **998 OPeN: The oncology precision network data sharing consortium.** Lincoln Nadauld, St. George, UT

Room 206, Level 2, Washington Convention Center

### Endocrinology

#### Estrogen Receptor in Cancer Progression and Therapies

**Cochairs:** Adrian V. Lee, Pittsburgh, PA; Sheila A. Stewart, St. Louis, MO

- 3:00 p.m. Introduction**
- 3:05 p.m. 999 ESR1 mutations activate and confer hormone resistance via distinct mechanisms.** Weiyi Toy, New York, NY
- 3:20 p.m. 1000 Estrogen receptor coactivator MED1 in breast tumorigenesis and therapeutic resistance.** Xiaoting Zhang, Cincinnati, OH
- 3:35 p.m. 1001 ESR1 mutations confer novel metastatic functions in genome-edited breast cancer models.** Zheqi Li, Pittsburgh, PA
- 3:50 p.m. 1002 An epigenetic strategy to degrade the estrogen receptor in breast cancer.** Cynthia A. Zahnow, Baltimore, MD
- 4:05 p.m. 1003 Extranuclear ER $\alpha$ -mTOR signaling rewires cancer cell metabolism during obesity-associated breast cancer.** Zeynep Madak Erdogan, Urbana, IL
- 4:20 p.m. 1004 LDLR knockdown reduces the growth of Her2 overexpressing breast cancer in mouse models of hyperlipidemia.** Emily J. Gallagher, New York, NY
- 4:35 p.m. 1005 Interaction between the estrogen receptor and fibroblast growth factor receptor pathways in non-small cell lung cancer.** Laura P. Stabile, Pittsburgh, PA

Room 152, Level 1, Washington Convention Center

### Experimental and Molecular Therapeutics

#### Novel Mechanisms of Drug Resistance

**Cochairs:** John C. Schmitz, Pittsburgh, PA; John S. Lazo, Charlottesville, VA

- 3:00 p.m. Introduction**
- 3:05 p.m. 1006 Drug-tolerant persister cancer cells are vulnerable to GPX4 inhibition.** Matthew J. Hangauer, San Francisco, CA
- 3:20 p.m. 1007 SHP2 inhibition restores sensitivity to ALK inhibition in resistant ALK-rearranged non-small cell lung cancer (NSCLC).** Leila Dardaei, Charlestown, MA
- 3:35 p.m. 1008 Gain-of-function kinase library screen identifies FGFR1 amplification as a mechanism of resistance to antiestrogens and CDK4/6 inhibitors in ER+ breast cancer.** Luigi Formisano, Nashville, TN
- 3:50 p.m. 1009 Comprehensive ctDNA sequencing reveals mechanisms of resistance to rociletinib in EGFR T790M-mutated NSCLC.** Elena Helman, Redwood City, CA (not eligible for CME credit)

- 4:05 p.m. **1010 Genomic analysis of recurrent ovarian cancer in patient-derived xenografts treated with platinum and taxane chemotherapy.** Elizabeth Stover, Boston, MA
- 4:20 p.m. **1011 RNAseq analysis obtained from on-purpose tumor biopsies of patients in the MATCH-R trial allows the identification of potential mechanisms of acquired resistance to PD(L)1 therapies.** Loic Verlingue, Villejuif, France
- 4:35 p.m. **1012 Patient-derived tumor microenvironment models uncover nonautonomous TKI resistance mechanisms in NSCLC.** Haichuan Hu, Charlestown, MA

Room 146, Level 1, Washington Convention Center

### Immunology

## Novel Insights into Mechanisms of Response to Immunotherapy

**Cochairs:** Patrick Hwu, Houston, TX; Lisa M. Coussens, Portland, OR

- 3:00 p.m. **Introduction**
- 3:05 p.m. **1013 Location matters: Unique functional and transcriptional, but not flow cytometric, characteristics of intratumoral FOXP3+ Tregs vs. Tregs from other sites of patients with lung tumors.** Tatiana Akimova, Philadelphia, PA
- 3:20 p.m. **1014 Selective impairment of intratumoral regulatory T cells by targeting Ezh2 enhances cancer immunity.** David Q. Wang, San Francisco, CA
- 3:35 p.m. **1015 Directionality of T-cell-mediated cross-protection against the same tumor in lungs versus skin.** Masaki Terabe, Bethesda, MD
- 3:50 p.m. **1016 Evaluation of progression associated neoepitopes and immune contexture in pulmonary premalignancy.** Kostyantyn Krysan, Los Angeles, CA
- 4:05 p.m. **1017 Lipid metabolic reprogramming drives resistance to PD1 blockade.** Maria A. Cortez, Houston, TX
- 4:20 p.m. **1018 High-resolution microbiome profiling and genome wide arrays uncover bacteria driven alterations of oncogenic and immune pathways in head and neck cancer patients treated with surgery, chemo-radiation, and PD-1 checkpoint blockade therapy.** Rafael E. Guerrero-Preston, Baltimore, MD
- 4:35 p.m. **1019 In vivo CRISPR screening identifies Ptpn2 as a target for cancer immunotherapy.** Robert T. Manguso, Boston, MA

Room 147, Level 1, Washington Convention Center

**Molecular and Cellular Biology/Genetics**

**Chromatin Structure and Function**

**Chair:** Cigall Kadoch, Boston, MA

- 3:00 p.m. Introduction**
- 3:05 p.m. 1020 BRD9 defines a novel mammalian SWI/SNF (BAF) complex configuration which supports proliferation in AML.** Brittany C. Michel, Boston, MA
- 3:20 p.m. 1021 Mutations in SWI/SNF chromatin remodeling complex sensitize tumors to OXPHOS inhibition.** Yonathan Lissanu Deribe, Houston, TX
- 3:35 p.m. 1022 Chromatin remodeler HELLS is an epigenetic driver for hepatocellular carcinoma progression.** Cheuk-Ting Law, Hong Kong Island, Hong Kong
- 3:50 p.m. 1023 Activation of proto-oncogenes by enhancer-hijacking in high-risk neuroblastoma.** Daniel Dreidax, Heidelberg, Germany
- 4:05 p.m. 1024 Genome-wide examination of topological variability reveals cell type-specific mechanisms of oncogene activation.** Caleb Lareau, Heidelberg, Germany, MA
- 4:20 p.m. 1025 Controlled and endogenous depletion of a synthetic lethal target in human cancer cell lines via SMASh degnon engineering.** Florencia Rago, Cambridge, MA
- 4:35 p.m. 1026 Identify BRD4 as a facilitator of replication stress response signaling.** Jingwen Zhang, Waltham, MA (not eligible for CME credit)

Room 150, Level 1, Washington Convention Center

**Molecular and Cellular Biology/Genetics**

**Oncogenes and Tumor Suppressors 1:  
Function and Therapeutic Vulnerabilities**

**Cochairs:** Thomas F. Westbrook, Houston, TX; Linda J. Z. Penn, Toronto, Canada

- 3:00 p.m. Introduction**
- 3:05 p.m. 1027 Development of orthotopically grafted organoid models to study pancreatic cancer progression.** Chang-Il Hwang, Cold Spring Harbor, NY
- 3:20 p.m. 1028 Genetic disruption of Kras sensitizes lung cancer cells to Fas-mediated apoptosis.** Haiwei Mou, Worcester, MA
- 3:35 p.m. 1029 MAPK-mediated immunomodulation in disseminated murine Emu-TCL1 chronic lymphocytic leukemia.** Aparna Lakshmanan, Columbus, OH

- 3:50 p.m. **1030 Metabolic reprogramming caused by mutations of the Fbw7 ubiquitin ligase in colorectal cancer.** Ryan J. Davis, Seattle, WA
- 4:05 p.m. **1031 Nuclear relocalization of NPM1c induces terminal differentiation and cell growth arrest.** Lorenzo Brunetti, Houston, TX
- 4:20 p.m. **1032 Identification of Ran binding protein 6 as a novel negative regulator of EGFR and candidate tumor suppressor in glioblastoma.** Wan-Ying Hsieh, New York, NY
- 4:35 p.m. **1033 Estrogen receptor gene fusions drive endocrine therapy resistance in estrogen receptor positive breast cancer.** Jonathan T. Lei, Houston, TX

Room 144, Level 1, Washington Convention Center

### Tumor Biology

### Animal Models of Human Oncogenesis

**Cochairs:** Alex Kentsis, New York, NY; Birgit Knoechel, Boston, MA

- 3:00 p.m. **Introduction**
- 3:05 p.m. **1034 Role of KEAP1/NRF2 and TP53 mutations in lung squamous cell carcinoma development and radiation resistance.** Youngtae Jeong, Stanford, CA
- 3:20 p.m. **1035 Direct evidence for a protumor role of APOBEC3A in cancer initiation and progression in vivo: Enhanced mutagenesis and immune suppression in a novel humanized autochthonous model of pancreatic cancer.** Andrew D. Rhim, Houston, TX
- 3:35 p.m. **1036 Non-myogenic origin of embryonal rhabdomyosarcoma.** Catherine J. Drummond, Memphis, TN
- 3:50 p.m. **1037 Progression from melanocytic nevi to melanoma is associated with increased genomic mutations in a UV-induced mouse model of human melanoma.** Helen Michael, Bethesda, MD
- 4:05 p.m. **1038 The KIT-V654A second site mutation confers perinatal lethality and increased oncogenesis in a mouse model of GIST.** Jennifer Q. Zhang, New York, NY
- 4:20 p.m. **1039 Disruption of circadian clockwork in in vivo reprogramming induced mouse kidney cancer and human Wilms tumor.** Munehiro Ohashi, Kyoto, Japan
- 4:35 p.m. **1040 LIN28B-mediated *let-7* independent activation of AKT promotes neuroblastoma pathogenesis.** Ting Tao, Boston, MA

Room 202, Level 2, Washington Convention Center

### Tumor Biology

#### Niches and Routes of Metastasis

**Cochairs:** Qing Chen, Philadelphia, PA; Paula M. Vertino, Atlanta, GA

**3:00 p.m. Introduction**

**3:05 p.m. 1041 Binding of soluble DC-HIL to endothelial cell creates immunosuppression on premetastatic niches.** Vijay Ramani, Dallas, TX

**3:20 p.m. 1042 CLIC4 is incorporated into extracellular vesicles of murine breast cancer cells and may influence metastatic burden.** Alayna B. Craig-Lucas, Bethesda, MD

**3:35 p.m. 1043 CSF-1R inhibitor prevented premetastatic lung niches in metastatic mammary tumor.** Thaiz F. Borin, Augusta, GA

**3:50 p.m. 1044 Development of a miRNA-based signature to predict human cancer metastasis.** Lian Willetts, Edmonton, Alberta, Canada

**4:05 p.m. 1045 Understanding breast cancer metastasis through circulating tumor cells.** Remi Klotz, Los Angeles, CA

**4:20 p.m. 1046 Conditional knockout of N-Myc and STAT Interactor disrupts normal mammary development and enhances metastatic ability of mammary tumors.** Hawley Christine Pruitt, Birmingham, AL

**4:35 p.m. 1047 Role of endocytosis in NM23 mediated motility suppression.** Imran Khan, Bethesda, MD

### ● MEET AND GREET • 3:45 p.m.–4:30 p.m.

AACRCentral Amphitheater (Booth 1125), Lower Level, Washington Convention Center

#### Meet the Mentor: Undergraduate Focus (not eligible for CME credit)

**Chair:** Kathleen W. Scotto, New Brunswick, NJ

**Mentor:** Pamela Anne Marino, Bethesda, MD

● **AWARDS AND LECTURES** • 4:00 p.m.–4:45 p.m.

Ballroom A-B, Level 3, Washington Convention Center

**Thirteenth Annual AACR-Irving Weinstein Foundation Distinguished Lecture**

**4:00 p.m.**      **Changing Cell Fate for the Treatment of Cancer.** Leonard I. Zon, Boston, MA

● **MEET AND GREET** • 4:00 p.m.–5:00 p.m.

AACR Publications Booth (2731), Lower Level, Washington Convention Center

**Meet the Editor-in-Chief of *Cancer Research*: George C. Prendergast, PhD**  
**(not eligible for CME credit)**

George C. Prendergast, Wynnewood, PA

● **NCI/NIH-SPONSORED SESSION** • 4:00 p.m.–6:00 p.m.

Marquis Ballroom Salons 3-4, Meeting Level 2, Marriott Marquis DC

**Translating Cancer Technologies from Lab to Market - Success Stories**  
**from the NCI SBIR Program**  
**(not eligible for CME credit)**

**Moderator:** Michael Weingarten, Bethesda, MD

**Speakers:** Nathan Caffo, Seattle, WA  
Scott C. Kachlany, Kendall Park, NJ  
Raj K. Singh, Birmingham, AL



# SUNDAY, APRIL 2

## ● AWARDS AND LECTURES • 4:15 p.m.–4:30 p.m.

Room 207, Level 2, Washington Convention Center

### **Special MICR Presentation Honoring Dr. Jane Cooke Wright (not eligible for CME credit)**

**Chair:** Rick A. Kittles, Tucson, AZ

Room 207, Level 2, Washington Convention Center

### **Twelfth Annual AACR-Minorities in Cancer Research Jane Cooke Wright Memorial Lectureship**

**4:30 p.m.      Cancer Health Equity in Clinical Research: Reaching Underserved  
Populations.** Carol L. Brown, New York, NY

## ● AWARDS AND LECTURES • 5:30 p.m.–6:15 p.m.

Room 202, Level 2, Washington Convention Center

### **Presidential Address**

### **Leading Discoveries, Targeting Cures, Saving Lives**

Nancy E. Davidson, Seattle, WA

Ballroom C, Level 3, Washington Convention Center

### **Twentieth Annual Pezcoller Foundation-AACR International Award for Cancer Research BRCA1, Other Fanconi Gene, and swi/SNF Function Co-sustain Mammary Epithelial Differentiation through DNA Damage Repair**

David M. Livingston, Boston, MA

● **SPECIAL SESSION** • 6:30 p.m.–8:30 p.m.

Level 3 South Pre-function, Washington Convention Center

**Networking Hubs**

**(not eligible for CME credit)**

● **TOWN MEETING** • 6:30 p.m.–8:30 p.m.

Independence Ballroom E-H, Meeting Level 4, Marriott Marquis DC

**Pediatric Cancer Working Group Town Hall Meeting and Networking Reception**

**(not eligible for CME credit)**

**Speakers:** Garrett M. Brodeur, Philadelphia, PA  
Crystal L. Mackall, Stanford, CA

**Panel discussion with the organizers of the AACR Childhood Cancer Predisposition Workshop**

**Panelists:** David Malkin, Toronto, Ontario, Canada  
Kim Nichols, Memphis, TN  
Sharon E. Plon, Houston, TX  
Joshua D. Schiffman, Salt Lake City, UT

● **SPECIAL SESSION** • 6:45 a.m.–8:00 a.m.

Room 140, Level 1, Washington Convention Center

**Annual Business Meeting of Members**  
**(not eligible for CME credit)**

**Participants in speaking order:** Margaret Foti, Philadelphia, PA

Nancy E. Davidson, Seattle, WA

William N. Hait, Raritan, NJ

José Baselga, New York, NY

Michael A. Caligiuri, Columbus, OH

● **MEET-THE-EXPERT SESSIONS** • 7:00 a.m.–8:00 a.m.

Room 202, Level 2, Washington Convention Center

**Altered Super Enhancer Function and Genome Topology in Cancer**  
**Pathogenesis and Therapy**

A. Thomas Look, Boston, MA

Room 151, Level 1, Washington Convention Center

**Ancestrally Conserved Mechanisms of Epigenetic Regulation in**  
**Cancer Progression**

Melissa B. Davis, Athens, GA

Room 152, Level 1, Washington Convention Center

**Brain Metastasis: Unique Challenges and Great Opportunities**

Dihua Yu, Houston, TX

Room 204, Level 2, Washington Convention Center

**Circadian Clocks Mechanisms Controlling Carcinogenesis and**  
**Cancer Treatments**

Francis Levi, Coventry, United Kingdom

Room 150, Level 1, Washington Convention Center

**Defects in Epithelial Extrusion Can Drive Carcinoma Formation and Progression**

Jody S. Rosenblatt, Salt Lake City, UT

East Salon A-B, Level 1, Washington Convention Center

**Control of Cancer Cell Phenotype by Covalent Cytosine Modifications**

Lucy A. Godley, Chicago, IL

Room 146, Level 1, Washington Convention Center

**Functional Characterization of Nonprotein Coding Variants**

Matthew L. Freedman, Boston, MA

Room 144, Level 1, Washington Convention Center

**Nutrition and Fasting in Cancer Therapy**

Valter D. Longo, Los Angeles, CA

Room 206, Level 2, Washington Convention Center

**Meet Your Surgeon, Enhance Your Research**

Shelley Hwang, Durham, NC

Ballroom C, Level 3, Washington Convention Center

**Neoadjuvant Approaches Provide Insight into Immunosuppression and Biomarkers of Response to Immune Checkpoints and Inflammatory Agonists**

Robert L. Ferris, Pittsburgh, PA

East Salon C, Level 1, Washington Convention Center

**Notes from the Field: Cancer Prevention in Rural China**

Thomas W. Kensler, Pittsburgh, PA

Room 147, Level 1, Washington Convention Center

**Physical Activity and Therapeutic Response**

Jeffrey A. Meyerhardt, Boston, MA

Room 207, Level 2, Washington Convention Center

**Regulation of Immune Cell Function and Spatiality by Diverse Stromal Niches**

Shannon J. Turley, South San Francisco, CA

Room 145, Level 1, Washington Convention Center

### **The Future of Cancer Imaging**

Christopher H. Contag, Stanford, CA

Room 201, Level 2, Washington Convention Center

### **The Molecular Basis for Leukemia in Children with Down Syndrome**

John Crispino, Chicago, IL

Room 143, Level 1, Washington Convention Center

### **Transcriptional Coupling of Nutrient Sensing and Growth Control**

Donald E. Ayer, Salt Lake City, UT

## ● POSTER SESSIONS • 8:00 a.m.-12:00 p.m.

Exhibit Hall, Lower Level, Washington Convention Center

### **(not eligible for CME credit)**

Complete titles and author listings for abstracts in the poster sessions are available in the online Itinerary Planner, the Annual Meeting App (available at [www.AACR.org/AACR2017](http://www.AACR.org/AACR2017)), and the print Poster Sessions and Exhibits Guide. A limited number of copies of the print guide are available in the Exhibit Hall.

### **Experimental and Molecular Therapeutics**

- Section 1      Combination Strategies: Novel Agents and Standard Therapies
- Section 2      Combination Therapy 1
- Section 3      DNA Repair
- Section 4      New Targets 1
- Section 5      Novel Molecular Targets 1
- Section 6      Reversal of Drug Resistance
- Section 7      Targeting Growth Factor and Intracellular Signaling

### **Cancer Chemistry**

- Section 9      Cheminformatics and Computational Strategies for Drug Discovery
- Section 35     Late-Breaking Research: Cancer Chemistry



## Prevention Research

Section 10 Biologic and Biochemical Mechanisms in Cancer Prevention

## Epidemiology

Section 11 Genetic Variation (Non-GWAS) and Cancer Risk, Prognosis, or Mechanisms

Section 12 Genome-Wide Association Studies/Post-GWAS Studies

## Molecular and Cellular Biology/Genetics

Section 13 Cell Growth Signaling Pathways 3

Section 14 Cell Growth Signaling Pathways 4

Section 15 Epigenetics 1

Section 16 Genomic Instability and Cancer Therapy

Section 17 Genomics in Inherited Susceptibility and Preneoplastic Conditions

Section 18 MicroRNA Regulation of Cancer Biology 2

Section 19 Mitochondria, Autophagy, and Cancer Metabolism

Section 20 Targeting Aberrant Transcription in Cancer

Section 21 Tumor Suppressors 1: Modeling, Metabolism, and Epigenetics

Section 36 Late-Breaking Research: Molecular and Cellular Biology 2

## Bioinformatics and Systems Biology

Section 24 Functional and Genomic Analysis of Cancer

## Endocrinology

Section 25 Prostate Cancer Biology and Therapy

## Immunology

Section 26 Cytokines: The First Modern Immunotherapies

Section 27 Tumor Microenvironment and Checkpoints

Section 28 Tumor Models and Assays

## Clinical Research

Section 29 Adaptive Immunity to Cancer

Section 30 Liquid Biopsies 1: Circulating Tumor Cells

Section 31 Molecular Classification of Tumors

Section 32 Predictive Biomarkers 1

Section 34 Late-Breaking Research: Clinical Research 1

**Clinical Trials**

Section 33 Clinical Trials

**Tumor Biology**

- Section 37 Angiogenesis and Vascular Biology 2
- Section 38 Cell Culture and Animal Models of Cancer 2
- Section 39 Imaging for Cancer Diagnosis and Image-Guided Therapy
- Section 40 Migration and Invasion 2
- Section 41 Normal and Neoplastic Stem Cells
- Section 42 Pediatric Cancer 1: Biomarkers, Preclinical Models, and New Targets
- Section 43 Regulation and Imaging of Tumor Metastasis
- Section 44 Tumor Microenvironment 2

● **PLENARY SESSION • 8:15 a.m.–10:15 a.m.**

Hall D-E, Level 2, Washington Convention Center

**The Immune System and Cancer**

**Chair:** Elizabeth M. Jaffee, Baltimore, MD

- 8:15 a.m. Immune checkpoint blockade in cancer therapy: Insights, opportunities, and prospects for cures.** James P. Allison, Houston, TX
- 8:45 a.m. Microbiome and cancer therapies.** Laurence Zitvogel, Villejuif, France
- 9:15 a.m. Genetically engineered T cells for cancer.** Crystal L. Mackall, Stanford, CA
- 9:45 a.m. Cell states linked to immunotherapy response and resistance.** Levi A. Garraway, Indianapolis, IN

● **PROFESSIONAL ADVANCEMENT SESSION**

8:15 a.m.–10:15 a.m.

