

# Conference Program

## Saturday, October 17

---

**7:00 p.m.-8:30 p.m. Welcome and Keynote Lectures**

Grand Ballroom E-K

*Session Chairperson: Jane E. Visvader, Walter and Eliza Hall Institute of Medical Research, Parkville, Australia*

**Potential applications of genomics in patients with metastatic breast cancer**

Fabrice Andre, Institut Gustave-Roussy, Villejuif, France

**Harnessing genetic dependencies in cancer therapy**

Alan Ashworth, University of California, San Francisco, CA

**8:30 p.m.-10:00 p.m. Opening Reception**

Grand Ballroom Foyer

## Sunday, October 18

---

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

Grand Ballroom Foyer

**8:30 a.m.-10:30 a.m. Plenary Session 1: Genomics - Sporadic and Hereditary**

Grand Ballroom E-K

*Session Chairperson: Charles M. Perou, Lineberger Comprehensive Cancer Center, UNC School of Medicine, Chapel Hill, NC*

**Molecular classification of breast tumors based on multiplatform analysis**

Charles M. Perou

**A compendium of 560 whole-genome sequenced breast cancers**

Serena Nik-Zainal, Wellcome Trust Sanger Institute, Cambridge, United Kingdom

**Genetic determinants of breast cancer risk**

Douglas Easton, University of Cambridge, Cambridge, United Kingdom

**Spatial systems biology of cancer**

Joe W. Gray, Oregon Health and Science University, Portland, OR

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

Grand Ballroom Foyer

**11:00 a.m.-1:00 p.m.      Plenary Session 2: The Differentiation Hierarchy and Cancer**  
Grand Ballroom E-K  
*Session Chairperson: Jane E. Visvader, Walter and Eliza Hall Institute of Medical Research, Parkville, Australia*

**Using the breast epithelial hierarchy to dissect tumor heterogeneity**  
Jane E. Visvader

**Developmental insights into breast cancer intratumoral heterogeneity**  
Jeffrey M. Rosen, Baylor College of Medicine, Houston, TX

**Protein C receptor as a surface marker of mammary stem cells and its implication in breast cancer**  
Yi Ariel Zeng, Shanghai Institute of Biochemistry and Cell Biology, Shanghai, China

**Sox10 regulates stem/progenitor and mesenchymal cell states in mammary epithelial cells**  
Christopher Dravis, Salk Institute for Biological Studies, La Jolla, CA

**1:15 p.m.-1:45 p.m.      Short Talks from Proffered Papers**  
Grand Ballroom E-K  
*Session Chairperson: Thomas (Trey) F. Westbrook, Baylor College of Medicine, Houston, TX*

**Understanding the role of BCL11A in triple-negative breast cancer\***  
Walid T. Khaled, University of Cambridge, Cambridge, United Kingdom

**The spliceosome is a therapeutic vulnerability in MYC-driven breast cancer\***  
Tiffany Hsu, Baylor College of Medicine, Houston, TX

**GLUT1 is required for induction of mammary tumorigenesis by activated ErbB2/HER2/Neu\***  
Steven M. Anderson, University of Colorado Anschutz Medical Campus, Aurora, CO

**1:45 p.m.-4:15 p.m.      Poster Session A with Lunch**  
Grand Ballroom A-D

**4:30 p.m.-6:00 p.m.      Plenary Session 3: Breast Tumor Heterogeneity (Intratumor and Intertumoral)**  
Grand Ballroom E-K  
*Session Chairperson: Jorge S. Reis-Filho, Memorial Sloan Kettering Cancer Center, New York, NY*

**Functional and clinical relevance of intratumor heterogeneity in breast**  
Kornelia Polyak, Dana-Farber Cancer Institute, Boston, MA

**Clonal analysis of the in vivo growth of normal and de novo transformed human mammary cells**  
Connie J. Eaves, BC Cancer Agency/Terry Fox Laboratory, Vancouver, BC, Canada

**Breast cancer inter- and intratumor genetic heterogeneity**  
Jorge S. Reis-Filho

**6:00 p.m.-                      Evening Off/Dinner on Own**

\*Short talks from proffered papers

## Monday, October 19

---

**7:30 a.m.-8:30 a.m. Continental Breakfast**  
Grand Ballroom Foyer

**8:30 a.m.-10:30 a.m. Plenary Session 4: Tumor Microenvironment and Immunotherapy**  
Grand Ballroom E-K  
*Session Chairperson: Valerie M. Weaver, University of California Medical Center, San Francisco, CA*

**Tissue tension programs tumor aggression**  
Valerie M. Weaver

**Immune control of breast cancer metastasis**  
Alana L. Welm, Oklahoma Medical Research Foundation, Oklahoma City, OK

**Importance of anti-host immunity for breast cancer patients**  
Sherene Loi, Peter MacCallum Cancer Center, Camberwell, Australia

