

An AACR Special Conference on

Advances in Breast Cancer Research: Genetics, Biology, and Clinical Applications

October 3-6, 2013 • The Manchester Grand Hyatt, San Diego, CA

Thursday, October 3

6:30 p.m.-8:00p.m.

Welcome and Opening Keynote Talks

Session Co-Chairpersons: Carlos L. Arteaga, Vanderbilt-Ingram Cancer Center, Nashville, TN, and Jeffrey M. Rosen, Baylor College of Medicine, Houston, TX

Douglas B and C

6:30 p.m.-7:15 p.m.

Breast cancer genomics: Implications for individuals and populations

Charles M. Perou, University of North Carolina, Chapel Hill, NC

7:15 p.m.-8:00 p.m.

Tumor plasticity and reactive stroma in breast cancer metastasis

Yibin Kang, Princeton University, Princeton, NJ

8:00 p.m.-9:30 p.m.

Opening Reception

Douglas D

Friday, October 4

- 7:30 a.m.-8:30 a.m.** **Continental Breakfast**
Douglas BC Foyer
- 8:30 a.m.-10:30 a.m.** **Session 1: Genomics/Epigenomics/“Omics”**
Session Chairperson: Charles M. Perou, University of North Carolina, Chapel Hill, NC
Douglas B and C
- 8:30 a.m.-9:00 a.m. **Clonal evolution and breast cancer subtypes**
Samuel Aparicio, BC Cancer Research Center, Vancouver, BC, Canada
- 9:00 a.m.-9:30 a.m. **Genomic studies of breast cancer progression**
Elaine R. Mardis, Washington University School of Medicine, St. Louis, MO
- 9:30 a.m.-10:00 a.m. **Understanding estrogen receptor transcription in breast cancer**
Jason S. Carroll, Cancer Research UK Cambridge Research Institute, Cambridge, United Kingdom
- 10:00 a.m.-10:30 a.m. **Protein pathway activation mapping for personalized breast cancer therapy**
Emanuel F. Petricoin, III, George Mason University, Manassas, VA
- 10:30 a.m.-11:00 a.m.** **Break**
Douglas Foyer East

- 11:00 a.m.-12:45 p.m.** **Session 2: Breast Cancer Models**
Session Chairperson: Alana L. Welm, Huntsman Cancer Institute, Salt Lake City, UT
Douglas B and C
- 11:00 a.m.-11:30 a.m. **Breast tumor grafts as preclinical models for anti-metastasis therapy**
Alana L. Welm
- 11:30 a.m.-12:00 p.m. **Studying therapy response and resistance in mouse models of breast cancer**
Jos Jonkers, Netherlands Cancer Institute, Amsterdam, The Netherlands
- 12:00 p.m.-12:30 p.m. **Targeting tumor-initiating cells in xenograft models of human breast cancer**
Michael T. Lewis, Baylor College of Medicine Cancer Center, Houston, TX
- 12:30 p.m.-12:45 p.m. **Loss of the hippo pathway scaffold “Kibra” in a mouse model of human claudin-low breast cancer***
Jennifer F. Knight, McGill University Goodman Cancer Research Centre, Montreal, QC, Canada
- 12:45 p.m.-1:00 p.m. **Genomic rearrangements and promoter demethylation drive therapy resistance in patient-derived xenograft models of BRCA1-deficient breast cancer***
Petra ter Brugge, Netherlands Cancer Institute, Amsterdam, The Netherlands
- 1:00 p.m.-3:30 p.m.** **Poster Session A/Lunch**
Douglas D/Douglas D Foyer

*Short talks from proffered papers

3:45 p.m.-5:45 p.m.

Session 3: Stem Cells/Mammary Lineage Tracing

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

3:45 p.m.-4:15 p.m.

**Using lineage tracing and clonal analysis to unravel
mammary gland expansion and cancer initiation**

Alexandra Van Keymeulen, Université Libre de Bruxelles,
Brussels, Belgium

4:15 p.m.-4:45 p.m.

Dissecting cancer through the lens of development

Geoffrey M. Wahl, The Salk Institute, La Jolla, CA

4:45 p.m.-5:15 p.m.

**Mammary epithelial subtypes and their implications for breast
cancer**

Jane E. Visvader

5:15 p.m.-5:45 p.m.