Independence Ballroom A, Level 5B, Grand Hyatt Washington  
**Women in Cancer Research Career Mentoring Session**  
**(not eligible for CME credit)**

**Cochairs:** Lucile L. Adams-Campbell, Washington, DC; Morag Park, Montréal, Quebec, Canada

**8:20 a.m. Title to be announced.** Caroline Dive, Manchester, United Kingdom

**8:40 a.m. Roundtable Discussion 1**

**9:25 a.m. Roundtable Discussion 2**

**Roundtable Mentors**

Eva Szabo, Bethesda, MD  
Cigall Kadoch, Boston, MA  
Charles A. Omer, Waltham, MA  
Varsha Gandhi, Houston, TX  
Elizabeth L. Travis, Houston, TX  
Louise M. Perkins, Washington, DC  
Danny R. Welch, Kansas City, KS  
Additional Mentors to be announced

**10:10 a.m. Closing Remarks**

● **MEET AND GREET • 10:00 a.m.–11:00 a.m.**

AACR Publications Booth (2731), Lower Level, Washington Convention Center  
**Meet the Editor-in-Chief of *Cancer Epidemiology, Biomarkers & Prevention*:  
Timothy R. Rebbeck, PhD**  
**(not eligible for CME credit)**

Timothy R. Rebbeck, Boston, MA



● **NCI/NIH-SPONSORED SESSION** • 10:30 a.m.–12:00 p.m.

Marquis Ballroom Salons 3-4, Meeting Level 2, Marriott Marquis DC

**Highlights of Research Resources at the Frederick National Lab for Cancer Research**

**(not eligible for CME credit)**

**Moderator:** Michelle A. Berny-Lang, Bethesda, MD

**Speakers:** Andrew A. Quong, Frederick, MD  
Ligia Pinto, Frederick, MD  
Jennifer Grossman, Frederick, MD  
Gordon R. Whiteley, Frederick, MD  
Amanda G. Paulovich, Seattle, WA  
Jeffrey R. Whiteaker, Seattle, WA

● **PROFESSIONAL ADVANCEMENT SESSION**  
10:30 a.m.–12:00 p.m.

Constitution Ballroom C-E, Level 3B, Grand Hyatt Washington

**Clinical Careers for Nonclinicians, Organized by the Associate Member Council (AMC)**

**(not eligible for CME credit)**

**Careers in basic and translational sciences.** J. Carl Barrett, Waltham, MA

**Careers in a clinical setting.** Lee W. Jones, New York, NY

**Appraisal of clinical data: Careers in regulatory affairs.** John K. Leighton, Silver Spring, MD

● **CLINICAL TRIALS PLENARY SESSION 3** • 10:30 a.m.–12:15 p.m.

Ballroom C, Level 3, Washington Convention Center

**Clinical Trials Plenary Session 3**

● **MAJOR SYMPOSIA • 10:30 a.m.–12:15 p.m.**

Room 152, Level 1, Washington Convention Center

**Epigenetic Therapy: What Is It, Where Are We, and What Does the Future Hold?**

**Chair:** Shelley L. Berger, Philadelphia, PA

**10:30 a.m. Introduction**

**10:35 a.m. Targeting aberrant gene silencing in cancer.** Jean-Pierre J. Issa, Philadelphia, PA

**11:05 a.m. Lysine specific demethylase-1 (LSD-1) inhibitors for treatment of cancer.**  
Sunil Sharma, Salt Lake City, UT

**11:35 a.m. Genomic and epigenomic mechanisms utilized by mutant p53.** Shelley L. Berger, Philadelphia, PA

Room 146, Level 1, Washington Convention Center

**Mechanisms Regulating Immune Checkpoint Therapies**

**Chair:** Pamela S. Ohashi, Toronto, Ontario, Canada

**10:30 a.m. Introduction**

**10:35 a.m. Next-generation anti-CTLA-4 antibodies.** Alan J. Korman, Redwood City, CA [SY09-01]\*

**10:55 a.m. A novel genetic mechanism of evading antitumor immunity in multiple human cancers.** Seishi Ogawa, Kyoto-shi Sakyo-ku, Japan [SY09-02]\*

**11:15 a.m. Evolution of neoantigen landscape during immune checkpoint blockade in non-small cell lung cancer.** Valsamo Anagnostou, Baltimore, MD [NG01]\*

**11:35 a.m. Evaluating potential mechanisms regulating the response to checkpoint therapy.** Pamela S. Ohashi, Toronto, Ontario, Canada

MONDAY

\*An extended abstract for this presentation is available in the Invited Abstracts section of the *Proceedings* (the abstract number is listed in brackets above).

Ballroom A-B, Level 3, Washington Convention Center

### Pan-cancer Genomic Analysis

**Chair:** Gad Getz, Charlestown, MA

**10:30 a.m. Introduction**

**10:35 a.m. Pan-cancer driver discovery.** Gad Getz, Charlestown, MA

**11:05 a.m. Pan-cancer study of recurrent and heterogeneous RNA aberrations and association with whole-genome variants.** Angela Norie Brooks, Santa Cruz, CA [SY10-02]\*

**11:35 a.m. The genetic archeology of 2,663 cancers.** Peter Van Loo, London, United Kingdom

Room 206, Level 2, Washington Convention Center

### Survivorship: Where Is the Science Headed?

**Chair:** Patricia A. Ganz, Los Angeles, CA

**10:30 a.m. Introduction**

**10:35 a.m. Survivorship science at the NCI: Present and future.** Julia H. Rowland, Bethesda, MD

**11:05 a.m. Cancer and accelerated aging: Insights into pathophysiology and prevention.** Saro Armenian, Duarte, CA

**11:35 a.m. Symptom science in cancer survivors: Advances in biology and management.** Patricia A. Ganz, Los Angeles, CA

Room 202, Level 2, Washington Convention Center

### The Effects of Tumor Microenvironment on Metastasis and Therapy Resistance

**Chair:** Ashani T. Weeraratna, Philadelphia, PA

**10:30 a.m. Introduction**

**10:35 a.m. Lymphatic vessels: Balancing immune priming and immune evasion in melanoma.** Amanda W. Lund, Portland, OR [NG02]\*

**10:55 a.m. Melanoma in the Wnt-er of life: How aging affects tumor progression.** Ashani T. Weeraratna, Philadelphia, PA

**11:20 a.m. Forcing tumor progression and aggression.** Valerie M. Weaver, San Francisco, CA

**11:45 a.m. Imaging therapy failure.** Erik Sahai, London, United Kingdom

\*An extended abstract for this presentation is available in the Invited Abstracts section of the *Proceedings* (the abstract number is listed in brackets above).

Room 151, Level 1, Washington Convention Center

## The Unfolded Protein Response in Tumor Biology

**Chair:** Amato J. Giaccia, Stanford, CA

**10:30 a.m. Introduction**

**10:35 a.m. Established and novel targets of the UPR in cancer from animal models to functional screens.** Constantinos Koumenis, Philadelphia, PA

**11:05 a.m. Targeting the Ire-XBP-1 pathway.** Albert C. Koong, Stanford, CA

**11:35 a.m. GRP78/BiP: Cancer's comrade in crime.** Amy S. Lee, Los Angeles, CA [SY13-03]\*

## RECENT ADVANCES IN DIAGNOSTICS AND THERAPEUTICS RESEARCH • 10:30 a.m.–12:15 p.m.

Room 150, Level 1, Washington Convention Center

## Cancer Predisposition in Pediatric Oncology

**Chair:** Sharon E. Plon, Houston, TX

**10:30 a.m. Telomere biology and human disease: Progress from the ends.** Sharon A. Savage, Rockville, MD

**11:00 a.m. Exploring the complex molecular nature of Li-Fraumeni syndrome.** David Malkin, Toronto, Ontario, Canada

**11:30 a.m. The landscape of pediatric cancer predisposition derived from genomic sequencing.** Sharon E. Plon, Houston, TX

Hall D-E, Level 2, Washington Convention Center

## Recent Advances in Immunotherapy Diagnostics

**Chair:** David L. Rimm, New Haven, CT

**10:30 a.m. DNA-based approaches to examining determinants of response and resistance to PD-1 blockade.** Matthew David Hellmann, New York, NY

**11:00 a.m. Tumor immunoarchitecture: Additional predictive factors for cancer immunotherapy response.** Janis Marie Taube, Baltimore, MD

**11:30 a.m. PD-L1-based predictive factors as companion diagnostics for immunotherapy.** David L. Rimm, New Haven, CT

\*An extended abstract for this presentation is available in the Invited Abstracts section of the *Proceedings* (the abstract number is listed in brackets above).

● **RECENT ADVANCES IN ORGAN SITE RESEARCH**

10:30 a.m.–12:15 p.m.

Room 147, Level 1, Washington Convention Center

**Gastric Cancer and Esophageal Adenocarcinoma: Biology, Treatment, and Heterogeneity between Tumor Types and Populations**

**Chair:** Patrick B.O. Tan, Singapore, Singapore

**10:30 a.m. Genomic and epigenomic heterogeneity of gastric and esophageal cancer.** Patrick B.O. Tan, Singapore, Singapore

**11:00 a.m. Tumors as organs: Influence of noncancerous cells on progression and response to therapy.** Heike I. Grabsch, Maastricht, Netherlands

**11:30 a.m. Clinical management of esophageal and gastric cancer: What's shared and what's not?** Jaffer A. Ajani, Houston, TX

● **RECENT ADVANCES IN PREVENTION RESEARCH**

10:30 a.m.–12:15 p.m.

Room 145, Level 1, Washington Convention Center

**Diet and Precision Medicine in Cancer Prevention: The Role of Genetic Background, the Microbiome, and Epigenetic Mechanisms**

**Chair:** Scott Bultman, Chapel Hill, NC

**10:30 a.m. Diet and gut microbiota influence an epigenetic mechanism of tumor suppression.** Scott J. Bultman, Chapel Hill, NC

**10:55 a.m. Marine omega-3 polyunsaturated fatty acid and colorectal cancer prevention and treatment.** Mingyang Song, Boston, MA [NG03]\*

**11:15 a.m. Genes, diet, and microRNAs and cancer.** Lynnette R. Ferguson, Auckland, New Zealand

**11:40 a.m. Periconceptional nutrition influences metastable epialleles associated with human cancer.** Robert A. Waterland, Houston, TX

\*An extended abstract for this presentation is available in the Invited Abstracts section of the *Proceedings* (the abstract number is listed in brackets above).

Room 144, Level 1, Washington Convention Center

## Implementation Science for Prevention

**Chair:** Graham A. Colditz, Saint Louis, MO

- 10:30 p.m.**    **Towards a national strategy to increase HPV vaccination.** Electra D. Paskett, Columbus, OH
- 11:00 a.m.**    **Using implementation science to reduce urban and rural cancer disparities.** Celette S. Skinner, Dallas, TX
- 11:30 a.m.**    **Improving implementation of tobacco treatment guidelines in public dental care.** Jamie S. Ostroff, New York, NY

## ● MINISYMPOSIUM • 10:30 a.m.–12:15 p.m.

Room 143, Level 1, Washington Convention Center

## Advancing Clinical Trial Design in Regulatory Science and Policy

**Cochairs:** Lisa LaVange, Silver Springs, MD ; Lillian L. Siu, Toronto, Ontario, Canada

**3594 Adaptively randomized seamless-phase multiarm platform trial: Glioblastoma Multiforme Adaptive Global Innovative Learning Environment (GBM AGILE).** Donald A. Berry, Houston, TX

**3595 Under-reporting of research biopsies in clinical trials in oncology.** Christine M. Parseghian, Houston, TX

**3596 How many tumor indications should be initially studied in clinical development of next-generation immunotherapies?** Cong Chen, Collegeville, PA

**3597 Experiences and lessons from innovative dose escalation designs in early-phase oncology.** Jiawen Zhu, New York, NY

## ● MAJOR SYMPOSIUM • 10:30 a.m.–12:30 p.m.

East Salon A-B, Level 1, Washington Convention Center

### Presidential Select Symposium: Cancer Health Disparities

**Chair:** Nancy E. Davidson, Seattle, WA

**Moderator:** Nancy E. Davidson, Seattle, WA

**10:30 a.m. Introduction**

**10:40 a.m. Colon cancer screening and genetics.** John M. Carethers, Ann Arbor, MI [SY14-01]\*

**11:00 a.m. Genomics in precision medicine and prostate cancer in African Americans.** John D. Carpten, Los Angeles, CA

**11:20 a.m. Disparities in Hispanic populations.** Marcia R. Cruz-Correa, San Juan, PR

**11:40 a.m. Disparities in Native American populations.** Cheryl L. Willman, Albuquerque, NM

## ● SPECIAL SESSION • 10:30 a.m.–12:30 p.m.

Room 204, Level 2, Washington Convention Center

### Pancreatic Cancer Action Network Grantee Discussion and Poster Session (not eligible for CME credit)

**Chair:** Steven D. Leach, New York, NY

**Discussion Moderators:** Howard C. Crawford, Ann Arbor, MI; Rosalie C. Sears, Portland, OR

**Pancreatic Cancer Action Network-AACR Inaugural Research Acceleration Network Grant, in memory of Skip Viragh; CAPS multicenter trial: Imaging and markers for pancreatic cancer screening.** Michael G. Goggins, Baltimore, MD

**2015 Pancreatic Cancer Action Network-AACR Research Acceleration Network Grant; Defining novel combination KRAS-targeted therapeutic strategies.** Channing J. Der, Chapel Hill, NC

**2014 Pancreatic Cancer Action Network-AACR Research Acceleration Network Grant, in memory of Skip Viragh; Developing a novel oxidative phosphorylation inhibitor in pancreatic cancer.** Giulio F. Draetta, Houston, TX

\*An extended abstract for this presentation is available in the Invited Abstracts section of the *Proceedings* (the abstract number is listed in brackets above).

2015 Pancreatic Cancer Action Network-AACR Research Acceleration Network Grant, supported by Celgene; Eliminating T cell barriers in pancreatic cancer patients. Steven D. Leach, New York, NY

Pancreatic Cancer Action Network-AACR Inaugural Research Acceleration Network Grant, supported by Tempur-Pedic in memory of Tim Miller; Accelerating development of CD40 therapy for pancreatic cancer. Robert H. Vonderheide, Philadelphia, PA

2014 Pancreatic Cancer Action Network-AACR Research Acceleration Network Grant, supported by the Fredman Family Foundation; GVAX + CRS-207 heterologous prime boost vaccination with PD-1 blockade. Dung T. Le, Baltimore, MD

2015 Pancreatic Cancer Action Network-AACR Research Acceleration Network Grant; Developing an algorithm for molecular tailored therapy. Jonathan R. Brody, Philadelphia, PA

Poster Presentations: 2016 Pathway to Leadership grant recipients

2016 Pancreatic Cancer Action Network-AACR Pathway to Leadership Grant; The epigenetic plasticity of pancreatic adenocarcinoma. Rohit Chandwani, New York, NY

2016 Pancreatic Cancer Action Network-AACR Pathway to Leadership Grant; The role and regulation of HNF1A in pancreatic cancer cells. Ethan V. Abel, MI

2016 Pancreatic Cancer Action Network-AACR Pathway to Leadership Grant, in memory of Carina Rogerson; Syndecan-1 is a novel regulator for nutrient salvage pathway. Wantong Yao, Houston, TX

● **SPECIAL SESSION** • 12:00 p.m.–12:30 p.m.

AACRcentral Amphitheater (Booth 1125), Lower Level, Washington Convention Center  
**Tumor Microenvironment Working Group (TME) Networking Session with Early-Career Researchers**  
(not eligible for CME credit)

**Moderator:** Cyrus M. Ghajar, Seattle, WA

**Speakers:** Eric C. Holland, Seattle, WA  
Alana L. Welm, Salt Lake City, UT



## ● SPECIAL SESSION • 12:30 p.m.–2:30 p.m.

Room 202, Level 2, Washington Convention Center

### **SU2C Scientific Session** (not eligible for CME credit)

**Moderator:** Phillip A. Sharp, Cambridge, MA

**Opening remarks from the SU2C Scientific Advisory Committee Chair.** Phillip A. Sharp, Cambridge, MA

## ● NCI/NIH-SPONSORED SESSION • 1:00 p.m.–1:45 p.m.

Marquis Ballroom Salons 3-4, Meeting Level 2, Marriott Marquis DC

### **NCI Cancer Imaging Program Informatics Integration** (not eligible for CME credit)

**Speakers:** Janet F. Eary, Bethesda, MD

**Additional speakers to be announced**

## ● MAJOR SYMPOSIA • 1:00 p.m.–2:45 p.m.

East Salon A-B, Level 1, Washington Convention Center

### **Adaptive Response to Therapy**

**Chair:** Joan S. Brugge, Boston, MA

**1:00 p.m. Introduction**

**1:05 p.m. Systems analysis of adaptive responses in patient-derived ovarian cancer xenografts to identify combination therapies and predictive biomarkers.**  
Joan S. Brugge, Boston, MA

**1:35 p.m. Adaptive resistance: Lessons for a prospective genomic profiling initiative.**  
David B. Solit, New York, NY

**2:05 p.m. Leveraging adaptive responses to targeting DNA damage response.**  
Gordon B. Mills, Houston, TX

Room 150, Level 1, Washington Convention Center

## Clonal Selection, Resistance, and Progression in Pediatric Cancer

**Chair:** Charles G. Mullighan, Memphis, TN

**1:00 p.m. Introduction**

**1:05 p.m. Genetic heterogeneity and clonal evolution: Lessons from acute lymphoblastic leukemia.** Charles G. Mullighan, Memphis, TN

**1:35 p.m. Molecular heterogeneity through the life cycle of medulloblastoma.** Michael D. Taylor, Toronto, Ontario, Canada

**2:05 p.m. Genetic and nongenetic mechanisms of progression in pediatric solid tumors.** Olivier Delattre, Paris, France

Room 147, Level 1, Washington Convention Center

## Diet, Microbiome, and Cancer

**Chair:** Stephen J. D. O'Keefe, Pittsburgh, PA

**1:00 p.m. Introduction**

**1:05 p.m. Prospective cohort studies of diet, the gut microbiome, and colorectal cancer.** Andrew T. Chan, Boston, MA

**1:35 p.m. How can intestinal microbes trigger cancer?** Christian Jobin, Gainesville, FL

**2:05 p.m. Can a change in diet change your cancer risk?** Stephen J. D. O'Keefe, Pittsburgh, PA [SY17-03]\*

Ballroom A-B, Level 3, Washington Convention Center

## Genetic Influences on Anticancer Immunity

**Chair:** Drew M. Pardoll, Baltimore, MD

**1:00 p.m. Introduction**

**1:05 p.m. Title to be announced.** Drew M. Pardoll, Baltimore, MD

**2:05 p.m. The multifaceted functions of the PD-1 pathway.** Arlene H. Sharpe, Boston, MA

**1:35 p.m. Targets and resistors of antitumor immunity.** Nir Hacohen, Charlestown, MA

\*An extended abstract for this presentation is available in the Invited Abstracts section of the *Proceedings* (the abstract number is listed in brackets above).