**Personalized immunotherapy**  
Naiyer Rizvi, Columbia University, New York, NY

**10:30 a.m.-11:00 a.m. Break**  
Grand Ballroom Foyer

**11:00 a.m.-1:00 p.m. Plenary Session 5: Animal Models and Their Applications**  
Grand Ballroom E-K  
*Session Chairperson: Elaine R. Mardis, Washington University School of Medicine, St. Louis, MO*

**Development of targeted therapeutics using patient-derived xenografts**  
Michael T. Lewis, Baylor College of Medicine Cancer Center, Houston, TX

**Targeting the BCL-2 family in breast cancer**  
Geoffrey J. Lindeman, Walter and Eliza Hall Institute of Medical Research, Parkville, Australia

**Genomics of a STAT1 knockout mouse model of human ER+ breast cancer**  
Elaine R. Mardis

**Modeling and targeting RB-deficiency in triple-negative breast cancer**  
Eldad Zacksenhaus, Toronto General Hospital, Toronto, ON, Canada

**1:00 p.m.-3:00 p.m. Free Time/Lunch on Own**

**3:00 p.m.-5:00 p.m. Plenary Session 6: Monitoring Metastasis and CTCs**  
Grand Ballroom E-K  
*Session Chairperson: Nicholas C. Turner, Institute of Cancer Research,  
Breakthrough Breast Cancer Research Center, London, United Kingdom*

**Circulating tumor DNA and prediction of relapse in early breast cancer**  
Nicholas C. Turner

**Circulating tumor cells, prognosis in metastatic breast cancer, and the SWOG S0500 study**  
Jeffrey B. Smerage, University of Michigan Comprehensive Cancer Center, Ann Arbor, MI

**A stem cell program in early human metastatic breast cancer cells**  
Zena Werb, UCSF Helen Diller Family Comprehensive Cancer Center, San Francisco, CA

**Deep sequencing of circulating tumor DNA for personalized cancer detection and monitoring**  
Maximilian Diehn, Stanford University, Stanford, CA

**5:00 p.m.-5:30 p.m. Short Talks from Proffered Papers**  
Grand Ballroom E-K  
*Session Chairperson: Jeffrey M. Rosen, Baylor College of Medicine, Houston, TX*

**Tissue tension promotes mammary stemness and breast cancer aggression\***  
Jason J. Northey, University of California, San Francisco, CA

**The effect of chemotherapy on HER2+ breast cancer heterogeneity measured by STAR-FISH: Detection of PIK3CA mutation and HER2 amplification at single-cell level in situ\***  
Michalina Janiszewska, Dana-Farber Cancer Institute, Boston, MA

**Modeling the tumor microenvironment to identify novel loss of function mutations in breast cancer progression\***  
Racheal Natrajan, The Institute of Cancer Research, London, United Kingdom

**5:30 p.m.-7:30 p.m. Poster Session B/Reception**  
Grand Ballroom A-D

\*Short talks from proffered papers

## Tuesday, October 20

---

**7:30 a.m.-8:30 a.m. Continental Breakfast**  
Grand Ballroom Foyer

**8:30 a.m.-10:00 a.m. Plenary Session 7: Targeted Therapies in Luminal Breast Cancer**  
Grand Ballroom E-K  
*Session Chairperson: Matthew J. Ellis, Lester and Sue Smith Breast Center, Baylor College of Medicine, Houston, TX*

**Identifying and prioritizing targets in ER+ breast cancer**  
Matthew J. Ellis

**PI3K/AKT/TOR pathway: Therapeutic targeting and role in breast cancer progression**  
Carlos L. Arteaga, Vanderbilt-Ingram Cancer Center, Nashville, TN

**Targeting cyclin-dependent kinases in breast cancer**  
Richard S. Finn, University of California, Los Angeles, CA

**10:00 a.m.-10:15 a.m. Break**  
Grand Ballroom Foyer

**10:15 a.m.-11:45 a.m. Plenary Session 8: New Omics in Breast Cancer**  
Grand Ballroom E-K  
*Session Chairperson: Gary L. Johnson, University of North Carolina School of Medicine, Chapel Hill, NC*

**Proteogenomic and phosphoproteomic analysis of human breast cancer**  
Philipp Mertins, The Broad Institute of MIT and Harvard, Cambridge, MA

**Insights into metabolome of breast cancer**  
Arun Sreekumar, Baylor College of Medicine, Houston, TX

**Resiliency of the breast cancer kinome to targeted kinase inhibition**  
Gary L. Johnson

**11:45 a.m. Departure**