**Wnt and Fgf signaling in mammary stem cells and breast
cancer**

Jeffrey M. Rosen, Baylor College of Medicine, Houston, TX

Saturday, October 5

- 7:30 a.m.-8:30 a.m.** **Continental Breakfast**
Douglas BC Foyer
- 8:30 a.m.-10:30 a.m.** **Session 4: Tumor Dormancy and Metastasis**
Session Chairperson: Lewis A. Chodosh, University of Pennsylvania, Philadelphia, PA
Douglas B and C
- 8:30 a.m.-9:00 a.m. **Assembly and function of the tumor microenvironment of metastasis in breast tumors**
John S. Condeelis, Sr., Albert Einstein College of Medicine, Bronx, NY
- 9:00 a.m.-9:30 a.m. **Biology and clinical implications of circulating tumor cells and bone marrow micrometastasis**
Klaus Pantel, University Medical Center, Hamburg, Germany
- 9:30 a.m.-10:00 a.m. **Mechanisms of breast cancer dormancy and recurrence**
Lewis A. Chodosh
- 10:00 a.m.-10:15 a.m. **The role of syndecan-1 in breast cancer metastasis to the brain***
Melvin Moore, Northwestern University, Feinberg School of Medicine, Robert H. Lurie Comprehensive Cancer Center, Chicago, IL
- 10:15 a.m.-10:30 a.m. **The Six2 homeoprotein mediates breast cancer metastasis via repressing E-cadherin***
Chu-An Wang, University of Colorado at Denver, Anschutz Medical Campus, Aurora, CO
- 10:30 a.m.-11:00 a.m.** **Break**
Douglas Foyer East

*Short talks from proffered papers

- 11:00 a.m.-12:30 p.m.** **Session 5: Targeted Therapies I**
Session Chairperson: Douglas Yee, Masonic Cancer Center, University of Minnesota, Minneapolis, MN
Douglas B and C
- 11:00 a.m.-11:30 a.m. **Targeting downstream effectors of growth factor signaling**
Douglas Yee
- 11:30 a.m.-12:00 p.m. **Targeting the androgen receptor in multiple breast cancer subtypes**
Jennifer K. Richer, University of Colorado Anschutz Medical Campus, Aurora, CO
- 12:00 p.m.-12:30 p.m. **Exploiting DNA repair deficiencies in breast cancer using PARP inhibitors**
Andrew Tutt, King's College London, London, United Kingdom
- 12:30 p.m.-2:45 p.m.** **Free Time/Lunch on Own**
- 2:45 p.m.-4:45 p.m.** **Session 6: Targeted Therapies II**
Session Chairperson: Carlos L. Arteaga, Vanderbilt-Ingram Cancer Center, Nashville, TN
Douglas B and C
- 2:45 p.m.-3:15 p.m. **Harnessing mTOR and translational control for the clinic**
Robert J. Schneider, New York University School of Medicine, New York, NY
- 3:15 p.m.-3:45 p.m. **Translating genetic screens into new therapeutic strategies**
Thomas (Trey) F. Westbrook, Baylor College of Medicine, Houston, TX
- 3:45 p.m.-4:15 p.m. **Rationale and current status of development of PI3K/TOR pathway inhibitors**
Carlos L. Arteaga
- 4:15 p.m.-4:30 p.m. **P-REX1 creates a positive feedback loop to activate growth factor receptor/PI3K signaling**
Lloye M. Dillon, Geisel School of Medicine at Dartmouth, Lebanon, NH
- 4:30 p.m.-4:45 p.m. **Overcoming resistance to PI3K inhibitors in breast cancer: Results of a pooled shRNA screen and combinatorial drug screen**
Sadhna Vora, Massachusetts General Hospital, Boston, MA

4:45 p.m.-7:15 p.m. **Dinner on Own**

7:15 p.m.-9:45 p.m. **Poster Session B/Reception**
Douglas D/Douglas D Foyer

Sunday, October 6

7:30 a.m.-8:30 a.m. **Continental Breakfast**
Douglas BC Foyer

8:30 a.m.-9:30 a.m. **Session 7: Hot Topics/Late-Breaking Research**
*Session Chairperson: Jeffrey M. Rosen, Baylor College of
Medicine, Houston, TX*
Douglas B and C

8:30 a.m.-9:00 a.m. **Molecular and clinical impact of APOBEC3B mutagenesis in
breast cancer**
Reuben S. Harris, University of Minnesota, Minneapolis, MN

9:00 a.m.-9:15 a.m. **Integrative functional genomics of breast cancer***
Richard Marcotte, Ontario Cancer Institute, Toronto, ON, Canada

9:15 a.m.-9:30 a.m. **Plk2 regulates mitotic spindle orientation and mammary
gland development***
Elizabeth Villegas, Baylor College of Medicine, Houston, TX

9:30 a.m.-9:45 a.m. **Break**
Douglas Foyer East

*Short talks from proffered papers

- 9:45 a.m.-11:45 a.m.** **Session 8: Tumor Microenvironment and Immunity**
*Session Chairperson: Zena Werb, UCSF Helen Diller Family
Comprehensive Cancer Center, San Francisco, CA*
Douglas B and C
- 9:45 a.m.-10:15 a.m. **How tumors regulate their microenvironment in primary sites
and metastasis**
Zena Werb
- 10:15 a.m.-10:45 a.m. **Tissue tension engages developmental programs to promote
tumor progression**
Valerie M. Weaver, University of California Medical Center, San
Francisco, CA
- 10:45 a.m.-11:15 a.m. **Stroma-targeted immunotherapy**
Stephen Gottschalk, Texas Children's Cancer and Hematology
Centers, Houston, TX
- 11:15 a.m.-11:45 a.m. **Immunomodulation of breast cancer**
Mary (Nora) L. Disis, University of Washington, Seattle, WA
- 11:45 a.m.-12:00 p.m.** **Closing Remarks and Departure**
Douglas B and C