Hall D-E, Level 2, Washington Convention Center

### Inflammation and Cancer

**Chair:** Michael Karin, La Jolla, CA

**1:00 p.m. Introduction**

**1:05 p.m. Tumor-elicited inflammation in colorectal cancer.** Michael Karin, La Jolla, CA [SY19-01]\*

**1:35 p.m. Microbes in cancer: Friends or foes?** Giorgio Trinchieri, Bethesda, MD

**2:05 p.m. Inflammation-driven cancer: Host and microbial pathways.** Fiona Powrie, Oxford, United Kingdom [SY19-03]\*

Room 206, Level 2, Washington Convention Center

### RNA Processing and Editing in Cancer

**Chair:** Catriona H. Jamieson, La Jolla, CA

**1:00 p.m. Introduction**

**1:05 p.m. The role of RNA editing in leukemia stem cell evolution.** Catriona H. M. Jamieson, La Jolla, CA

**1:35 p.m. Circ-RNAs and fusion-Circ-RNAs in tumorigenesis.** Pier Paolo Pandolfi, Boston, MA

**2:05 p.m. Imaging stem cell signals in cancer progression and therapy resistance.** Tannishtha Reya, La Jolla, CA

Room 152, Level 1, Washington Convention Center

### Targeting Residual Disease

**Chair:** Alice T. Shaw, Boston, MA

**1:00 p.m. Introduction**

**1:05 p.m. Novel therapeutic strategies for targeting postsurgical residual disease in breast cancer.** Mitchell Dowsett, London, United Kingdom

**1:35 p.m. Mechanisms of residual disease during targeted therapy.** Trever G. Bivona, San Francisco, CA

**2:05 p.m. Cancer evolution as a therapeutic target.** Alberto Bardelli, Candiolo, Italy [SY21-03]\*

\*An extended abstract for this presentation is available in the Invited Abstracts section of the *Proceedings* (the abstract number is listed in brackets above).

● **RECENT ADVANCES IN DIAGNOSTICS  
AND THERAPEUTICS RESEARCH** • 1:00 p.m.–2:45 p.m.

Room 146, Level 1, Washington Convention Center

**Clonality in Normal Tissue and Its Relationship with Malignancy**

**Chair:** Peter J. Campbell, Cambridge, United Kingdom

- 1:00 p.m.**     **Tissue-specific mutation accumulation in human adult stem cells during life.**  
Ruben van Boxtel, Utrecht, Netherlands
- 1:30 p.m.**     **Somatic mutations in normal human hematopoietic stem cells.** Peter J.  
Campbell, Cambridge, United Kingdom
- 2:00 p.m.**     **Clinical implications of clonal hematopoiesis.** Andy Futreal, Houston, TX

Ballroom C, Level 3, Washington Convention Center

**Liquid Biopsies: The New Pathology**

**Chair:** Victor E. Velculescu, Baltimore, MD

- 1:00 p.m.**     **Liquid biopsy in breast cancer: Circulating tumor cells (CTCs) and  
circulating cell-free tumor DNA (ctDNA) for prognosis, disease monitoring,  
and modeling of tumor heterogeneity.** Massimo Cristofanilli, Chicago, IL
- 1:30 p.m.**     **First validation, then discovery: Establishing truth from cfDNA genotyping.**  
Geoffrey R. Oxnard, Boston, MA
- 2:00 p.m.**     **Liquid biopsy analyses for detection and characterization of human cancer.**  
Victor E. Velculescu, Baltimore, MD

Room 151, Level 1, Washington Convention Center

**PARP Inhibitors: To Combine or Not Combine; That Is the Question**

**Chair:** Johann S. de Bono, Sutton, United Kingdom

- 1:00 p.m.**     **Introduction: PARP inhibitors so far.** Johann S. de Bono, Sutton, United Kingdom
- 1:05 p.m.**     **Mechanism-driven combinatorial therapy of inhibitors of PARP inhibitor and other kinases.** Mien-Chie Hung, Houston, TX
- 1:35 p.m.**     **The study of PARPi resistance using genetically engineered mouse models for BRCA1/2-mutated breast cancer.** Sven Rottenberg, Amsterdam, Netherlands
- 2:05 p.m.**     **Rationally combining PARP inhibitors with DNA-damaging agents: Will it be possible?** Ruth Plummer, Newcastle Upon Tyne, United Kingdom
- 2:35 p.m.**     **Conclusion: What next for PARP inhibitors?** Johann S. de Bono, Sutton, United Kingdom

MONDAY

● **RECENT ADVANCES IN ORGAN SITE RESEARCH**

1:00 p.m.–2:45 p.m.

Room 144, Level 1, Washington Convention Center

**New Developments or Insight into Lung Cancer Evolution and Metastases**

**Chair:** Roman K. Thomas, Cologne, Germany

- 1:00 p.m.**     **Chromosomal order and chaos in lung cancer evolution.** Charles Swanton, London, United Kingdom
- 1:30 p.m.**     **Novel insights into the small cell lung cancer genome.** Roman K. Thomas, Cologne, Germany
- 2:00 p.m.**     **Functional lung cancer genomics through in vivo genome editing.** Monte M. Winslow, Stanford, CA

● **RECENT ADVANCES IN PREVENTION RESEARCH**

1:00 p.m.–2:45 p.m.

Room 145, Level 1, Washington Convention Center

**From Germline Risk and Premalignant Biology to Immune-Prevention of Colorectal Cancer**

**Chair:** Eduardo Vilar-Sanchez, Houston, TX

- 1:00 p.m.**      **Germline precision prevention: Accelerating evaluation of variants in known CRC susceptibility genes and identifying novel CRC genes.** Sean V. Tavtigian, Salt Lake City, UT
- 1:30 p.m.**      **Tackling the microbiota for colorectal cancer prevention.** Cynthia L. Sears, Baltimore, MD
- 2:00 p.m.**      **Developing a premalignant cancer genome atlas for colorectal cancer.** Eduardo Vilar-Sanchez, Houston, TX

● **SPECIAL SESSION • 1:00 p.m.–3:00 p.m.**

Room 207, Level 2, Washington Convention Center

**Beau Biden Cancer Moonshot: Progress and Promise  
(not eligible for CME credit)**

**Speakers to be announced**

## ● POSTER SESSIONS • 1:00 p.m.-5:00 p.m.

Exhibit Hall, Lower Level, Washington Convention Center

**(not eligible for CME credit)**

Complete titles and author listings for abstracts in the poster sessions are available in the online Itinerary Planner, the Annual Meeting App (available at [www.AACR.org/AACR2017](http://www.AACR.org/AACR2017)), and the print Poster Sessions and Exhibits Guide. A limited number of copies of the print guide are available in the Exhibit Hall.

### Experimental and Molecular Therapeutics

- Section 1 Cell Death Targets
- Section 2 Combination Therapy 2
- Section 3 Drug Resistance: Other Topics
- Section 4 Growth Factor and Hormone Receptors as Therapeutic Targets
- Section 5 Mechanism of Drug Action
- Section 6 New Targets 2
- Section 7 Targeting p53, Apoptosis, and the Cell Cycle
- Section 35 Late-Breaking Research: Experimental and Molecular Therapeutics 1

### Cancer Chemistry

- Section 8 Drug Delivery
- Section 9 Proteomics and Mass Spectrometry 2

### Prevention Research

- Section 10 Molecular Targets and Cancer Prevention

### Epidemiology

- Section 11 Biomarkers of Risk and Prognosis
- Section 12 Tobacco, Alcohol, and Other Risk Factors

### Molecular and Cellular Biology/Genetics

- Section 13 Apoptosis and Other Regulated Cell Death in Cancer
- Section 14 CDKs and CDK Inhibitors
- Section 15 Cell Growth Signaling Pathways 5
- Section 16 Epigenetics 2
- Section 17 Genome-Wide Analysis of Transcriptional Regulation
- Section 18 Genomic Landscape of Lymphoma, Leukemia, and Lung, Bladder, and Other Cancers

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- Section 19 Homologous Recombination and DNA Double-Strand Break Repair
  - Section 20 Metabolomics and Metabolic Regulation
  - Section 21 MicroRNAs and Other Noncoding RNAs as Tumor Suppressors or Oncogenes 1
  - Section 22 Nuclear Oncogenes and Tumor Suppressors

### Scientist<-->Survivor Program

- Section 23 Advocates Poster Session 2

### Bioinformatics and Systems Biology

- Section 24 Computational Tools and Databases

### Immunology

- Section 25 Checkpoints 2: Small-Molecule Inhibitors
- Section 26 Immune Response to Hematopoietic Tumors:  
New Development in Tumor Immunology
- Section 27 Inflammation and Cancer

### Clinical Research

- Section 29 Clinical Molecular Genetics and Laboratory Correlates
- Section 30 Liquid Biopsies 2: cfDNA
- Section 31 Outcomes in Patients and Survivors
- Section 32 Predictive Biomarkers 2

### Clinical Trials

- Section 33 Clinical Trials

### Tumor Biology

- Section 36 Late-Breaking Research: Tumor Biology 1
- Section 38 Cell Culture and Animal Models of Cancer 3
- Section 39 Gene Expression in Metastatic Progression
- Section 40 Imaging Cancer Metabolism, Therapeutic Targets, and Treatment Response
- Section 41 Signaling in Cancer Stem Cells
- Section 42 Tumor Evolution and Heterogeneity 1
- Section 43 Tumor Microenvironment 3
- Section 44 Tumor Microenvironment 4



# MONDAY, APRIL 3

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## ● MEET AND GREET • 1:45 p.m.–2:15 p.m.

AACRcentral Amphitheater (Booth 1125), Lower Level, Washington Convention Center  
**Meet the AACR Foundation: Executive Director and Board of Trustees**  
**(not eligible for CME credit)**

**Moderator:** Mitch Stoller, Philadelphia, PA

## ● NCI/NIH-SPONSORED SESSION • 2:00 p.m.–3:00 p.m.

Marquis Ballroom Salons 3-4, Meeting Level 2, Marriott Marquis DC  
**NIH-Supported International Consortium of METabolomics Studies**  
**(COMETS)**  
**(not eligible for CME credit)**

**Moderator:** Krista Anne Zanetti, Rockville, MD

**Speakers:** Steven C. Moore, Rockville, MD  
Marinella Temprosa, Rockville, MD

## ● MEET AND GREET • 2:30 p.m.–3:30 p.m.

AACRcentral Amphitheater (Booth 1125), Lower Level, Washington Convention Center  
**Meet the 2017–2018 AACR President, Michael A. Caligiuri, MD**  
**(not eligible for CME credit)**

Michael A. Caligiuri, Columbus, OH

● **ASSOCIATE MEMBER COUNCIL MEET AND GREET**  
3:00 p.m.–4:30 p.m.

AACRcentral (Booth 1125), Associate Member Resource Ctr, Lower Level, Washington Convention Center

**(not eligible for CME credit)**

**Chair:** Diana M. Merino, Chevy Chase, MD

**Chair-elect:** Ken Dutton-Regester, Boston, MA

**Past Chair:** Mark D. Stewart, Washington, DC

**Council Members:** Brian J. Abraham, Cambridge, MA

**Members:** Allison S. Betof, New York, NY

Wenji Guo, Libertyville, IL

Francis Wahren Hunter, Auckland, New Zealand

Katherine Jameson, Nashville, TN

Selena Lin, West Chester, PA

Maeve Mullooly, Bethesda, MD

Colles O. Price, Boston, MA

Nardin Samuel, Toronto, Ontario, Canada

Shane R. Stecklein, Houston, TX

Kekoa Taparra, Rochester, MN

● **CLINICAL TRIALS MINISYMPOSIUM 2 • 3:00 p.m.–5:30 p.m.**

Ballroom C, Level 3, Washington Convention Center

**Clinical Trials Minisymposium 2**

**Update, Novel Indication, and New Immuno-oncology Clinical Trials**

## ● MAJOR SYMPOSIUM • 3:00 p.m.–5:00 p.m.

East Salon A-B, Level 1, Washington Convention Center

### AACR-JCA Joint Symposium: Cancer Metabolomics

**Cochairs:** M. Celeste Simon, Philadelphia, PA; Chiaki Takahashi, Kanazawa, Japan

- 3:00 p.m. Regulation of metabolism by RB tumor suppressor gene.** Chiaki Takahashi, Kanazawa, Japan [SY22-01]\*
- 3:30 p.m. Tumor suppression by p62 through the metabolic reprogramming of the stroma.** Jorge Moscat, La Jolla, CA [SY22-02]\*
- 4:00 p.m. Multi-omics analyses of paired normal and tumor tissues reveals when and what causes altered metabolism in colorectal cancer.** Tomoyoshi Soga, Tsuruoka, Japan [SY22-03]\*
- 4:30 p.m. Metabolic adaptations and renal cancer.** M. Celeste Simon, Philadelphia, PA [SY22-04]\*

## ● MINISYMPOSIA • 3:00 p.m.–5:00 p.m.

Room 151, Level 1, Washington Convention Center

### Clinical Research

#### Clinical Biomarkers

**Cochairs:** Vincent A. Miller, Cambridge, MA; Leisha A. Emens, Baltimore, MD

- 3:05 p.m. 2986 Atezolizumab in metastatic TNBC (mTNBC): Long-term clinical outcomes and biomarker analyses.** Peter Schmid, London, United Kingdom
- 3:20 p.m. 2987 Validation and clinical feasibility of a comprehensive genomic profiling assay to identify likely immunotherapy responders through tumor mutational burden (TMB).** Daniel S. Lieber, Cambridge, MA (not eligible for CME credit)
- 3:35 p.m. 2988 Immunogenomic analyses of tumor cells and microenvironment in patients with advanced melanoma before and after treatment with nivolumab.** Timothy A. Chan, New York, NY
- 3:50 p.m. 2989 Expression of immune checkpoints proteins and their prognostic relevance in prostate cancer.** Ronald Simon, Hamburg, Germany

\*An extended abstract for this presentation is available in the Invited Abstracts section of the *Proceedings* (the abstract number is listed in brackets above).

- 4:05 p.m. **2990 Polyfunctional anti-CD19 CAR T cells determined by single-cell multiplex proteomics associated with clinical activity in patients with advanced non-Hodgkin's lymphoma.** John Rossi, Santa Monica, CA (not eligible for CME credit)
- 4:20 p.m. **2991 Integrative analysis of molecular and drug response data from clinical samples and PDTXs to identify pharmacogenomic associations in breast cancer.** Maurizio Callari, Cambridge, United Kingdom
- 4:35 p.m. **2992 Identification of *NOTCH1* inactivating mutation as a therapeutic vulnerability to PI3K/mTOR pathway inhibition in head and neck squamous cell carcinoma (HNSCC).** Vaishnavi Sambandam, Houston, TX

Room 152, Level 1, Washington Convention Center

### Clinical Research

### Innate Immune Mechanisms in Cancer Treatment

**Cochairs:** Robert J. Binder, Pittsburgh, PA; Xiaokui Zhang, Warren, NJ

- 3:05 p.m. **2993 STING signaling in breast tumor microenvironment modulates immune checkpoint blockade efficacy in the neu-N mouse model of breast cancer.** Jeremy B. Foote, Baltimore, MD
- 3:20 p.m. **2994 Engineered STING-targeting immunotherapy delays B16 melanoma tumor growth and significantly improves animal survival as compared to an immune-checkpoint inhibitor.** Andrea Amalfitano, East Lansing, MI
- 3:35 p.m. **2995 Development of a novel highly potent TLR8 selective agonist for cancer immunotherapy.** Yuxun Wang, Shanghai, China
- 3:50 p.m. **2996 Immune checkpoint protein VISTA suppresses Toll-like receptor signaling and the production of inflammatory cytokines.** Wenwen Xu, Milwaukee, WI
- 4:05 p.m. **2997 The tetravalent bispecific antibody AFM13 engages and primes innate immune cells for anti-cancer immunity.** Martin Treder, Heidelberg, Germany
- 4:20 p.m. **2998 Elotuzumab can costimulate NK cell responses by engaging SLAMF7.** Tatiana Pazina, Philadelphia, PA
- 4:35 p.m. **2999 NKG2A checkpoint receptor expression on tumor-infiltrating CD8<sup>+</sup> T cells restrains efficacy of immunotherapy.** Thorbald van Hall, Leiden, Netherlands

Room 204, Level 2, Washington Convention Center

**Clinical Research**

**Predictors and Drivers of Pediatric Tumors**

**Cochairs:** Angelika Eggert, Berlin, Germany; David Malkin, Toronto, Ontario, Canada

- 3:05 p.m. 3000 Defining the subclonal landscape of high-risk neuroblastoma.** Jo Lynne Harenza, Philadelphia, PA
- 3:20 p.m. 3001 Germline mutations in cancer predisposition genes and risk for subsequent neoplasms among long-term survivors of childhood cancer in the St. Jude Lifetime Cohort.** Zhaoming Wang, Memphis, TN
- 3:35 p.m. 3002 Therapeutic targeting of PGBD5-induced DNA repair dependence in pediatric solid tumors.** Anton Henssen, New York, NY
- 3:50 p.m. 3003 Exome analysis of known hereditary cancer genes in 122 children with rhabdomyosarcoma.** Talia Wegman-Ostrosky, Bethesda, MD
- 4:05 p.m. 3004 Comparison of somatic alterations in the genome and transcriptome of 1,705 pediatric leukemia and solid tumors: a report from the Children's Oncology Group (COG) - NCI TARGET Project.** Xiaotu Ma, Memphis, TN
- 4:20 p.m. 3005 Whole-genome sequencing identified novel non-coding mutations causal of oncogene activation in T-cell acute lymphoblastic leukemia.** Maoxiang Qian, Memphis, TN
- 4:35 p.m. 3006 Oncogenic activity of H3.3 K27M in a spontaneous DIPG mouse model.** Jon D. Larson, Memphis, TN

Room 201, Level 2, Washington Convention Center

**Epidemiology**

**Cancer Epidemiology and Prevention**

**Chair:** James V. Lacey, Duarte, CA

- 3:05 p.m. 3007 Tobacco smoking, alcohol use and risk of hepatocellular carcinoma and intrahepatic cholangiocarcinoma: The Liver Cancer Pooling Project.** Jessica Leigh Petrick, Bethesda, MD
- 3:20 p.m. 3008 Obesity, physical activity, and breast cancer survival among older breast cancer survivors in the CPS-II Nutrition Cohort.** Maret L. Maliniak, Atlanta, GA
- 3:35 p.m. 3009 Lipid-lowering drug use and risk of fatal prostate cancer in the Atherosclerosis Risk in Communities (ARIC) Study.** Alison M. Mondul, Ann Arbor, MI
- 3:50 p.m. 3010 Broad reduction in cancer incidence in patients treated with warfarin: A prospective cohort study.** Gry S. Haaland, Bergen, Norway

- 4:05 p.m. **3011 Dietary fat, fatty acids, and ovarian cancer risk: Preliminary findings from the Shanghai Women's Health Study.** Eftitan Y. Akam, Nashville, TN
- 4:20 p.m. **3012 Long-term aspirin use and total and cancer-specific mortality.** Yin Cao, Boston, MA
- 4:35 p.m. **3013 Duration of oral contraceptive use and the prevention of gynecologic cancers: Modification by modifiable factors?** Kara A. Michels, Bethesda, MD

Room 147, Level 1, Washington Convention Center

**Experimental and Molecular Therapeutics**

**Identification of Molecular Targets**

**Chair:** Giulio F. Draetta, Houston, TX

- 3:05 p.m. **3014 BCL3 over-expression contributes an in vivo growth advantage in a B-cell lymphoma xenograft model and is a risk factor for ibrutinib relapse in CLL.** Erin Hertlein, Columbus, OH
- 3:20 p.m. **3015 Selective inhibition of mutant KRAS cell and tumor growth by PHT-7.3, an inhibitor of the KRas signaling nanocluster protein Cnk1.** Roisin Delaney, La Jolla, CA
- 3:35 p.m. **3016 Identification of protein arginine methyltransferase 1 as novel epigenetic vulnerability in KRAS/p53 mutant PDAC primary patient models.** Virginia Giuliani, Houston, TX
- 3:50 p.m. **3017 Inhibition of YAP/TAZ-dependent transforming properties in LATS1/2 deleted RPE1 cells by MAPKAPK5 targeting.** Min Hwan Kim, Daejeon, Republic of Korea
- 4:05 p.m. **3018 RET rearrangements as promising therapeutic targets in breast cancer.** Bhavna S. Paratala, New Brunswick, NJ
- 4:20 p.m. **3019 The role of TACC3 in the progression from ductal carcinoma in situ to invasive breast cancer.** Maya Mathew, Maywood, IL
- 4:35 p.m. **3020 Novel therapeutic targets in head and neck cancer.** Maria Kondratyev, Oakville, Ontario, Canada

MONDAY

Ballroom A-B, Level 3, Washington Convention Center

### Immunology

#### Adaptive Immunity in the Tumor Microenvironment

**Chair:** Charles G. Drake, New York, NY

- 3:05 p.m. 3021 CCR5 inhibition: Macrophage repolarization therapy for colorectal cancer.** Niels Halama, Heidelberg, Germany
- 3:20 p.m. 3022 Novel hydrocarbon stapled peptide inhibitors suppresses  $\beta$ -catenin dependent cancer growth and immunomodulates colorectal tumors.** David Zhu, Boston, MA
- 3:35 p.m. 3023 The antitumor activity of immunotoxins is enhanced by tofacitinib.** Nathan Simon, Bethesda, MD
- 3:50 p.m. 3024 CD4+ outperform CD8+ central memory-derived CAR T cells, mediating persistent antitumor responses and long-term eradication of glioblastoma.** Dongrui Wang, Duarte, CA
- 4:05 p.m. 3025 Preclinical characterization of a novel monoclonal antibody targeting a neo-antigen expressed in ovarian and GI malignancies.** Kristen Zeligs, Bethesda, MD
- 4:20 p.m. 3026 Targeting GPX4 in tumor-associated stromal cells increases inflammatory-cell infiltration.** Shrikanta Chattopadhyay, Boston, MA
- 4:35 p.m. 3027 Dissecting mechanisms of anti-PD-1 therapy with massively parallel single-cell RNA-sequencing.** Brian C. Miller, Boston, MA

Room 206, Level 2, Washington Convention Center

### Molecular and Cellular Biology/Genetics

#### Breakthroughs in the Control, Function, and Drivers of Oncogenesis

**Cochairs:** Michael A. Dyer, Memphis, TN; Conor C. Lynch, Tampa, FL

- 3:05 p.m. 3028 Reactive oxygen species induced nuclear translocation of c-MET via INTERNET mechanism.** Mei-Kuang Chen, Houston, TX
- 3:20 p.m. 3029 An in vivo role for Argonaute 2 in KRAS driven pancreatic cancer.** Sunita Shankar, Ann Arbor, MI
- 3:35 p.m. 3030 Mutant p53-driven metastasis explored utilizing a traceable, conditional osteosarcoma model.** Rasoul Pourebrahimabadi, Houston, TX
- 3:50 p.m. 3031 PHIP is a therapeutic target for triple negative solid tumors.** David De Semir, San Francisco, CA
- 4:05 p.m. 3032 Direct regulation of alternative splicing by Smad3 through PCBP1 is essential to the tumor-promoting role of transforming growth factor beta1.** Veenu Tripathi, Bethesda, MD

4:20 p.m. **3033 The PRL family of tyrosine phosphatases as a novel drug targets in acute lymphoblastic leukemia.** Jessica S. Blackburn, Lexington, KY

4:35 p.m. **3034 A programmed ribosomal frameshifting defect potentiates the transforming activity of the JAK2-V617F mutation.** Yousuf A. Khan, Potomac, MD

Room 145, Level 1, Washington Convention Center

**Molecular and Cellular Biology/Genetics**

**High Throughput Genomics Dissecting Cancer Development and Vulnerabilities**

**Chair:** Eliezer M. Van Allen, Brookline, MA

3:05 p.m. **3035 Decomposing oncogenic transcriptional signatures to generate maps of divergent cellular states.** William J. Kim, Cambridge, MA

3:20 p.m. **3036 Real-time genomic characterization of metastatic pancreatic cancer to enable precision medicine.** Andrew J. Aguirre, Boston, MA

3:35 p.m. **3037 Dissecting treatment resistance in patients with ovarian cancer and PDX-models using single-cell RNA-sequencing.** Benjamin Izar, Cambridge, MA

3:50 p.m. **3038 Bridging the gap between NGS data and its usability: Cancer gene discovery through massive-scale transcriptomic analyses and development of a powerful web-tool for dissemination of these findings.** Yashar Niknafs, Ann Arbor, MI

4:05 p.m. **3039 Combinatorial CRISPR-Cas9 gene knockout to enable genetic interaction mapping in human cells.** John Paul Shen, La Jolla, CA

4:20 p.m. **3040 Functional genomic screening identifies USP11 as a novel regulator of ER $\alpha$  transcription in breast cancer.** Lisa Dwane, Dublin, Ireland

4:35 p.m. **3041 Duplex Sequencing detects cancer-associated mutations arising during normal aging: Clonal evolution over a century of human lifetime.** Jesse J. Salk, Seattle, WA

MONDAY



East Salon C, Level 1, Washington Convention Center

### Molecular and Cellular Biology/Genetics

## The Riddle of the Noncoders: New Functional Roles for miRNAs, Long Noncoding RNAs, and mRNAs

**Cochairs:** George A. Calin, Houston, TX; Muller Fabbri, Los Angeles, CA

- 3:05 p.m.**     **3042** *MIR142* loss-of-function mutations promote leukemogenesis through derepression of *ASH1L* resulting in increased *HOX* gene expression. Juo-Chin Yao, St. Louis, MO
- 3:20 p.m.**     **3043** A novel *Cpa3-Cre; miR-9fl/fl* mouse reveals a functional role for miR-9 in promoting mast cell invasion via up-regulation of *CMA1*. Joelle M. Fenger, Columbus, OH
- 3:35 p.m.**     **3044** Rapid decay of engulfed extracellular miRNA by *XRN1* exonuclease promotes transient epithelial-mesenchymal transition. Paul Hofman, Nice, France
- 3:50 p.m.**     **3045** Engineering Mesenchymal Stem Cells (MSCs) to support tumor-targeted delivery of exosome-encapsulated microRNA-379. Roisin M. Dwyer, Galway, Ireland
- 4:05 p.m.**     **3046** Identification of lncRNAs involved in regulation of androgen receptor splice variants in prostate cancer through CRISPR-Cas9-based screen. Tsui-Ting Ho, Jackson, MS
- 4:20 p.m.**     **3047** PRC2-mediated silencing of circRNA *CDR1as* drives *miR-7*-independent melanoma metastasis. Doug Hanniford, New York, NY
- 4:35 p.m.**     **3048** A noncoding function of *TYRP1* mRNA promotes melanoma growth. Marie-Dominique Galibert, Rennes, France

Room 144, Level 1, Washington Convention Center

### Tumor Biology

## Early Stages of Metastatic Dissemination

**Cochairs:** Paula Hurley, Baltimore, MD; Maria S. Sosa, NEW YORK, NY

- 3:05 p.m.**     **3049** Tracing the origin of disseminated tumor cells in breast cancer using single-cell sequencing. Jonas Demeulemeester, London, United Kingdom
- 3:20 p.m.**     **3050** Polymorphisms in the *arntl2* promoter affect breast cancer metastasis susceptibility. Ngoc-Han Ha, Bethesda, MD
- 3:35 p.m.**     **3051** Mechanism of early dissemination and metastasis in Her2+ mammary cancer. Julio A. Aguirre-Ghiso, New York, NY
- 3:50 p.m.**     **3052** Defining the role of EMT in breast cancer dormancy and metastasis *in vivo*. Kay T. Yeung, San Diego, CA

- 4:05 p.m.     **3053 Stability and stemness of the hybrid epithelial-mesenchymal phenotype.** Mohit Kumar Jolly, Houston, TX
- 4:20 p.m.     **3054 Tracing EMT with fluorescent biosensors (chromobodies) in living cancer cells.** Julia Maier, Reutlingen, Germany
- 4:35 p.m.     **3055 A permanent lung imaging window reveals, for the first time, the steps of extravasation, seeding and growth of early metastatic dissemination.** Sonia E. Voiculescu, Bronx, NY

● **SPECIAL SESSION • 3:00 p.m.–5:00 p.m.**

Room 202, Level 2, Washington Convention Center

**SU2C Scientific Session**  
**(not eligible for CME credit)**

**Moderator:** Phillip A. Sharp, Cambridge, MA

**Opening remarks from the SU2C Scientific Advisory Committee Chair.** Phillip A. Sharp, Cambridge, MA

**Speakers to be announced**

● **AWARDS AND LECTURES • 3:15 p.m.-4:00 p.m.**

Room 140, Level 1, Washington Convention Center

**An Update from the NCI's Acting Director**

Douglas R. Lowy, Bethesda, MD

● **AWARDS AND LECTURES • 3:30 p.m.–4:15 p.m.**

Hall D-E, Level 2, Washington Convention Center

**Inaugural AACR-Waun Ki Hong Award for Outstanding Achievement in Cancer Research**  
**Therapeutic Resistance in Melanoma**

Roger S. Lo, Los Angeles, CA

● **MEET AND GREET** • 3:30 p.m.–4:30 p.m.

AACRcentral (Booth 1125), MICR Resource Center, Lower Level, Washington Convention Center

**Meet the Director and Staff of the NCI-Center to Reduce Cancer Health Disparities**  
**(not eligible for CME credit)**

**Chair:** Sanya A. Springfield, Bethesda, MD

● **MEET AND GREET** • 4:00 p.m.–5:00 p.m.

AACR Publications Booth (2731), Lower Level, Washington Convention Center

**Meet the Editors-in-Chief of *Cancer Immunology Research*: Robert D. Schreiber, PhD and Philip D. Greenberg, MD**  
**(not eligible for CME credit)**

Robert D. Schreiber, St. Louis, MO  
Philip D. Greenberg, Seattle, WA

● **AWARDS AND LECTURES** • 4:15 p.m.–4:30 p.m.

Room 146, Level 1, Washington Convention Center

**Special WICR Presentation Honoring Dr. Charlotte Friend**  
**(not eligible for CME credit)**

**Chair:** Patricia M. LoRusso, New Haven, CT

● **NCI/NIH-SPONSORED SESSION • 4:15 p.m.–6:15 p.m.**

Marquis Ballroom Salons 3-4, Meeting Level 2, Marriott Marquis DC

**NCI's Center for Cancer Genomics and Cloud Pilots Initiatives: Using Large-Scale Data to Advance Precision Oncology (not eligible for CME credit)**

**Cochairs:** Jaime Guidry Auvil, Bethesda, MD; Jean C. Zenklusen, Bethesda, MD; Anthony Kerlavage, Bethesda, MD; Jean C. Zenklusen, Bethesda, MD; Anthony Kerlavage, Bethesda, MD

**CCG Structural Genomics Initiatives: The Cancer Genome Atlas (TGA), Clinical Trials Sequencing Program (CTSP) & Cancer Driver Discovery Program (CDDP).** Jean C. Zenklusen, Bethesda, MD

**CCG Structural Genomics Initiatives: ALCHEMIST & Exceptional Responders (ER).** Roy Tarnuzzer, Bethesda, MD

**CCG Structural Genomics Initiatives: Burkitt Lymphoma Genome Sequencing Project (BLGSP) & HIV+ Tumor Molecular Characterization Project (HTMCP).** Nicholas B. Griner, Bethesda, MD

**CCG Structural Genomics Initiatives: Therapeutically Applicable Research to Generate Effective Treatments (TARGET).** Jaime Guidry Auvil, Bethesda, MD

**CCG Functional Genomics Initiatives: Cancer Target and Driver Discovery (CTD2) Network updates.** Subhashini Jagu, Bethesda, MD

**CCG Functional Genomics Initiatives: Human Cancer Models Initiative.** Caitlyn Barrett, Bethesda, MD

**CCG Computational Genomics Initiative: Genomic Data Commons.** Zhining Wang, Bethesda, MD

**Specific Cancer Genomics Cloud Pilot Initiatives: Seven Bridges Genomics CGC.** Brandi Davis Dusenbery, Cambridge, MA

**Specific Cancer Genomics Cloud Pilot Initiatives: Institute for Systems Biology CGC.** Sheila Reynolds, Seattle, WA

**Specific Cancer Genomics Cloud Pilot Initiatives: Broad Firecloud.** Gad Getz, Cambridge, MA

**Cancer Genomics Cloud Pilot User Talks: Sensitive and specific gene fusion detection in the NCI Seven Bridges Cloud Pilot.** Julia Salzman, Stanford, CA

**Cancer Genomics Cloud Pilot User Talks: Preprocessing, alignment, and quantification of thousands of RNA-sequencing samples in the cloud for a minimal cost.** Stephen Piccolo, Provo, UT

**Cancer Genomics Cloud Pilot User Talks: Overcoming computational limitations in large scale cancer genomic projects with Firecloud.** Chip Stewart, Cambridge, MA

## ● MEET THE RESEARCH ICON • 4:30 p.m.–5:00 p.m.

AACRcentral Amphitheater (Booth 1125), Lower Level, Washington Convention Center

**Meet the Research Icon: Carlos L. Arteaga, MD, FAACR, Organized by the Associate Member Council (AMC)**  
**(not eligible for CME credit)**

Carlos L. Arteaga, Nashville, TN

## ● AWARDS AND LECTURES • 4:30 p.m.–5:15 p.m.

Room 207, Level 2, Washington Convention Center

**Fifty-Seventh Annual AACR G.H.A. Clowes Memorial Award**  
**The Makings of Human B Cell Lymphoma**

Riccardo Dalla-Favera, New York, NY

Room 146, Level 1, Washington Convention Center

**Twentieth Annual AACR-Women in Cancer Research Charlotte Friend Memorial Lectureship**  
**Multilevel Molecular Analyses in Breast Cancer: Gauging Inter- and Intra-tumor Heterogeneity and Elucidating Its Role in Treatment Response**

Anne-Lise Børresen-Dale, Oslo, Norway

## ● SPECIAL SESSION • 4:45 p.m.–6:00 p.m.

Marquis Ballroom Salons 1-2, Meeting Level 2, Marriott Marquis DC

**Social Interactome Session: Picking the Best Partner for PD1/L1 Blockade—Small Molecule Immunotherapeutics and Antibody-Drug Conjugates**  
**(not eligible for CME credit)**

**Cochairs:** Justin Guinney, Seattle, WA; Rodrigo Dienstmann, Barcelona, Spain

● FORUMS • 5:00 p.m.–6:30 p.m.

Room 147, Level 1, Washington Convention Center

**Antibody-Drug Conjugates versus Small Molecule-Drug Conjugates:  
Where Size Matters**

**Chair:** Jennifer R. Cochran, Stanford, CA

**Panel:** Philip S. Low, W. Lafayette, IN  
Peter D. Senter, Bothell, WA

Room 151, Level 1, Washington Convention Center

**Aspirin and Cancer Prevention: Ready for Prime Time?**

**Chair:** Andrew T. Chan, Boston, MA

**Panel:** John Burn, Newcastle-upon-Tyne, United Kingdom  
Ernest T. Hawk, Houston, TX

Room 144, Level 1, Washington Convention Center

**Is the Cancer Stem Cell an Induced State or a Cellular Entity?**

**Chair:** John E. Dick, Toronto, Ontario, Canada

**Panel:** Cedric Blanpain, Bruxelles, Belgium  
Geoffrey M. Wahl, La Jolla, CA

Room 150, Level 1, Washington Convention Center

**Preclinical Human Cancer Models that May Guide Therapeutic Development**

**Chair:** David A. Tuveson, Cold Spring Harbor, NY

**Panel:** Alana L. Welm, Salt Lake City, UT  
James M. Olson, Seattle, WA

Room 152, Level 1, Washington Convention Center

**Should Cancer Genetic Testing Be Offered to Everyone Regardless of Family History?**

**Chair:** Judy E. Garber, Boston, MA

**Population BRCA1/2 testing in Ashkenazi Jewish populations.** Ephrat Levy-Lahad, Jerusalem, Israel

**Considerations for broadening cancer susceptibility testing in specific populations.** William D. Foulkes, Montreal, Quebec, Canada

Room 145, Level 1, Washington Convention Center

**The Obesity-Cancer Link: Is It Reversible?**

**Chair:** Stephen D. Hursting, Chapel Hill, NC

**Panel:** Carol J. Fabian, Westwood, KS  
Henry J. Thompson, Ft. Collins, CO

**SPECIAL SESSIONS • 5:00 p.m.–6:30 p.m.**

Room 202, Level 2, Washington Convention Center

**AACR/ASCO Joint Session: Clinical Implications of Tumor Heterogeneity**

**Cochairs:** Nancy E. Davidson, Seattle, WA; Daniel F. Hayes, Ann Arbor, MI

- 5:00 p.m. Tumor heterogeneity: From Virchow to victory?** Daniel F. Hayes, Ann Arbor, MI
- 5:10 p.m. Tumor heterogeneity and therapeutic resistance.** Jeffrey A. Engelman, Cambridge, MA
- 5:30 p.m. Tracking genomic heterogeneity during cancer progression.** Elaine R. Mardis, Columbus, OH
- 5:50 p.m. Heterogeneity in breast tumors: More than the sum of its parts.** Kornelia Polyak, Boston, MA
- 6:10 p.m. Clinical implications.** Nancy E. Davidson, Seattle, WA

Ballroom A-B, Level 3, Washington Convention Center

### **Are There New Hallmarks of Cancer?**

**Cochairs:** Douglas Hanahan, Lausanne, Switzerland ; Robert A. Weinberg, Cambridge, MA

**5:00 p.m.      Recap of the current hallmarks conceptualization.** Douglas Hanahan, Lausanne, Switzerland

**5:15 p.m.      Emerging hallmarks.** Robert A. Weinberg, Cambridge, MA

**5:35 p.m.      New “enabling characteristics” and new suspects in the tumor microenvironment.** Douglas Hanahan, Lausanne, Switzerland

**5:35 p.m.      Discussion**

## ● **TOWN MEETINGS • 5:00 p.m.–7:00 p.m.**

Constitution Ballroom C-E, Level 3B, Grand Hyatt Washington

### **Minorities in Cancer Research Town Meeting (not eligible for CME credit)**

**Chair:** Rick A. Kittles, Tucson, AZ

Liberty Ballroom, Meeting Level 4, Marriott Marquis DC

### **Radiation Science and Medicine Working Group Town Hall Meeting and Networking Reception (not eligible for CME credit)**

**Chair:** Theodore S. Lawrence, Ann Arbor, MI

**Moderator:** David R. Gius, Chicago, IL

**Panelists:** Mohamed Abazeed, Cleveland, OH  
Timothy A. Chan, New York, NY  
Maximilian Diehn, Stanford, CA  
Sunitha Nagrath, Ann Arbor, MI



● **AWARDS AND LECTURES** • 5:15 p.m.–6:00 p.m.

East Salon A-B, Level 1, Washington Convention Center

**Eleventh Annual AACR Princess Takamatsu Memorial Lectureship  
Lymphoma Therapy Inspired by Functional and Structural Genomics**

Louis M. Staudt, Bethesda, MD

● **SPECIAL SESSION** • 5:30 p.m.–6:15 p.m.

Treasury Room, Meeting Level 2, Marriott Marquis DC

**Molecular Epidemiology Working Group (MEG) Networking Session with  
Early-Career Researchers, Part 2: Meet the MEG Experts  
(not eligible for CME credit)**

**Chair:** Susan E. Hankinson, Amherst, MA

**Job opportunities in industry.** Edith A. Perez, South San Francisco, CA

**Working in academia.** Luis G. Carvajal-Carmona, Davis, CA

**Working in consortia.** Sophia S. Wang, Duarte, CA

**Negotiations: What to consider and strategies to optimize.** Melissa L. Bondy, Houston, TX;  
Marc T. Goodman, Los Angeles, CA

**Advice from the NCI: Grant (including Training Grant) applications.** Leah E. Mechanic, MD;  
Jonathan S. Wiest, Bethesda, MD

● **SPECIAL SESSION** • 6:00 p.m.–8:00 p.m.

Independence Ballroom A-D, Meeting Level 4, Marriott Marquis DC

**Joint Cancer Immunology (CIMM)/Tumor Microenvironment (TME) Working Groups Evening Scientific Session**

- 6:00 p.m.**      **CIMM Chair: Opening remarks.** Patrick Hwu, Houston, TX
- 6:15 p.m.**      **Targeting the molecular switch controlling immune suppression for cancer therapy.** Judith A. Varner, La Jolla, CA
- 6:45 p.m.**      **Interferon signaling and resistance mechanisms to cancer immune checkpoint blockade.** Andy J. Minn, Philadelphia, PA
- 7:15 p.m.**      **Impacts of tumor cell-intrinsic signaling on the induction and recruitment of antitumor effector T cells.** Stefani Spranger, Chicago, IL
- 7:45 p.m.**      **TME Chair-elect: Closing remarks.** Valerie M. Weaver, San Francisco, CA

● **PROFESSIONAL ADVANCEMENT SESSION**  
6:30 p.m.–8:45 p.m.

Independence Ballroom A, Level 5B, Grand Hyatt Washington

**Minorities in Cancer Research Professional Advancement Session: Navigating the Road to a Successful Career in Cancer Research (not eligible for CME credit)**

**Cochairs:** Christopher S. Lathan, Boston, MA; Brian M. Rivers, Atlanta, GA

- 6:30 p.m.**      **Welcome**
- 6:55 p.m.**      **Roundtable Discussion 1**
- 7:40 p.m.**      **Roundtable Discussion 2**
- Roundtable Mentors to be announced**

## ● MEET-THE-EXPERT SESSIONS • 7:00 a.m.–8:00 a.m.

Room 146, Level 1, Washington Convention Center

### **Big Data, Omics, and Precision Medicine**

Yu Shyr, Nashville, TN

East Salon A-B, Level 1, Washington Convention Center

### **Breast Cancer Genomics and Biomarkers of Therapeutic Responsiveness**

Charles M. Perou, Chapel Hill, NC

Room 152, Level 1, Washington Convention Center

### **Changing Landscape of Early Phase Clinical Trials in Oncology**

Shivaani Kummar, Palo Alto, CA

Room 206, Level 2, Washington Convention Center

### **Elucidating Mechanisms to Overcome Endocrine Therapy Resistance**

Myles A. Brown, Boston, MA

East Salon C, Level 1, Washington Convention Center

### **Reprogramming the Tumor Microenvironment Using Angiotensin System Inhibitors to Enhance Cancer Treatment: Bench to Bedside**

Rakesh K. Jain, Boston, MA

Room 144, Level 1, Washington Convention Center

### **Targeting Epigenetic Dependencies in Pediatric Cancers**

Kimberly Stegmaier, Boston, MA

Room 147, Level 1, Washington Convention Center

### **Exosomal MicroRNAs Shape the Immune Response and the Biology of the Tumor Microenvironment**

Muller Fabbri, Los Angeles, CA

Room 145, Level 1, Washington Convention Center

### **Immunity and Inflammation in Pulmonary Premalignancy**

Steven M. Dubinett, Los Angeles, CA

Room 201, Level 2, Washington Convention Center

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## Community-Driven Approaches in Cancer Education and Prevention: A Model to Advance Cancer Health Equity

Brian M. Rivers, Atlanta, GA

Room 150, Level 1, Washington Convention Center

### Dynamics of the Physical Microenvironment: Relevance to Cancer

Claudia Fischbach-Teschl, Ithaca, NY

Room 207, Level 2, Washington Convention Center

### Strategies for Molecular Imaging of Cancer Immunotherapy

David R. Piwnica-Worms, Houston, TX

Room 151, Level 1, Washington Convention Center

### The Role of Surgery in Metastatic Disease

Peter L. J. Naredi, Gothenburg, Sweden

Room 143, Level 1, Washington Convention Center

### Use of Whole Genome DNA Sequencing and Single Cell RNA Sequencing to Identify Oncogenic Phenotypes of Individual Subclones Present in a Tumor

Andrea Bild, Salt Lake City, UT

Ballroom C, Level 3, Washington Convention Center

### Using Genomics in the Clinic to Predict/Harness Neoantigen Biomarkers of Checkpoint Therapy

Catherine J. Wu, Boston, MA

## ● NCI/NIH-SPONSORED SESSION • 7:00 a.m.–8:00 a.m.

Marquis Ballroom Salons 3-4, Meeting Level 2, Marriott Marquis DC

### Utilizing “Normal” Genomic Data from the GTEx Project in Cancer Research (not eligible for CME credit)

**Moderators:** Helen M. Moore, Bethesda, MD; Abhi Rao, Bethesda, MD

**Overview of GTEx program and resources.** Simona Volpi, Rockville, MD

**GTEx: Normal comparator data for cancer research.** Gad Getz, Charlestown, MA

**Characterizing tumor-adjacent normal tissue: Is it really normal?** Dvir Aran, San Francisco, CA

**Utilizing GTEx data in the Exceptional Responders program.** Linghua Wang, Houston, TX

## ● POSTER SESSIONS • 8:00 a.m.-12:00 p.m.

Exhibit Hall, Lower Level, Washington Convention Center

**(not eligible for CME credit)**

Complete titles and author listings for abstracts in the poster sessions are available in the online Itinerary Planner, the Annual Meeting App (available at [www.AACR.org/AACR2017](http://www.AACR.org/AACR2017)), and the print Poster Sessions and Exhibits Guide. A limited number of copies of the print guide are available in the Exhibit Hall.

### Experimental and Molecular Therapeutics

- Section 2 Determinants of Drug Sensitivity and Resistance
- Section 3 Differentiation Therapy
- Section 4 Drug Delivery Technology and Antibody Technology
- Section 5 Molecular Medicine
- Section 6 Molecular Targeted Therapies 1
- Section 7 Novel Mechanisms 1
- Section 8 Novel Molecular Targets 2

### Cancer Chemistry

- Section 9 Drug Design and Optimization Strategies

### Prevention Research

- Section 10 Strategies and Biomarkers for Clinical Prevention

### Epidemiology

- Section 11 Survivorship Research
- Section 34 Late-Breaking Research: Epidemiology and Prevention Research

### Molecular and Cellular Biology/Genetics

- Section 13 Autophagy and Cancer
- Section 14 Cell Growth Signaling Pathways 6
- Section 15 Epigenetics 3
- Section 16 Genomic Landscape of Breast, Prostate, Ovarian, Melanoma, and Thyroid Cancers
- Section 17 Genotype-Phenotype Associations
- Section 18 MicroRNAs and Other Noncoding RNAs as Tumor Suppressors or Oncogenes 2

- Section 19 Mitosis, Telomeres, and Proliferation Control
- Section 20 Noncoding RNAs and Cancer: Expression, Function, and Therapeutics
- Section 21 Oncogenic Transcription Factors
- Section 22 Regulation of Metabolic Pathways in Cancer

## Bioinformatics and Systems Biology

- Section 23 Sequencing Analysis and Algorithms

## Endocrinology

- Section 25 Nuclear Receptors and Endocrine Oncology Therapies

## Immunology

- Section 26 BITES Bispecifics and Checkpoints
- Section 27 Dendritic Cells as Critical Immune Targets
- Section 28 Inflammation in the Tumor Microenvironment
- Section 35 Late-Breaking Research: Immunology

## Clinical Research

- Section 29 Clinical Laboratory and Imaging Correlates
- Section 30 Innate Effectors in Immunity to Cancer
- Section 31 Liquid Biopsies 3: Circulating Tumor Cells, Extracellular Vesicles, and Exosomes
- Section 32 Predictive Biomarkers 3

## Clinical Trials

- Section 33 Clinical Trials

## Tumor Biology

- Section 36 Late-Breaking Research: Tumor Biology 2
- Section 37 Cell Culture and Animal Models of Cancer 4
- Section 38 Pediatric Cancer 2: Epigenetics and Stem Cells
- Section 39 Targeting Cancer Stem Cells
- Section 40 Tumor Cell Dissemination and the Premetastatic Niche
- Section 41 Tumor Evolution and Heterogeneity 2
- Section 42 Tumor Microenvironment 5
- Section 43 Tumor Microenvironment 6

## ● **PLENARY SESSION** • 8:15 a.m.–10:15 a.m.

Hall D-E, Level 2, Washington Convention Center  
**Opportunities in Precision Cancer Medicine**

**Chair:** Sandra J. Horning, San Francisco, CA

- 8:15 a.m.**      **Leveraging premalignant biology for immune-based cancer prevention.**  
Scott M. Lippman, La Jolla, CA
- 8:45 a.m.**      **Precision medicine and cancer health disparities.** Chanita Hughes-Halbert,  
Charleston, SC
- 9:15 a.m.**      **Precision medicine lessons from window-of-opportunity trials.** Jennifer  
Rubin Grandis, San Francisco, CA
- 9:45 a.m.**      **Drug resistance: Tailoring therapies to mechanisms to improve outcomes.**  
Alice T. Shaw, Boston, MA

## ● **PROFESSIONAL ADVANCEMENT SESSION** 8:30 a.m.–2:30 p.m.

Marquis Ballroom Salon 5, Meeting Level 2, Marriott Marquis DC  
**AACR Special Program for High School Students: The Conquest of Cancer  
and the Next Generation of Cancer Researchers**  
(not eligible for CME credit)

**Chair:** Kathleen W. Scotto, New Brunswick, NJ

- 9:00 a.m.**      **Welcome**
- 9:10 a.m.**      **Understanding cancer.** William G. Nelson, Baltimore, MD
- 9:30 a.m.**      **Keys to cancer prevention.** Lucile L. Adams-Campbell, Washington, DC
- 9:50 a.m.**      **Break**
- 10:05 a.m.**     **Message from a cancer survivor.** Jameisha B. Brown, Bryan, TX
- 10:25 a.m.**     **Why cancer research needs you!**
- 10:45 a.m.**     **Remarks from Career Development Committee and introduction of mentors**
- 11:00 a.m.**     **Tour of exhibits and posters**
- 12:30 p.m.**     **Lunch**

- 1:15 p.m.      **Cancer Bowl**
- 1:45 p.m.      **Student poster session**
- 2:20 p.m.      **Closing**

● **MEET AND GREET • 9:00 a.m.–10:00 a.m.**

AACR Publications Booth (2731), Lower Level, Washington Convention Center  
**Meet the Editor-in-Chief of *Molecular Cancer Therapeutics*:  
Napoleone Ferrara, MD**  
**(not eligible for CME credit)**

Napoleone Ferrara, La Jolla, CA

● **SPECIAL SESSION • 10:30 a.m.–11:00 a.m.**

AACRcentral Amphitheater (Booth 1125), Lower Level, Washington Convention Center  
**Cancer Immunology Working Group (CIMM) Networking Session with  
Early-Career Researchers**  
**(not eligible for CME credit)**

**Moderator and Presenter:** Drew M. Pardoll, Baltimore, MD

● **CLINICAL TRIALS PLENARY SESSION 4 • 10:30 a.m.–12:15 p.m.**

Ballroom C, Level 3, Washington Convention Center  
**Clinical Trials Plenary Session 4**



## ● MAJOR SYMPOSIA • 10:30 a.m.–12:15 p.m.

East Salon A-B, Level 1, Washington Convention Center

### Host Immunity to Oncogenic Viruses

**Chair:** Blossom A. Damania, Chapel Hill, NC

**10:30 a.m. Introduction**

**10:35 a.m. KSHV: Immune evasion and oncogenesis.** Blossom A. Damania, Chapel Hill, NC [SY23-01]\*

**11:05 a.m. Host immune responses to HPV and HPV vaccines.** Ligia Pinto, Frederick, MD [SY23-02]\*

**11:35 a.m. How does HTLV-1 cause leukemia?** Charles Bangham, London, United Kingdom [SY23-03]\*

Room 146, Level 1, Washington Convention Center

### Liquid Biopsies: Emerging Technologies to Monitor Cancer Progression and Guide Treatment Selection

**Chair:** Daniel A. Haber, Charlestown, MA

**10:30 a.m. Introduction**

**10:35 a.m. High-throughput CTC detection for noninvasive cancer monitoring.** Daniel A. Haber, Charlestown, MA [SY24-01]\*

**11:05 a.m. Personalized cancer detection and monitoring via deep sequencing of circulating tumor DNA.** Maximilian Diehn, Stanford, CA

**11:35 a.m. Inferring expressed tumor driver genes by whole-genome sequencing of plasma DNA for monitoring treatments.** Michael R. Speicher, Graz, Austria

Hall D-E, Level 2, Washington Convention Center

### Mechanisms of Primary and Acquired Resistance to Immunotherapy

**Chair:** Robert H. Vonderheide, Philadelphia, PA

**10:30 a.m. Introduction**

**10:35 a.m. Mechanisms of resistance to anti-PD-1 immunotherapy through interferon pathway mutations.** Jesse Zaretsky, Los Angeles, CA [NG04]\*

\*An extended abstract for this presentation is available in the Invited Abstracts section of the *Proceedings* (the abstract number is listed in brackets above).

- 10:55 a.m. **Antigenic strength vs. tumor microenvironment in determining cancer immunosurveillance.** Robert H. Vonderheide, Philadelphia, PA [SY25-02]\*
- 11:20 a.m. **From the clinic to the lab: Investigating response and resistance mechanisms to immune checkpoint therapy.** Padmanee Sharma, Houston, TX [SY25-03]\*
- 11:45 a.m. **Tumor and host factors regulating immunotherapy responsiveness.** Thomas Frank Gajewski, Chicago, IL [SY25-04]\*

Room 147, Level 1, Washington Convention Center  
**Molecular Signatures as a Window on Etiology**

**Chair:** Michael R. Stratton, Cambridge, United Kingdom

- 10:30 a.m. **Introduction**
- 10:35 a.m. **An overview of mutational signatures.** Michael R. Stratton, Cambridge, United Kingdom
- 11:05 a.m. **A rogues' gallery of mutational signatures and their causes and consequences.** Steven G. Rozen, Closter, NJ
- 11:35 a.m. **Local variation of mutation rate in tumors caused by differential DNA repair efficiency.** Nuria Lopez-Bigas, Barcelona, Spain

Room 150, Level 1, Washington Convention Center  
**Pediatric Cancer: Epigenetics and Chromatin**

**Chair:** Charles W. Roberts, Memphis, TN

- 10:30 a.m. **Introduction**
- 10:35 a.m. **Epigenetic vulnerabilities in pediatric solid tumors.** Rani E. George, Boston, MA
- 11:05 a.m. **SWI/SNF (BAF) complex mutations in cancer.** Charles W.M. Roberts, Memphis, TN
- 11:35 a.m. **Oncohistones in cancer: Pickpockets and epigenome hijackers.** Nada Jabado, Montréal, Quebec, Canada

\*An extended abstract for this presentation is available in the Invited Abstracts section of the *Proceedings* (the abstract number is listed in brackets above).

Room 207, Level 2, Washington Convention Center  
**Systemic Metabolic Dysfunction and Cancer**

**Chair:** Cornelia M. Ulrich, Salt Lake City, UT

**10:30 a.m. Introduction**

**10:35 a.m. Stromal contributions of adipocytes to cancer.** Philipp E. Scherer, Dallas, TX [SY28-01]\*

**11:05 a.m. The adipose-cancer link: From microenvironment to metabolomics.** Cornelia M. Ulrich, Salt Lake City, UT [SY28-02]

**11:35 a.m. Wasting metabolism: Cancer cachexia and beyond.** Stephan Herzig, Heidelberg, Germany

Room 145, Level 1, Washington Convention Center  
**Targeting DNA Damage/Repair in the Genome**

**Chair:** Samuel Aparicio, Vancouver, British Columbia, Canada

**10:30 a.m. Introduction**

**10:35 a.m. Targeting DNA repair factor dysfunction in advanced prostate cancer.** Karen E. Knudsen, Philadelphia, PA [SY29-01]\*

**11:05 a.m. Novel mechanisms of PARP inhibitor resistance.** Alan D. D'Andrea, Boston, MA [SY29-02]\*

**11:35 a.m. Targeting DNA damage/repair deficiencies in breast/ovarian cancers.** Samuel Aparicio, Vancouver, British Columbia, Canada

**RECENT ADVANCES IN DIAGNOSTICS  
 AND THERAPEUTICS RESEARCH • 10:30 a.m.–12:15 p.m.**

Room 151, Level 1, Washington Convention Center  
**Combining Imaging and Therapy in Cancer: Advances in Theranostics**

**Chair:** Carolyn J. Anderson, Pittsburgh, PA

**10:30 a.m. Theranostics with Alpha and Auger electron-emitting targeted radionuclide therapy agents.** Michael R. Zalutsky, Durham, NC

\*An extended abstract for this presentation is available in the Invited Abstracts section of the *Proceedings* (the abstract number is listed in brackets above).

- 11:00 a.m. **<sup>177</sup>Lu-labeled small molecule theranostics for metastatic melanoma and prostate cancer.** Carolyn J. Anderson, Pittsburgh, PA
- 11:30 a.m. **Recent advances in theranostics targeting PSMA and CXCR4.** Margret Schottelius, Munich, Germany

Ballroom A-B, Level 3, Washington Convention Center

### **CRISPR Technologies and the Identification of Cancer**

**Chair:** William C. Hahn, Boston, MA

- 10:30 a.m. **Systematic identification of cancer dependencies and targets.** William C. Hahn, Boston, MA
- 11:05 a.m. **Domain-focused CRISPR screening.** Christopher R. Vakoc, Cold Spring Harbor, NY
- 11:40 a.m. **CRISPR-Cas9-based genetic screens to cancer.** David M. Sabatini, Cambridge, MA

## ● **RECENT ADVANCES IN ORGAN SITE RESEARCH** 10:30 a.m.–12:15 p.m.

Room 202, Level 2, Washington Convention Center

### **Advances in Breast Cancer Therapy**

**Chair:** Leisha A. Emens, Baltimore, MD

- 10:30 a.m. **Targeting the Cyclin D:cdk-4/6 pathway in ER + breast cancer: Opportunities and challenges.** Dennis J. Slamon, Los Angeles, CA
- 11:00 a.m. **Breast cancer immunotherapy: Recent success and new strategies.** Leisha A. Emens, Baltimore, MD
- 11:30 a.m. **Targeting genomic instability for breast cancer treatment.** Andrew Tutt, London, United Kingdom

Room 144, Level 1, Washington Convention Center

### **Biology and Treatment of Hepatocellular Carcinoma**

**Chair:** J.H. Ou, Los Angeles, CA

- 10:30 a.m. Hepatitis B virus and autophagy in hepatocarcinogenesis.** J.H. Ou, Los Angeles, CA
- 11:00 a.m. Noninvasive DNA and glycoproteomic detection and characterization of hepatocellular carcinoma.** Timothy M. Block, Doylestown, PA
- 11:30 a.m. From HBV and HCV pathobiology to the prevention of hepatocellular carcinoma in the clinic.** Fabien Zoulim, Utrecht, Netherlands

### **RECENT ADVANCES IN PREVENTION RESEARCH**

10:30 a.m.–12:15 p.m.

Room 152, Level 1, Washington Convention Center

### **The Emerging Role of Inherited Genetic Risk Factors in Precision Prevention**

**Chair:** Kenneth Offit, New York, NY

- 10:30 a.m. Next generation germline sequencing to target prevention.** Kenneth Offit, New York, NY
- 11:00 a.m. Toward a biological basis for cancer prevention and early detection.** Timothy R. Rebbeck, Boston, MA
- 11:30 a.m. Recent advances in precision prevention for inherited GI cancer syndromes: The case for Lynch syndrome and FAP.** Niloy Jewel Samadder, Salt Lake City, UT

● **REGULATORY SCIENCE AND POLICY SESSION**  
10:30 a.m.–12:15 p.m.

Room 143, Level 1, Washington Convention Center

**Reference Materials for Next Generation Sequencing (NGS)-Based Tests**

**Cochairs:** Elaine R. Mardis, Saint Louis, MO; David Litwack, Silver Spring, MD

**Speakers:** Zivana Tezak, Silver Spring, MD  
Maryellen de Mars, Manassas, VA  
Girish Putcha, Columbia, SC  
Marc Salit, Stanford, CA  
Kenna Mills Shaw, Houston, TX  
Jeffrey M. Trent, Phoenix, AZ

● **SCIENCE POLICY SESSION • 10:30 a.m.-12:15 p.m.**

Room 201, Level 2, Washington Convention Center

**The Potential Impact on Cancer Patients of a Repeal or Revision of the Affordable Care Act**

**Chair:** Gilbert S. Omenn, Ann Arbor, MI

**Speakers:** Diana Chingos, Los Angeles, CA  
Chiara D'Agostino, Montclair, NJ

## ● MAJOR SYMPOSIUM • 10:30 a.m.–12:30 p.m.

Room 206, Level 2, Washington Convention Center

### **Minorities in Cancer Research Scientific Symposium: The Role of Diverse Populations in Precision Medicine**

**Cochairs:** Rick A. Kittles, Tucson, AZ; Laura Fejerman, Berkeley, CA

**10:30 a.m. Introduction**

**10:40 a.m. The mutational landscapes of African American colon cancers.** Kishore Guda, Cleveland, OH

**11:00 a.m. Polygenic risk score for breast cancer risk prediction in Latinas: Does one size fit all?** Elad Ziv, San Francisco, CA

**11:20 a.m. Prostate cancer in African Americans: Unique molecular and genomic characteristics and how they might impact treatment and prognosis.** Isaac J. Powell, Detroit, MI

**11:40 a.m. Human demographic history impacts genetic risk prediction across diverse populations.** Eimear Kenny, New York, NY

**12:00 p.m. Panel discussion**

**12:25 p.m. Closing**

## ● NCI/NIH-SPONSORED SESSION • 10:30 a.m.–12:30 p.m.

Marquis Ballroom Salons 3-4, Meeting Level 2, Marriott Marquis DC

### **Funding Opportunities for Cancer Research at Multiple National Institutes of Health (NIH) Institutes and Centers with NIH Experts (not eligible for CME credit)**

**Cochairs:** Phuong Kim Pham, Bethesda, MD; Julia T. Arnold, Bethesda, MD

**Speakers:** Julia T. Arnold, Bethesda, MD  
Alison Deckhut Augustine, Bethesda, MD  
Gary J. Murray, Bethesda, MD  
Jane W. Fountain, Bethesda, MD  
Pamela Anne Marino, Bethesda, MD  
Kimberly A. McAllister, Res. Triangle Park, NC  
Phuong Kim Pham, Bethesda, MD  
Syed Musaddaq Quadri, Bethesda, MD  
Sundar Venkatachalam, Bethesda, MD

● **SPECIAL SESSIONS** • 10:30 a.m.–12:30 p.m.

East Salon C, Level 1, Washington Convention Center

**Radiation Science and Medicine Working Group Special Scientific Session: Fundamental Advances in Induced Modeling and Signatures for Radiation Carcinogenesis**

**Moderator:** Robert G. Bristow, Toronto, Ontario, Canada

**10:30 a.m. Introduction.** Robert G. Bristow, Toronto, Ontario, Canada

**10:40 a.m. Sublethal activation of caspases and its roles in radiation therapy and carcinogenesis.** Chuan-Yuan Li, Durham, NC

**11:08 a.m. Radiation exposure alters the adaptive landscape for oncogenic events.** James V. DeGregori, Aurora, CO

**11:36 p.m. Mutational signatures of radiation exposure.** Peter J. Campbell, Cambridge, United Kingdom

**12:04 p.m. Post-radiation mutational signatures.** Jean L. Nakamura, San Francisco, CA

Location to be announced

**SU2C Innovative Research Grant Poster Session (not eligible for CME credit)**

**Moderator:** William G. Nelson, Baltimore, MD

**Targeting cellular plasticity in individual basal-type breast cancer cells.** John G. Albeck, Davis, CA

**Uncovering how Rad51 paralog mutations contribute to cancer predisposition.** Kara A. Bernstein, Pittsburgh, PA

**Phospholipid messengers as drivers of dendritic cell dysfunction in cancer.** Juan R. Cubillos-Ruiz, New York, NY

**Metabolic reprogramming using oncolytic viruses to improve immunotherapy.** Greg M. Delgoffe, Pittsburgh, PA

**“Weak links” in cancer proteostasis networks as new therapeutic targets.** Martin Kampmann, San Francisco, CA

**Algorithmically-driven quantitative combination cancer therapy engineering.** Daniel Landau, New York, NY

**Deubiquitinating enzymes as novel anticancer targets.** Li Ma, Houston, TX

**Imaging cell-level heterogeneity in solid tumors for personalized treatment.** Melissa C. Skala, Madison, WI

**Defining the metabolic dependencies of tumors.** Matthew G. Vander Heiden, Cambridge, MA

**Defining the mechanistic connections between injury, regeneration, and cancer.** Hao Zhu, Dallas, TX



## ● CAREER DISCUSSIONS • 11:30 a.m.–12:15 p.m.

AACRcentral Amphitheater (Booth 1125), Lower Level, Washington Convention Center  
**Putting Yourself on the Map: Strategies to Increase Your Visibility within the Academic Community, Organized by the Associate Member Council (AMC)**  
**(not eligible for CME credit)**

**Speakers:** Christine M. Lovly, Nashville, TN  
Nikhil Wagle, Newton, MA

## ● MEET THE RESEARCH ICON • 12:30 p.m.–1:00 p.m.

AACRcentral Amphitheater (Booth 1125), Lower Level, Washington Convention Center  
**Meet the Research Icon: Karen H. Vousden, PhD, Organized by the Associate Member Council (AMC)**  
**(not eligible for CME credit)**

Karen H. Vousden, Glasgow, United Kingdom

## ● NCI/NIH-SPONSORED SESSION • 12:30 p.m.–2:30 p.m.

Marquis Ballroom Salons 3-4, Meeting Level 2, Marriott Marquis DC  
**Technology Transfer and Intellectual Property:  
Career Opportunities for Researchers**  
**(not eligible for CME credit)**

**Cochairs:** Thomas J. Siepmann, Springfield, VA; Phuong Kim Pham, Bethesda, MD

**Speakers:** Joseph G. Contrera, Baltimore, MD  
Jason V. Cristofaro, Bethesda, MD  
Steven M. Ferguson, Rockville, MD  
Phuong Kim Pham, Bethesda, MD  
Sana Pratt, Bethesda, MD  
Rayna Bauzo Rodriguez, Alexandria, VA  
Thomas J. Siepmann, Springfield, VA

● **SPECIAL SESSION** • 12:45 p.m.–2:45 p.m.

East Salon C, Level 1, Washington Convention Center

**Pediatric Cancer Working Group Special Scientific Session: Emerging Topics in Pediatric Cancer**

**Moderators:** Crystal L. Mackall, Stanford, CA; Garrett M. Brodeur, Philadelphia, PA

**12:45 p.m. Epimutations in childhood cancer.** Frank Westermann, Heidelberg, Germany

**1:15 p.m. Exploiting metabolic dependencies encoded by MYC hyperactivation.**  
Michael D. Hogarty, Philadelphia, PA

**1:45 p.m. Identification of pediatric solid tumor vulnerabilities through integrated analysis.** Michael A. Dyer, Memphis, TN

**2:15 p.m. Qualitative and quantitative imaging in pediatric oncology.** Mary-Louise Greer, Toronto, Ontario, Canada

● **MEET AND GREET** • 1:00 p.m.–2:00 p.m.

AACR Publications Booth (2731), Lower Level, Washington Convention Center

**Meet the Editor-in-Chief of *Cancer Prevention Research*:**

**Scott M. Lippman, MD**

**(not eligible for CME credit)**

Scott M. Lippman, La Jolla, CA

## ● MAJOR SYMPOSIA • 1:00 p.m.–2:45 p.m.

Room 152, Level 1, Washington Convention Center

### **Dysregulation of MicroRNAs Leads to Target Therapy**

**Chair:** Carlo M. Croce, Columbus, OH

- 1:00 p.m. Introduction**
- 1:05 p.m. The new genetics and treatment of CLL.** Carlo M. Croce, Columbus, OH
- 1:30 p.m. MicroRNA-based therapeutics in cancer.** Frank John Slack, Boston, MA
- 1:55 p.m. TP53-mediated human cancer susceptibility is defined by epigenetic dysregulation of microRNA-34A.** Nardin Samuel, Markham, Ontario, Canada [NG05]\*
- 2:15 p.m. About Chomsky, patterns, and noncoding RNAs cancer therapeutics.** George A. Calin, Houston, TX [SY32-04]\*

Hall D-E, Level 2, Washington Convention Center

### **Immunometabolism in Immunotherapy**

**Chair:** Jonathan D. Powell, Baltimore, MD

- 1:00 p.m. Introduction**
- 1:05 p.m. Targeting metabolism to enhance immunotherapy.** Jonathan D. Powell, Baltimore, MD [SY33-01]\*
- 1:35 p.m. Fueling T cells and antitumor immunity.** Jeffrey C. Rathmell, Nashville, TN [SY33-02]\*
- 2:05 p.m. Impact of metabolic deviations in neoplastic cells on anticancer immunosurveillance.** Guido Kroemer, Villejuif, France

Room 202, Level 2, Washington Convention Center

\*An extended abstract for this presentation is available in the Invited Abstracts section of the *Proceedings* (the abstract number is listed in brackets above).

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## International Cancer Genomic Studies

**Chair:** Bin Tean Teh, Academia, Singapore

- 1:00 p.m. Introduction**
- 1:05 p.m. Insights from genomics inform molecular pathogenesis, classification, and therapy for Barrett's esophagus and esophageal adenocarcinoma.** Rebecca C. Fitzgerald, Cambridge, United Kingdom
- 1:35 p.m. Cancer genome profiling in diverse patient populations.** John D. Carpten, Los Angeles, CA
- 2:05 p.m. Updates on Asia-centric cancer genomics: Biliary tract and herbal carcinogen-related cancers.** Bin Tean Teh, Academia, Singapore

Room 146, Level 1, Washington Convention Center

## Metastasis and the Tumor Microenvironment

**Chair:** Melody A. Swartz, Chicago, IL

- 1:00 p.m. Introduction**
- 1:05 p.m. Macrophages--evildoers in cancer.** Jeffrey W. Pollard, Edinburgh, United Kingdom [SY31-02]\*
- 1:35 p.m. Cellular and molecular deconvolution of human pancreatic cancers.** Andreas Trumpp, Heidelberg, Germany
- 2:05 p.m. Lymphatic transport of tumor-secreted exosomes.** Melody A. Swartz, Chicago, IL

Ballroom A-B, Level 3, Washington Convention Center

## Single Cell Cancer Genomics: From Tumor Heterogeneity to Drug Target Discovery

**Chair:** Ido Amit, Rehovot, Israel

- 1:00 p.m. Introduction**
- 1:05 p.m. An atlas of the tumor immune system.** Dana Pe'er, New York, NY
- 1:35 p.m. Dissecting tumor heterogeneity by microtissue phenotyping and single cell transcriptomics.** Roland Eils, Heidelberg, Germany
- 2:05 p.m. The power of one: Cancer-immunology in the age of single cell genomics.** Ido Amit, Rehovot, Israel

Room 147, Level 1, Washington Convention Center

### Surgery in the 21st Century: Convergence of Genes, Imaging, and Robots

**Chair:** Dan Theodorescu, Aurora, CO

- 1:00 p.m. Introduction**
- 1:05 p.m. Imaging to stage tumor prior to surgery.** Wolfgang A. Weber, New York, NY
- 1:30 p.m. Optimizing neoadjuvant therapy prior to surgery: Biomarker and target discovery.** Dan Theodorescu, Aurora, CO [SY36-01]\*
- 1:55 p.m. Surgery using intraoperative molecular imaging.** Sunil Singhal, Philadelphia, PA
- 2:20 p.m. Monitoring cancer and predicting recurrence using cell-free tumor DNA.** Nitzan Rosenfeld, Cambridge, United Kingdom

Room 207, Level 2, Washington Convention Center

### Transformative Small Molecule Therapies

**Chair:** Kevan Michael Shokat, San Francisco, CA

- 1:00 p.m. Introduction**
- 1:05 p.m. Targeting KRAS mutant cancers with a covalent G12C-specific inhibitor.** Yi Liu, La Jolla, CA (not eligible for CME credit)
- 1:35 p.m. Ligand-directed degradation of GSPT1 by a novel cereblon modulator drives potent antitumor effects.** Philip Chamberlain, San Diego, CA [SY37-02]\*
- 2:05 p.m. Overcoming kinase inhibitor resistance and dealing with biologic redundancy: mTOR and K-Ras.** Kevan Michael Shokat, San Francisco, CA

## RECENT ADVANCES IN DIAGNOSTICS AND THERAPEUTICS RESEARCH • 1:00 p.m.–2:45 p.m.

Room 150, Level 1, Washington Convention Center

### Nanotechnology for Cancer Diagnosis and Therapy

**Chair:** Ugur Sahin, Mainz, Germany

\*An extended abstract for this presentation is available in the Invited Abstracts section of the *Proceedings* (the abstract number is listed in brackets above).

- 1:00 p.m.**     **Nanoparticle delivery of drugs and genes to desmoplastic tumors.**  
Leaf Huang, Chapel Hill, NC
- 1:30 p.m.**     **Oncolytic viruses for the treatment of cancer.** John C. Bell, Ottawa,  
Ontario, Canada
- 2:00 p.m.**     **Invited speaker.** Ugur Sahin, Mainz, Germany **(not eligible for CME credit)**

East Salon A-B, Level 1, Washington Convention Center

**New Mechanisms of Intercellular Communication: Extracellular Vesicles and Extracellular RNAs**

**Chair:** Clotilde Thery, Paris, France

- 1:00 p.m.**     **Biogenesis and functions of EVs and associated nucleic acids in tumor-immune system crosstalk.** Clotilde Thery, Paris, France
- 1:30 p.m.**     **Extracellular RNAs as liquid biopsy source for cancer diagnostics.** D. Michiel Pegtel, Amsterdam, Netherlands
- 2:00 p.m.**     **The diagnostic and therapeutic function of exosome-associated nucleic acids in tumor microenvironment.** Raghu Kalluri, Houston, TX

● **RECENT ADVANCES IN ORGAN SITE RESEARCH**  
1:00 p.m.–2:45 p.m.

Room 145, Level 1, Washington Convention Center

**The Molecular Pathogenesis of Myelodysplasia**

**Chair:** Maria Eugenia Figueroa, Ann Arbor, MI

- 1:00 p.m.**     **The genetics of myeloid neoplasia: From clonal hematopoiesis to acute leukemia.** Benjamin L. Ebert, Boston, MA
- 1:30 p.m.**     **Epigenetic deregulation of aging hematopoietic stem cells.** Maria Eugenia Figueroa, Miami, FL
- 2:00 p.m.**     **Understanding and targeting spliceosomal gene mutations in MDS.** Omar Abdel-Wahab, New York, NY

TUESDAY

## ● RECENT ADVANCES IN PREVENTION RESEARCH

1:00 p.m.–2:45 p.m.

Ballroom C, Level 3, Washington Convention Center

### Premalignant Lesions as Targets for Immunoprevention

**Chair:** Olivera J. Finn, Pittsburgh, PA

- 1:00 p.m.**     **The cystine/glutamate antiporter (xCT): A new cancer stem cell target for anticancer vaccines.** Federica Cavallo, Turin, Italy
- 1:25 p.m.**     **Vaccination in patients with low-grade glioma aiming at prevention of high-grade transformation.** Hideho Okada, San Francisco, CA
- 1:50 p.m.**     **Antigens and vaccines for prevention of nonviral cancers.** Olivera J. Finn, Pittsburgh, PA
- 2:15 p.m.**     **Synthetic DNA vaccine technology for immuno-oncology applications.** David Weiner, Philadelphia, PA

## ● REGULATORY SCIENCE AND POLICY SESSION

1:00 p.m.–2:45 p.m.

Room 143, Level 1, Washington Convention Center

### Immuno-oncology Combination Therapies

**Chair:** Geoffrey Kim, Silver Spring, MD

**Speakers:** Chao Liu, Silver Spring, MD

Amy Rosenberg, Silver Spring, MD

Daniel S. Chen, San Francisco, CA

Bernard Fox, Portland, OR

Elizabeth Jaffee, Baltimore, MD

Sreeneeranj Kasichayanula, Thousand Oaks, CA

## ● SCIENCE POLICY SESSION • 1:00 p.m.–2:45 p.m.

Room 201, Level 2, Washington Convention Center

### E-cigarettes: Are They a Public Health Threat or a Useful Cessation Tool?

**Chair:** Benjamin A. Toll, New Haven, CT

**Speaker:** Roy S. Herbst, New Haven, CT

● **POSTER SESSIONS • 1:00 p.m.-5:00 p.m.**

Exhibit Hall, Lower Level, Washington Convention Center  
**(not eligible for CME credit)**

Complete titles and author listings for abstracts in the poster sessions are available in the online Itinerary Planner, the Annual Meeting App (available at [www.AACR.org/AACR2017](http://www.AACR.org/AACR2017)), and the print Poster Sessions and Exhibits Guide. A limited number of copies of the print guide are available in the Exhibit Hall.

### **Experimental and Molecular Therapeutics**

- Section 1 Assay Technology
- Section 2 Combination Therapies and Approaches to Sensitize Cancer Cells to Drugs
- Section 3 Mechanistic Understanding of Novel Anticancer Therapies
- Section 4 Molecular Targeted Therapies 2
- Section 5 New Targets and New Drugs
- Section 6 Novel Mechanisms 2
- Section 7 Targeting Protein Kinases and DNA Repair

### **Cancer Chemistry**

- Section 8 Drug Screening Innovation

### **Prevention Research**

- Section 10 Population Science in Cancer Prevention Research

### **Epidemiology**

- Section 11 Biomarkers of Endogenous or Exogenous Exposures, Early Detection, and Biologic Effects
- Section 12 Familial and Hereditary Cancers



**Molecular and Cellular Biology/Genetics**

- Section 13 Cell Death in Cancer
- Section 14 Cell Growth Signaling Pathways 7
- Section 15 Epigenetics 4
- Section 16 Genomic Landscape of Head and Neck and GI Cancers
- Section 17 Metabolic Regulation and Cancer Therapy 1
- Section 18 MicroRNA Profiling in Cancer
- Section 20 Oncogenes and Tumor Suppressors 2
- Section 21 Post-transcriptional and Translational Regulation in Cancer
- Section 22 Tumor Hypoxia and the Unfolded Protein Response
- Section 35 Late-Breaking Research: Molecular and Cellular Biology 3

**Bioinformatics and Systems Biology**

- Section 24 Modeling and Algorithms

**Immunology**

- Section 25 Clinical Immunotherapy, Viruses, and Bacteria
- Section 26 Immunoconjugates and Antibodies
- Section 27 Innate Immune Response to Cancer

**Clinical Research**

- Section 28 Diagnostic Biomarkers
- Section 29 Epigenetics and DNA Repair
- Section 30 Immunomodulatory Agents and Therapeutics
- Section 31 Prognostic Biomarkers 1
- Section 32 Radiobiology and Radiotherapy
- Section 34 Late-Breaking Research: Clinical Research 2/Endocrinology

**Endocrinology**

- Section 34 Late-Breaking Research: Clinical Research 2/Endocrinology

**Clinical Trials**

- Section 33 Clinical Trials

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## Tumor Biology

- Section 37 Cancer Stem Cells
- Section 38 Carcinogenesis, Models, and Tumor Biology
- Section 39 Cell Culture and Animal Models of Cancer 5
- Section 41 Metastasis Suppressors and Promoters
- Section 42 Pediatric Cancer 3: Genetics and Genomics
- Section 43 Therapeutic Intervention of Cancer and Metastasis
- Section 44 Tumor Microenvironment 7

### ● MEET AND GREET • 2:00 p.m.–3:00 p.m.

AACR Publications Booth (2731), Lower Level, Washington Convention Center

**Meet the Editor-in-Chief of *Molecular Cancer Research*:**

**Karen E. Knudsen, PhD**

**(not eligible for CME credit)**

Karen E. Knudsen, Philadelphia, PA

### ● MEET AND GREET • 2:30 p.m.–3:15 p.m.

AACRcentral Amphitheater (Booth 1125), Lower Level, Washington Convention Center

**Meet the Career Development Committee**

**(not eligible for CME credit)**

**Chair:** Kathleen W. Scotto, New Brunswick, NJ

## ● **NCI/NIH-SPONSORED SESSION** • 2:45 p.m.–4:45 p.m.

Marquis Ballroom Salons 3-4, Meeting Level 2, Marriott Marquis DC

### **NCI Cross-Disciplinary Programs Supporting Integrated Cancer Research (not eligible for CME credit)**

**Moderator:** Juli Klemm, Rockville, MD

#### **IMAT, ITCR, CSBC, and PS-ON program overviews**

**Speakers:** Anthony Dickherber, Marietta, GA

Juli Klemm, Rockville, MD

Shannon Hughes, Bethesda, MD

Nastaran Zahir Kuhn, Bethesda, MD

#### **Technologies for advanced -omic analysis**

**Speakers:** Chang Lu, Blacksburg, VA

Alexander Krasnitz, Cold Spring Harbor, NY

Peter A. Sims, New York, NY

#### **Technologies for defining the cancer interactome**

**Speakers:** Zhenghe John Wang, Cleveland, OH

Joshua M. Stuart, Santa Cruz, CA

Nevan J. Krogan, San Francisco, CA

## ● **AWARDS AND LECTURES** • 3:00 p.m.–3:45 p.m.

Room 202, Level 2, Washington Convention Center

### **Eleventh Annual AACR Award for Outstanding Achievement in Chemistry in Cancer Research PROTACs: Targeted Protein Degradation as a Therapeutic Strategy**

Craig M. Crews, New Haven, CT

● **REGULATORY SCIENCE AND POLICY SESSION**  
3:00 p.m.–4:45 p.m.

Room 143, Level 1, Washington Convention Center

**New Drugs—A Review of Recently Approved Breakthrough Therapies**

**Chair:** Amy E. McKee, Silver Spring, MD

**Speakers:** Sanjeeve Balasubramaniam, Silver Spring, MD

Leslie Doros, Silver Spring, MD

Daniel Suzman, Silver Spring, MD

Deborah Armstrong, Baltimore, MD

Dan Theodorescu, Aurora, CO

Katie Armstrong, Boston, MA

● **CLINICAL TRIALS MINISYMPOSIUM 3 • 3:00 p.m.–5:00 p.m.**

Ballroom C, Level 3, Washington Convention Center

**Clinical Trials Minisymposium 3**

● **FORUM • 3:00 p.m.–5:00 p.m.**

Room 140, Level 1, Washington Convention Center

**Minorities in Cancer Research Forum: Academic Relevance:  
Mission-Driven Career**

**(not eligible for CME credit)**

**Cochairs:** Robert A. Winn, Chicago, IL; Sanya A. Springfield, Bethesda, MD

**3:00 p.m. Introduction**

**3:10 p.m. Empowering patients through research and engagement.** Victoria L. Seewaldt, Duarte, CA

**3:30 p.m. Examining cancer disparities through a basic science lens.** Clayton Yates, Tuskegee, AL

**3:50 p.m. Developing a health disparities research agenda.** Lucile L. Adams-Campbell, Washington, DC

**4:10 p.m. Panel discussion moderator and closing remarks.** Robert A. Winn, Chicago, IL

## ● MAJOR SYMPOSIUM • 3:00 p.m.–5:00 p.m.

Room 152, Level 1, Washington Convention Center

### AACR-CSCO Joint Symposium: Tumor Microenvironment

**Cochairs:** David C. Lyden, New York, NY; Ruibao Ren, Shanghai, China

- 3:00 p.m.**     **Tumor exosomes prepare premetastatic niches at organ-specific sites.**  
David C. Lyden, New York, NY
- 3:30 p.m.**     **Communication between cancer cells and immune cells in the tumor microenvironment: A therapeutic implication.** Jiuwei Cui, Changchun, China
- 4:00 p.m.**     **Decoding the premetastatic niche with label-free Raman spectroscopic imaging.** Ishan Barman, Baltimore, MD
- 4:30 p.m.**     **Targeting RAS in cancer.** Ruibao Ren, Shanghai, China

## ● LATE-BREAKING MINISYMPOSIUM • 3:00 p.m.–5:00 p.m.

Room 147, Level 1, Washington Convention Center

### Late-Breaking Research

**Chair:** TBA

**LB-000 Glycemia is positively associated with prostate cancer mortality in white and black men without diabetes when better classifying hyper- and normoglycemia using 3 biomarkers.** Michael Marrone, Baltimore, MD

**LB-000 ARID1A loss impairs enhancer-mediated gene regulation and drives colon cancer in mice.** Radhika Mathur, Boston, MA

**LB-000 Identification of patients at risk for tumor predisposition syndromes based on the evaluation of sporadic cancer exome sequencing data: Experiences from the NCT/DKTK MASTER program.** Evelin Schröck, Dresden, Germany

**LB-000 An allosteric PRC2 inhibitor targeting the H3K27me3 binding pocket of EED.** Wei Qi, Shanghai, China

**LB-000 Computational detection of oncogene-centric pathway members.** Joshua Broyde, New York, NY

**LB-000 Oncometabolites induce a BRCAness state that can be exploited by PARP inhibitors.** Ranjit S. Bindra, New Haven, CT

**LB-000 Identification of CMTM6 and CMTM4 as PD-L1 protein regulators.** Chong Sun, Amsterdam, The Netherlands

● **MINISYMPOSIA • 3:00 p.m.–5:00 p.m.**

Room 146, Level 1, Washington Convention Center

**Clinical Research**

**Liquid Biopsies 4**

**Chair:** Luis A. Diaz, Baltimore, MD; Shyamala Maheswaran, Charlestown, MA

**3:00 p.m. Introduction**

**3:05 p.m. 4949 Longitudinal monitoring of cell-free DNA in patients with small cell lung cancer reveals dynamic insights into treatment efficacy and disease relapse.** Christine M. Lovly, Nashville, TN

**3:20 p.m. 4950 The emergence of ESR1 mutations is associated with aromatase inhibitor and fulvestrant therapy.** Yanan Kuang, Boston, MA

**3:35 p.m. 4951 Dynamics of KIT exon 11 mutations in cell free plasma DNA of patients treated for advanced gastrointestinal stromal tumors: Results from the Dutch GIST bio-databank.** Pieter A. Boonstra, Groningen, Netherlands

**3:50 p.m. 4952 Whole exome sequencing of circulating tumor DNA highlights spatial and temporal tumor heterogeneity in neuroblastoma.** Gudrun Schleiermacher, PARIS, France

**4:05 p.m. 4953 Single cell signaling analysis reveals circulating tumor cell markers of drug susceptibility and tumor heterogeneity.** N. Murat Karabacak, Charlestown, MA

**4:20 p.m. 4954 Clinical validation of a cell-free DNA liquid biopsy approach for noninvasive molecular profiling.** Monica Nesselbush, Baltimore, MD

**4:35 p.m. 4955 PD-L1 expression on circulating epithelial tumor cells (CETCs) correlates with the presence of metastasis in breast cancer patients and differs from PD-L2 expression.** Monika Pizon, Bayreuth, Germany

Room 204, Level 2, Washington Convention Center

**Epidemiology**

**Molecular and Genetic Epidemiology**

**Cochairs:** Lorelei A. Mucci, Boston, MA; Celine M. Vachon, Rochester, MN

**3:00 p.m. Introduction**

**3:05 p.m. 4956 Transcriptome-wide association study identifies new prostate cancer susceptibility genes in the OncoArray data.** Nicholas Mancuso, Los Angeles, CA

**3:20 p.m. 4957 Gene expression signature of Gleason score is associated with prostate cancer outcomes in a radical prostatectomy cohort.** Min A Jhun, Seattle, WA

- 3:35 p.m.**     **4958 Prediagnostic peripheral blood DNA methylation and lung cancer survival.** Jennifer A. Doherty, Salt Lake City, UT
- 3:50 p.m.**     **4959 The RANK-axis and breast cancer risk by hormone receptor subtype: Results from the EPIC cohort.** Renée T. Fortner, Heidelberg, Germany
- 4:05 p.m.**     **4960 Recent ultraviolet radiation exposure and circulating immunosuppressive T-regulatory cells.** Dana E. Rollison, Tampa, FL
- 4:20 p.m.**     **4961 The oral microbiome and prospective risk for esophageal cancer: A population-based nested case-control study.** Brandilyn A. Peters, New York, NY
- 4:35 p.m.**     **4962 Geographic disparities in prevalence of baseline prostate inflammation and prostate cancer risk: Results from a multinational trial.** Emma H. Allott, Chapel Hill, NC

Room 144, Level 1, Washington Convention Center

**Experimental and Molecular Therapeutics**

**Novel Approaches for Experimental Therapeutics**

**Cochairs:** Lori S. Friedman, South San Francisco, CA; Pamela Carroll, Boston, MA

- 3:00 p.m.**     **Introduction**
- 3:05 p.m.**     **4963 Novel hexavalent G1TR agonists stimulate T cells and enhance memory formation.** Meinolf Thiemann, Heidelberg, Germany (**not eligible for CME credit**)
- 3:20 p.m.**     **4964 Structure, in vitro biology and in vivo pharmacodynamic characterization of a novel clinical IDO1 inhibitor.** John T. Hunt, Princeton, NJ
- 3:35 p.m.**     **4965 Sustained tumor regressions and significant improvements in therapeutic index for a lead monomethyl auristatin E nanoparticle-drug conjugate, CRLX701, with the potential for improved anticancer effects.** Liang Zhao, Waltham, MA
- 3:50 p.m.**     **4966 Phospho-proteome analyses confirm the unique mode of action of MP0274, an apoptosis inducing, biparatopic HER2-targeting DARPIn<sup>®</sup> drug candidate.** Ulrike Fiedler, Schlieren-Zurich, Switzerland (**not eligible for CME credit**)
- 4:05 p.m.**     **4967 RAF kinase inhibition synergizes with MEK inhibitors in KRAS mutant tumors.** Ivana Yen, Schlieren-Zurich, Switzerland, (**not eligible for CME credit**)
- 4:20 p.m.**     **4968 Importance of tumor microenvironment in the preclinical estrogen receptor positive breast cancer—primary tumor and bone metastasis models.** Jenni Bernoulli, Turku, Finland (**not eligible for CME credit**)
- 4:35 p.m.**     **4969 Impaired PARP1 DNA repair defines chemosensitivity in IDH1 mutant cell.** Yanxin Lu, Bethesda, MD

Room 151, Level 1, Washington Convention Center

## Experimental and Molecular Therapeutics

### Novel Small Molecular Targets and Approaches

**Cochairs:** Scott Kopetz, Houston, TX; John J. Wright, Houston, TX

**3:00 p.m.** Introduction

**3:05 p.m.** **4970 Oxidative phosphorylation as a target in triple negative breast cancer therapy.** Funda Meric-Bernstam, Houston, TX

**3:20 p.m.** **4971 IACS-010759, a novel inhibitor of complex I in Phase I clinical development to target OXPHOS dependent tumors.** Joseph R. Marszalek, Houston, TX

**3:35 p.m.** **4972 Novel Ras inhibitor DC070-547 potently and selectively blocks Ras-RBD binding, EGFR binding to Ras signaling complex, EGFR activation of Ras signaling, and growth of Ras-driven lung tumor cells.** Bing Zhu, Mobile, AL

**3:50 p.m.** **4973 Discovery of LY3214996, a selective and novel ERK1/2 inhibitor with potent antitumor activities in cancer models with MAPK pathway alterations.** Shripad V. Bhagwat, Indianapolis, IN (not eligible for CME credit)

**4:05 p.m.** **4974 Pharmacogenomic interactions in glioblastoma cell line models.** Ruben Ferrer-Luna, Boston, MA

**4:20 p.m.** **4975 A small molecule pan Id protein antagonist shows strong antitumor activity.** Paulina M. Wojnarowicz, New York, NY

**4:35 p.m.** **4976 Ricolinostat, a selective HDAC6 inhibitor with immunomodulatory properties, has significant antimelanoma activity in vitro and in vivo.** Fengdong Cheng, Washington, DC

Ballroom A-B, Level 3, Washington Convention Center

## Immunology

### Adoptive Cellular Therapy for Cancer

**Cochairs:** Michael T. Lotze, Pittsburgh, PA; Christian Hinrichs, Bethesda, MD

**3:00 p.m.** Introduction

**3:05 p.m.** **4977 Isolation and characterization of a PRAME-specific TCR with high avidity, potent antitumor efficacy and a favorable preclinical safety profile.** Manon Weis, Planegg/Martinsried, Germany

**3:20 p.m.** **4978 Adoptively transferred CMV-specific T-cells recognizing dominant and sub-dominant pp65 epitopes demonstrate improved in vivo inhibition of tumor xenografts in combination with PD-1 inhibition.** Aisha N. Hasan, New York, NY



- 3:35 p.m.**     **4979 Development of KITE-585: A fully human BCMA CAR T-cell therapy for the treatment of multiple myeloma.** Gregor B. Adams, Santa Monica, CA (not eligible for CME credit)
- 3:50 p.m.**     **4980 Engineering adoptive T cell therapy for efficacy in ovarian cancer.** Kristin G. Anderson, Seattle, WA
- 4:05 p.m.**     **4981 Extracellular spacer and co-stimulatory domains define target sensitivity and persistence of CAR T cells for the treatment of PSCA+ bone metastatic prostate cancer.** Kelly Kennewick, Duarte, CA
- 4:20 p.m.**     **4982 Regression of metastatic breast cancer after adoptive cell transfer of tumor infiltrating lymphocytes and checkpoint blockade.** Nikolaos Zacharakis, Bethesda, MD
- 4:35 p.m.**     **4983 T cells expressing chimeric PD1 receptors that contain a Dap10 costimulatory domain are a potential treatment for multiple types of cancer.** Amorette E. Barber, Farmville, VA

Room 145, Level 1, Washington Convention Center

**Molecular and Cellular Biology/Genetics**

**Exploiting Metabolic Vulnerabilities to Treat Cancer**

**Chair:** Matthew G. Vander Heiden, Cambridge, MA

- 3:00 p.m.**     **Introduction**
- 3:05 p.m.**     **4984 BNip3 suppresses hepatocellular carcinoma (HCC) growth by limiting lipogenesis.** Kay F. Macleod, Chicago, IL
- 3:20 p.m.**     **4985 Understanding the vulnerabilities in cancer cells upon inhibition of glutathione synthesis.** Isaac S. Harris, Boston, MA
- 3:35 p.m.**     **4986 Pancreatic cancers develop metabolic resistance pathways to glutaminase inhibition.** Joseph D. Mancias, Boston, MA
- 3:50 p.m.**     **4987 ASS1 downregulation facilitates cancer cell survival in acidic environment.** Ayelet Erez, Rehovot, Israel
- 4:05 p.m.**     **4988 Genome-wide CRISPR screen and metabolite profiling reveal a new mechanism of methotrexate sensitivity.** Naama Kanarek, Cambridge, MA
- 4:20 p.m.**     **4989 3D spheroid screen yields SCD1 pathway inhibitors for the treatment of cancer.** Sylvia Gruenewald, Berlin, Germany
- 4:35 p.m.**     **4990 High-throughput drug combination screening in tumor spheroids identifies context-dependent synthetic lethalties.** Wojciech Senkowski, Uppsala, Sweden

East Salon C, Level 1, Washington Convention Center

## Molecular and Cellular Biology/Genetics

### Transcriptional Regulation in Cancer Cells

**Cochairs:** Rani E. George, Boston, MA; Paul A. Northcott, Memphis, TN

**3:00 p.m.** Introduction

**3:05 p.m.** **4991 Dynamic reprogramming of the chromatin landscape in cancer: Studies in real time.** Ville Paakinaho, Bethesda, MD

**3:20 p.m.** **4992 Miswired super enhancer logic driving childhood sarcoma.** Berkley E. Gryder, Bethesda, MD

**3:35 p.m.** **4993 The role of super-enhancers and genetic boundaries in gene regulation.** Michaela Willi, Bethesda, MD

**3:50 p.m.** **4994 Understanding the MYC and WDR5 interaction at chromatin.** Alissa D. Guarnaccia, Nashville, TN

**4:05 p.m.** **4995 Premature polyadenylation causes oncogenic truncations of the tumor suppressor genes *BRCA1*, *LATS1* and *MAGI3* in breast cancer.** Thomas K. Ni, Boston, MA

**4:20 p.m.** **4996 The m<sup>6</sup>A hallmark of cancer: RNA demethylase ALKBH5 maintains tumorigenicity of glioblastoma stem-like cells by sustaining FOXM1 expression and cell proliferation.** Sicong Zhang, Houston, TX

**4:35 p.m.** **4997 Specialized microRNP and translation mechanisms in quiescent cancer cells.** Shobha Vasudevan, Boston, MA

Room 201, Level 2, Washington Convention Center

## Prevention Research

### Biomarkers and Intervention Studies

**Cochairs:** Brian M. Rivers, Atlanta, GA; Jong Y. Park, Tampa, FL

**3:00 p.m.** Introduction

**3:05 p.m.** **4998 Breast tumor FOXA1 protein expression and reproductive characteristics among African-American and European-American women.** Ting-Yuan David Cheng, Gainesville, FL

**3:20 p.m.** **4999 Stress, spiritual wellbeing and cancer risk among diverse racial faith-based communities: Elevated levels of stress proteomic biomarkers in breast cancer patients.** Padma P. Tadi Uppala, Berrien Springs, MI

**3:35 p.m.** **5000 A stromal liver gene signature predictive of HCC risk across all liver disease etiologies.** Shigeki Nakagawa, Kumamoto City, Japan

- 3:50 p.m. 5001 Functional biomarker discovery from cancer patient serum with PEP technology.** Xing Wang, St. Louis, MO
- 4:05 p.m. 5002 Premalignant squamous cell lung carcinoma lesions have distinct molecular subtypes associated with histologic progression.** Jennifer E. Beane, Boston, MA
- 4:20 p.m. 5003 Serum parathyroid hormone and risks of colorectal adenoma, adenoma recurrence and colorectal cancer, results from the Prostate, Lung, Colorectal, and Ovarian Cancer Screening Trial.** Xiangzhu Zhu, Nashville, TN
- 4:35 p.m. 5004 Chemopreventive potential of *Lactobacillus kefir* P-IF, a novel kefir product, on Ehrlich ascites carcinoma cells.** Nariman K. Badr El-Din, Mansoura, Egypt

East Salon A-B, Level 1, Washington Convention Center

### Tumor Biology

#### Microenvironmental Cues in Immune Escape and Therapy Resistance

**Cochairs:** Raghu Kalluri, Houston, TX; Valerie S. Lebleu, Houston, TX

- 3:00 p.m. Introduction**
- 3:05 p.m. 5005 Inhibition of E-selectin or E-selectin together with CXCR4 resensitizes multiple myeloma to treatment.** Barbara Muz, Saint Louis, MO
- 3:20 p.m. 5006 Correlation between PD-L1 expression and tumor clinicopathologic characteristics in early stage breast cancer.** Hadeel Assad, Southfield, MI
- 3:35 p.m. 5007 Role of the interferon-gamma response pathway in immune escape of colorectal carcinoma.** Michael Stürzl, Southfield, MI, Germany
- 3:50 p.m. 5008 The brain microenvironment mediates resistance in luminal breast cancer to PI3K inhibition through HER3 activation.** Gino B. Ferraro, Boston, MA
- 4:05 p.m. 5009 Self-renewal of hypoxic glioma stem-like cells is facilitated by secretion-mediated STAT3 activation.** Damian A. Almiron Bonnin, Lebanon, NH
- 4:20 p.m. 5010 Activation of the notch signaling pathway confers a tumor-suppressive phenotype on melanoma-associated fibroblasts.** Zhao-Jun Liu, Miami, FL
- 4:35 p.m. 5011 Tumor associated macrophages promote malignant phenotypes of disseminated human gastric cancer cells in intraperitoneal cancer immune microenvironment.** Shuichi Sakamoto, Okayama, Japan

Room 206, Level 2, Washington Convention Center

## Tumor Biology

### Models for Treatment Resistance and Drug Discovery

**Cochairs:** Alejandro Gutierrez, Brookline, MA; Yoon-Jae Cho, Portland, OR

**3:00 p.m.** Introduction

**3:05 p.m.** **5012 Mouse-human co-clinical trials demonstrate superior efficacy with combinational approach of BKM120 and erbitux over BKM120 monotherapy in patients with recurrent and/or metastatic squamous cell carcinoma of head and neck (R/M-SCCHN).** Hye Ryun Kim, Seoul, Republic of Korea

**3:20 p.m.** **5013 A 3D culture system identifies a new mode of cetuximab resistance and disease-relevant genes in colorectal cancer.** Bhuminder Singh, Nashville, TN

**3:35 p.m.** **5014 Drug discovery for NF1-associated malignant peripheral nerve sheath tumors using the zebrafish model.** Dong Hyuk Ki, Boston, MA

**3:50 p.m.** **5015 Innovative and predictive models against breast cancer.** Séverine Tabone-Eglinger, Lyon, France

**4:05 p.m.** **5016 High-throughput patient-derived 3-dimensional organoid cultures as personalized models to assess drug response and post-treatment residual disease.** Eugen Dhimolea, Boston, MA

**4:20 p.m.** **5017 Visualization of the mechanisms of metastasis within a biomimetic engineered tumor microenvironment encompassing a perfusable cylindrical 3D microvessel.** Andrew D. Wong, Baltimore, MD

**4:35 p.m.** **5018 Dissecting antigen-specific T-cell response in a novel mouse model of colon cancer.** Mary C. Beytagh, Cambridge, MA

Room 150, Level 1, Washington Convention Center

## Tumor Biology

### Tumor Stem Cell Biology

**Cochairs:** Sendurai A. Mani, Houston, TX; Jeremy N. Rich, Cleveland, OH

**3:00 p.m.** Introduction

**3:05 p.m.** **5019 HMGA1 amplifies Wnt signaling and expands the intestinal stem cell compartment to drive premalignant polyposis in transgenic mice.** Lingling Xian, Baltimore, MD

**3:20 p.m.** **5020 A genome-scale ORF screen reveals an alternative splicing program that regulates mesenchymal and stem-like cell states in breast cancer.** Ji Li, Boston, MA

- 3:35 p.m.**     **5021 Semaphorin signal via MICAL3 induces symmetrical cell division of cancer stem-like cells to confer aggressiveness in breast cancer.** Noriko Gotoh, Kanazawa, Japan
- 3:50 p.m.**     **5022 Keratin15 (Krt15) + are radio resistant and tumor-initiating cells in the mouse small intestine.** Véronique Giroux, Philadelphia, PA
- 4:05 p.m.**     **5023 Disruption of Monocarboxylate transporter-4 Basigin interaction as an effective strategy to inhibit hypoxic response, tumor growth and vascularization, and stem cell phenotype in human glioblastoma in vitro and in vivo.** Raffaella Spina, Cleveland, OH
- 4:20 p.m.**     **5024 Unmasking heterogeneity within the adult mammary stem cell compartment.** Jane E. Visvader, Parkville, Australia
- 4:35 p.m.**     **5025 EZH2 reprogramming confers intrinsic stem cell properties and developmental plasticity driving neuroendocrine prostate cancer.** Alastair Davies, Vancouver, British Columbia, Canada

## ● CAREER DISCUSSIONS • 3:30 p.m.–4:15 p.m.

AACRcentral Amphitheater (Booth 1125), Lower Level, Washington Convention Center  
**The Importance of Mentorship, Organized by the Associate Member Council (AMC)**  
**(not eligible for CME credit)**

**Speakers:** Ryan B. Corcoran, Boston, MA  
 Lindsay M. Morton, Bethesda, MD

## ● AWARDS AND LECTURES • 3:45 p.m.–4:30 p.m.

Ballroom C, Level 3, Washington Convention Center  
**Twenty-Sixth Annual AACR-American Cancer Society Award for Research Excellence in Cancer Epidemiology and Prevention**  
**Decline in Prostate Cancer Rates: Bad News?**

Meir J. Stampfer, Boston, MA

● **MEET AND GREET** • 4:30 p.m.–5:00 p.m.

AACRcentral Amphitheater (Booth 1125), Lower Level, Washington Convention Center  
**Meet the AACR Foundation: Runners for Research**  
**(not eligible for CME credit)**

**Moderator:** Danielle Triplett, Philadelphia, PA

● **AWARDS AND LECTURES** • 4:30 p.m.–5:15 p.m.

Room 207, Level 2, Washington Convention Center  
**Twenty-Second Annual AACR Joseph H. Burchenal Memorial Award for Outstanding Achievement in Clinical Cancer Research**  
**Title to be announced**

Judy E. Garber, Boston, MA

● **AWARDS AND LECTURES** • 5:00 p.m.–5:45 p.m.

Ballroom A-B, Level 3, Washington Convention Center  
**Fifth Annual AACR-CRI Lloyd J. Old Award in Cancer Immunology**  
**Vaccines for Cancer Prevention: The Risk Worth Taking**

Olivera J. Finn, Pittsburgh, PA

● **FORUMS** • 5:00 p.m.–6:30 p.m.

East Salon A-B, Level 1, Washington Convention Center  
**Early Detection of Lethal Cancers: Separating the Wheat from the Chaff**

**Chair:** Barnett S. Kramer, Rockville, MD

**Panel:** Avrum E. Spira, Boston, MA  
Laura J. Esserman, San Francisco, CA

Room 146, Level 1, Washington Convention Center

## **EMT and Metastasis: Is It Necessary?**

**Chair:** Charlotte Kuperwasser, Boston, MA

**Panel:** Vivek Mittal, New York, NY  
Thomas Brabletz, Erlangen, Germany

Room 152, Level 1, Washington Convention Center

## **Genomics and the Environment: Moving toward Precision Medicine in the Context of Health Disparities**

**Chair:** Rick A. Kittles, Tucson, AZ

**Panel:** John D. Carpten, Los Angeles, CA  
Carol R. Horowitz, New York, NY

Room 202, Level 2, Washington Convention Center

## **How Much of Cancer Is Bad Luck?**

**Chair:** John D. Groopman, Baltimore, MD

**Panel:** Cristian Tomasetti, Baltimore, MD  
Walter C. Willett, Boston, MA

Ballroom C, Level 3, Washington Convention Center

## **Optimizing the Sequence of Anticancer Therapies**

**Chair:** Christine M. Lovly, Nashville, TN

**Panel:** Roger S. Lo, Los Angeles, CA  
Alice T. Shaw, Boston, MA

Room 150, Level 1, Washington Convention Center

## **Precision Medicine: Will It Be of Benefit in Pediatric Cancer Patients?**

**Chair:** John M. Maris, Philadelphia, PA

**Panel:** Sabine Mueller, San Francisco, CA  
Charles G. Mullighan, Memphis, TN

● **NCI/NIH-SPONSORED SESSION** • 5:00 p.m.–6:30 p.m.

Marquis Ballroom Salons 3-4, Meeting Level 2, Marriott Marquis DC  
**NCI's Provocative Questions Initiative: Objectives, Outcomes,  
Lessons Learned**  
**(not eligible for CME credit)**

**Chair:** Philip J. Daschner, Rockville, MD

**Speakers:** Phillip J. Daschner, Rockville, MD  
Tiffany A. Wallace, Rockville, MD  
Kelly Filipski, Bethesda, MD  
Wendy Cozen, Los Angeles, CA  
David L. Waning, Hershey, PA

● **SPECIAL SESSION** • 5:00 p.m.–6:30 p.m.

Room 147, Level 1, Washington Convention Center  
**Advancing Cancer Therapy Using Data from the NIH LINCS Program**

**Cochairs:** Peter K. Sorger, Boston, MA; Laura M. Heiser, Portland, OR

- 5:00 p.m.**      **Introduction to the NIH LINCS Program.** Peter K. Sorger, Boston, MA
- 5:15 p.m.**      **Navigating the global landscape of cellular fate with LINCS data.**  
Avi Ma'ayan, New York, NY
- 5:30 p.m.**      **Mining LINCS drug-response databases to identify novel activities of  
investigational breast cancer therapeutics.** Caitlin Mills, Boston, MA
- 5:45 p.m.**      **The L1000 Platform and Next Generation Connectivity Map.** Todd R. Golub,  
Cambridge, MA
- 6:00 p.m.**      **Systematic study of the influence of the microenvironment on cancer  
cell phenotypes: An overview of the MEP-LINCS center.** Laura M. Heiser,  
Portland, OR
- 6:15 p.m.**      **Proteomic connectivity maps of chromatin and signaling for functional drug  
discovery.** Jake Jaffe, Cambridge, MA



## ● MEET-THE-EXPERT SESSIONS • 7:00 a.m.–8:00 a.m.

Room 152, Level 1, Washington Convention Center

### **Analysis of Breast Cancer Development, Therapy Response, and Resistance in Mouse Models**

Jos Jonkers, Amsterdam, Netherlands

Room 206, Level 2, Washington Convention Center

### **The Emerging Role of lncRNAs in Cancer Biology**

Jean-Christophe W. Marine, Ghent, Belgium

Room 151, Level 1, Washington Convention Center

### **Elucidating How Mutations in Calreticulin Cause Myeloproliferative Neoplasms**

Ann Mullally, Boston, MA

Room 201, Level 2, Washington Convention Center

### **EGFR and HER2: Network Signaling and Next-Generation Drugs**

Yosef Yarden, Rehovot, Israel

Room 207, Level 2, Washington Convention Center

### **Genome-Inspired Approaches to Oncology Drug Discovery**

Todd R. Golub, Cambridge, MA

Room 143, Level 1, Washington Convention Center

### **Improve Your Research with a New-Technologies Strategy**

James V. Lacey, Duarte, CA

Room 144, Level 1, Washington Convention Center

### **Intermittent Dosing of Targeted Therapy to Prevent the Development of Resistance**

Mark R. Middleton, Oxford, United Kingdom

Room 204, Level 2, Washington Convention Center

### **Mitochondria and Cancer**

Dario C. Altieri, Philadelphia, PA

Room 145, Level 1, Washington Convention Center

**Optimizing Clinical Trials for Therapeutic Development**

Steven Piantadosi, Los Angeles, CA

Room 150, Level 1, Washington Convention Center

**Patterns of Somatic Mutation in Cancer**

Michael S. Lawrence, Cambridge, MA

East Salon C, Level 1, Washington Convention Center

**Progression of Premalignant Lesions**

Akinyemi Ojesina, Birmingham, AL

Room 202, Level 2, Washington Convention Center

**Using Mismatch Repair Deficiency as a Predictive Biomarker of Response to Checkpoint Blockade**

Dung T. Le, Baltimore, MD

● **NCI/NIH-SPONSORED SESSION • 7:15 a.m.–8:00 a.m.**

Marquis Ballroom Salons 3-4, Meeting Level 2, Marriott Marquis DC

**The NCI PREVENT Cancer Preclinical Drug Development Program  
(not eligible for CME credit)**

**Speaker:** Robert H. Shoemaker, Bethesda, MD

## ● **PLENARY SESSION** • 8:00 a.m.–10:00 a.m.

Hall D-E, Level 2, Washington Convention Center

### **Convergence, Computation, and Cancer**

**Chair:** Chi Van Dang, Philadelphia, PA

- 8:00 a.m.**      **G-quadruplexes and DNA dynamics.** Shankar Balasubramanian, Cambridge, United Kingdom [PL04-01]\*
- 8:30 a.m.**      **Mathematical modeling of cancer evolution.** Franziska Michor, Boston, MA
- 9:00 a.m.**      **Activity-based biomarkers for noninvasive cancer detection.** Sangeeta N. Bhatia, Cambridge, MA
- 9:30 a.m.**      **Novel approaches for personalizing treatments: From nutrition to cancer.** Eran Segal, Rehovot Israel, Israel [PL04-04 ]\*

## ● **POSTER SESSIONS** • 8:00 a.m.-12:00 p.m.

Exhibit Hall, Lower Level, Washington Convention Center

### **(not eligible for CME credit)**

Complete titles and author listings for abstracts in the poster sessions are available in the online Itinerary Planner, the Annual Meeting App (available at [www.AACR.org/AACR2017](http://www.AACR.org/AACR2017)), and the print Poster Sessions and Exhibits Guide. A limited number of copies of the print guide are available in the Exhibit Hall.

### **Experimental and Molecular Therapeutics**

- |            |   |
|------------|---|
| Section 1  | Anticancer Precision Clinical Pharmacology                        |
| Section 2  | Epigenetic Agents   |
| Section 3  | Gene- and Vector-Based Therapy                                    |
| Section 4  | Novel Chemotherapies  |
| Section 5  | Novel Drug Delivery Technology                                    |
| Section 6  | Oncogenes and Tumor Suppressors as Therapeutic Targets            |
| Section 7  | Preclinical Radiotherapeutics                                     |
| Section 8  | Transport and Metabolism  |
| Section 34 | Late-Breaking Research: Experimental and Molecular Therapeutics 2 |

\*An extended abstract for this presentation is available in the Invited Abstracts section of the *Proceedings* (the abstract number is listed in brackets above).



## Cancer Chemistry

Section 9 Chemical Biology and Structure Biology Approach to Study Cancers

## Prevention Research

Section 11 Chemoprevention and Cancer

## Epidemiology

Section 12 Health Disparities, Screening, and Risk Prediction

Section 13 Nutrition and Anthropometric Features

## Molecular and Cellular Biology/Genetics

Section 14 Cell Growth Signaling Pathways 8

Section 15 Development of High Throughput Analytic Methods

Section 16 Epigenetics 5

Section 17 Genomic Analyses of Circulating Tumor Material and RNA

Section 18 Metabolic Regulation and Cancer Therapy 2

Section 19 MicroRNA Diagnostics and Therapeutics in Cancer

Section 20 Oxidative Stress, Autophagy, and Senescence

Section 21 Regulation of Oncogenic Transcription

Section 22 Tumor Suppressors 2

Section 36 Late-Breaking Research: Molecular and Cellular Biology 4

## Bioinformatics and Systems Biology

Section 23 Systems Biology Approaches to Cancer Diagnostics and Disease Management

## Immunology

Section 24 Enzymes and Hormones and Metabolism in Tumor Immunity

Section 25 Immune Checkpoints and Immunosurveillance

## Clinical Research

Section 27 Clinical and Translational Endocrine Oncology

Section 28 Innate Immunity to Generate Adaptive Immunity

Section 29 Liquid Biopsies 5: cfDNA, MicroRNA, and Protein

Section 30 Prognostic Biomarkers 2

**Clinical Trials**

Section 33 Clinical Trials

**Tumor Biology**

- Section 37 Carcinogenesis and Human Tumors  
 Section 38 Cell Culture and Animal Models of Cancer 6  
 Section 39 Effects of Tumor-Microenvironment Crosstalk on Metastasis  
 Section 40 Pediatric Cancer 4: Immunology, Signaling, and the Tumor Microenvironment  
 Section 41 Radioprotectors, Radiosensitizers, and Radiation Resistance  
 Section 42 Tumor Cell Adhesion and Drug Resistance  
 Section 43 Tumor Microenvironment 8  
 Section 44 Tumor Microenvironment 9

● **CAREER DISCUSSIONS • 10:15 a.m.–11:00 a.m.**

AACRcentral Amphitheater (Booth 1125), Lower Level, Washington Convention Center  
**Searching for the Right Postdoctoral Position, Organized by  
 the Associate Member Council (AMC)**  
**(not eligible for CME credit)**

**Speakers:** Shih-Wen “Wenny” Lin, Stanford, CA  
 Jessica N. Clague Dehart, Duarte, CA

● **NCI/NIH-SPONSORED SESSION • 10:15 a.m.–11:45 a.m.**

Marquis Ballroom Salons 3-4, Meeting Level 2, Marriott Marquis DC  
**NCI Funding Opportunities to Increase Diversity in Cancer Research**  
**(not eligible for CME credit)**

**Moderator:** Peter O. Ogunbiyi, Bethesda, MD

**Speakers:** Alison Lin, Bethesda, MD  
 Nicole E. McNeil, Bethesda, MD  
 John O. Ojeifo, Bethesda, MD  
 Davyd Chung, Bethesda, MD  
 Behrouz Davani, Bethesda, MD

● **MAJOR SYMPOSIA • 10:15 a.m.–12:00 p.m.**

Room 207, Level 2, Washington Convention Center

**Bridging Big Data and Clinical Practice**

**Chair:** Li Ding, St. Louis, MO

**10:15 a.m. Introduction**

**10:20 a.m. Beyond the exome: Noncoding alterations in cancer genomes.** Matthew L. Meyerson, Boston, MA

**10:50 a.m. Identification of novel modulators of response to immune checkpoint blockade in lung cancer patients through the marrying of clinical and genomic data.** Phil Stephens, Cambridge, MA [SY40-02]\* (not eligible for CME credit)

**11:20 a.m. The application of integrative sequencing for precision oncology.** Arul M. Chinnaiyan, Ann Arbor, MI

Ballroom A-B, Level 3, Washington Convention Center

**CAR T Cell Cancer Immunotherapy: Refinements for B Cell Malignancies and Emerging Opportunities in Solid Tumors**

**Chair:** Michael C. Jensen, Seattle, WA

**10:15 a.m. Introduction**

**10:20 a.m. Engineering next-generation CAR T cells using synthetic biology-inspired technologies.** Michael C. Jensen, Seattle, WA

**10:50 a.m. Defining the limitations of CD19CAR immunotherapy in pediatric ALL and development of effective countermeasures.** Terry J. Fry, Bethesda, MD

**11:20 a.m. Progress and challenges in CAR T cell therapy for brain tumors.** Christine E. Brown, Duarte, CA

\*An extended abstract for this presentation is available in the Invited Abstracts section of the *Proceedings* (the abstract number is listed in brackets above).

Hall D-E, Level 2, Washington Convention Center

### CRISPR and Functional Genomics

**Chair:** Feng Zhang, Cambridge, MA

**10:15 a.m. Introduction**

**10:20 a.m. Mechanisms of oncogenic signaling and therapeutic resistance in lymphoma revealed by CRISPR-Cas9 screens.** Louis M. Staudt, Bethesda, MD

**10:50 a.m. Linking cancer vulnerabilities to therapeutic development.** William R. Sellers, Cambridge, MA

**11:20 a.m. High-throughput interrogation of cancer drug-resistance phenotypes.** Feng Zhang, Cambridge, MA

Ballroom C, Level 3, Washington Convention Center

### Myeloid Cell Reprogramming in the Tumor Microenvironment

**Chair:** Michele De Palma, Lausanne, Switzerland

**10:15 a.m. Introduction**

**10:20 a.m. Dissecting tumor myeloid cell heterogeneity.** Miriam Merad, New York, NY

**10:50 a.m. Reprogramming tumor macrophages for antitumor immunity.** Michele De Palma, Lausanne, Switzerland

**11:20 a.m. Tissue-specificity of myeloid-mediated T-cell suppression in solid tumors.** Lisa M. Coussens, Portland, OR

East Salon A-B, Level 1, Washington Convention Center

### Proteomics Landscape of Cancer

**Chair:** Matthias Mann, Martinsried, Germany

**10:15 a.m. Introduction**

**10:20 a.m. Translational mass spectrometry: Making the genome actionable for cancer patients.** Amanda G. Paulovich, Seattle, WA

**10:50 a.m. A human pathology atlas: Expression profiles related to clinical outcome of cancers.** Mathias Uhlen, Solna, Sweden

**11:20 a.m. Mass spectrometry-based proteomics to study cancer development and progression.** Matthias Mann, Martinsried, Germany

Room 146, Level 1, Washington Convention Center

## **Role of Interferon Pathway Signaling in Cancer Immunotherapy**

**Chair:** Antoni Ribas, Los Angeles, CA

**10:15 a.m. Introduction**

**10:20 a.m. Description of the IFN receptor pathway signaling and its relevance to cancer.** Leonidas C. Platanias, Chicago, IL

**10:50 a.m. The independent roles of Type I IFN and IFN-gamma in natural and therapeutically induced immune responses to cancer.** Robert D. Schreiber, St. Louis, MO

**11:20 a.m. Resistance to checkpoint blockade through IFN-g pathway alterations.** Antoni Ribas, Los Angeles, CA

## **RECENT ADVANCES IN DIAGNOSTICS AND THERAPEUTICS RESEARCH • 10:15 a.m.–12:00 p.m.**

Room 202, Level 2, Washington Convention Center

## **Novel Diagnostics and Patient Selection Approaches for Therapeutic Trials**

**Chair:** Scott Kopetz, Houston, TX

**10:15 a.m. Gene expression studies in breast cancer trials: Moving past ER and HER2.** Lisa A. Carey, Chapel Hill, NC

**10:45 a.m. Realities and opportunities of DNA-based molecular profiling studies.** Scott Kopetz, Houston, TX

**11:15 a.m. Tumor models as novel diagnostics: Finding drugs that work.** James H. Doroshow, Bethesda, MD

Room 152, Level 1, Washington Convention Center

## **Novel Targets in Hematologic Malignancies**

**Chair:** Mark Dawson, Victoria, Australia

**10:15 a.m. Targeting BCL2 and MCL1 in blood cancers: Practice, pitfalls, and possibilities.** Andrew Roberts, Parkville Victoria, Australia

**10:45 a.m. Mechanisms of response and resistance to epigenetic therapies in myeloid malignancies.** Mark Dawson, Victoria, Australia

**11:15 a.m. Novel therapeutic opportunities for germinal center B-cell lymphomas.** Laura Pasqualucci, New York, NY



## ● RECENT ADVANCES IN ORGAN SITE RESEARCH

10:15 a.m.–12:00 p.m.

Room 151, Level 1, Washington Convention Center

### Bladder Cancer

**Chair:** Ellen C. Zwarthoff, Rotterdam, Netherlands

- 10:15 a.m. Molecular subgrouping of bladder cancer, tumor clonality, and ctDNA follow-up in the clinic.** Torben F. Ørntoft, Aarhus N, Denmark
- 10:40 a.m. Genomic dissection of the clonal evolution dynamics of chemotherapy-resistant urothelial carcinoma.** Bishoy M. Faltas, New York, NY [NG06]\*
- 11:00 a.m. Bladder cancer heterogeneity: Drivers or progenitor cells?** Xue-Ru Wu, New York, NY
- 11:25 a.m. Diagnostic and prognostic markers for patient management.** Ellen C. Zwarthoff, Rotterdam, Netherlands

Room 145, Level 1, Washington Convention Center

### Glioblastoma

**Chair:** Michael Prados, San Francisco, CA

- 10:15 a.m. Glioblastoma: Where we are, where we have been, and what is next.** Michael Prados, San Francisco, CA
- 10:30 a.m. Immunotherapy for malignant gliomas: Current approaches, challenges, and opportunities.** Duane A. Mitchell, Gainesville, FL
- 10:55 p.m. Missing link in CNS anticancer drug development: Early markers of (sub) clinical effect.** Timothy Cloughesy, Los Angeles, CA
- 11:20 a.m. GBM AGILE: A collaborative next-generation clinical trial and learning system for GBM.** Anna D. Barker, Scottsdale, AZ

● **RECENT ADVANCES IN PREVENTION RESEARCH**

10:15 a.m.–12:00 p.m.

Room 150, Level 1, Washington Convention Center

**Lung Cancer Screening: Biomarkers, Lung Cancer Modeling, and Smoking Cessation**

**Chair:** Stephanie R. Land, Rockville, MD

- 10:15 p.m. Smoking cessation in the context of lung cancer screening: State of the research.** Stephanie R. Land, Rockville, MD
- 10:45 a.m. Modeling smoking trends and lung cancer screening: Changes in eligibility and the potential impact of joint screening/cessation programs on smoking and lung cancer.** Rafael Meza, Ann Arbor, MI
- 11:15 a.m. IL-17 pathway is up-regulated in squamous cell lung cancer arising in patients with COPD.** Jill M. Siegfried, Minneapolis, MN

Room 147, Level 1, Washington Convention Center

**Obesity, Inflammation, and Cancer Prevention**

**Chair:** Dipali Sharma, Baltimore, MD

- 10:15 a.m. Molecular connections between obesity and cancer.** Dipali Sharma, Baltimore, MD
- 10:45 a.m. Inflammation and cancer: The role of exercise.** Melinda L. Irwin, New Haven, CT
- 11:15 a.m. Inflammation and cancer: The role of caloric restriction and weight loss.** Wendy Demark-Wahnefried, Birmingham, AL

● **PLENARY SESSION • 12:15 p.m.–1:30 p.m.**

Hall D-E, Level 2, Washington Convention Center

**AACR Annual Meeting 2017 Highlights: Vision for the Future**

**12:20 p.m. Basic science and translational implications.** Kornelia Polyak, Boston, MA

**12:40 p.m. Therapeutics.** Elizabeth M. Jaffee, Baltimore, MD

**1:00 p.m. Early detection and prevention research.** Nancy E. Davidson, Seattle, WA

**1:20 p.m. Wrap-up and vision for the future.** Michael A. Caligiuri, Columbus, OH

● **MINISYMPOSIUM • 10:30 a.m.–12:00 p.m.**

Room 143, Level 1, Washington Convention Center

**Recent Trends in Regulatory Science**

**Cochairs:** Julia Beaver, Silver Springs, MD; Martha Donoghue, Silver Springs, MD

**5946 Universal consent for biospecimens: A novel electronic/video consent.** Arash Naeim, Los Angeles, CA

**5947 The NCI Best Practices for Biospecimen Resources: 2016 revised recommendations.** Abhi Rao, Bethesda, MD

**LB-000 A critical evaluation of genomic data sharing: Barriers to accessing pediatric cancer genomic datasets: A Treehouse Childhood Cancer Initiative experience.** Katrina Learned, Santa Cruz, CA