CONFERENCE PROGRAM

SATURDAY, OCTOBER 7

Registration
3:00 p.m.-7:00 p.m.
Salon 3 of the Ray Dolby Ballroom Terrace

Welcome and Keynote Lectures
6:00 p.m.-7:30 p.m.
Session Chair: Ramon E. Parsons, Icahn School of Medicine at Mount Sinai, New York, NY
Ray Dolby Ballroom

6:00-6:45 Molecular diversity of human breast cancer: Biologic and therapeutic implications
Dennis J. Slamon, UCLA David Geffen School of Medicine, Los Angeles, CA

6:45-7:30 Mapping stem and progenitor cells to decipher the origins of breast cancer
Jane E. Visvader, Walter & Eliza Hall Institute of Medical Research, Parkville, VIC, Australia

Opening Reception
7:30 p.m.-9:30 p.m.
Ray Dolby Ballroom

SUNDAY, OCTOBER 8

Registration
7:30 a.m.-5:30 p.m.
Salon 3 of the Ray Dolby Ballroom Terrace

Continental Breakfast
7:30 a.m.-8:30 a.m.
Salons 3, 4, 5, and 6 of the Ray Dolby Ballroom

Plenary Session 1: Metabolism and Breast Cancer
8:30 a.m.-10:30 a.m.
Session Chair: Ramon E. Parsons, Icahn School of Medicine at Mount Sinai, New York, NY
Ray Dolby Ballroom

8:30-9:00 Increased dependence on glutamine in PTEN-deficient breast cancer
Ramon E. Parsons, Icahn School of Medicine at Mount Sinai, New York, NY
9:00-9:30  **PI 3-Kinase and breast cancer**
Lewis C. Cantley, Weill Cornell Medical College, New York- Presbyterian Hospital, New York, NY

9:30-10:00  **Novel PARP-inhibitor combinations to treat breast cancer**
Gerburg M. Wulf, Beth Israel Deaconess Medical Center, Boston, MA

10:00-10:30  **Redefining druggability using chemoproteomic platforms for cancer therapy**
Daniel Nomura, University of California, Berkeley, Berkeley, CA

**Break**
10:30 a.m.-11:00 a.m.
Ray Dolby Ballroom Terrace

**Plenary Session 2: Functional Validation of Driver Mutations / Interaction Mapping**
11:00 a.m.-1:00 p.m.
*Session Chair: Ramon E. Parsons, Icahn School of Medicine at Mount Sinai, New York, NY*
Ray Dolby Ballroom

11:00-11:30  **Title to be announced**
Jos Jonkers, Netherlands Cancer Institute, Amsterdam, The Netherlands

11:30-12:00  **From systems to structure: Bridging network and mechanism**
Nevan J. Krogan, University of California, San Francisco, San Francisco, CA

12:00-12:30  **Title to be announced**
José Baselga, Memorial Sloan Kettering Cancer Center, New York, NY

12:30-1:00  **Targeting RNA metabolism in TNBC: From genetic networks to therapeutic opportunities**
Thomas F. (Trey) Westbrook, Baylor College of Medicine, Houston, TX

**Poster Session A / Lunch**
1:15 p.m.-3:45 p.m.
Salons 3, 4, 5, and 6 of the Ray Dolby Ballroom

**Plenary Session 3: Extrinsic Regulation of Breast Cancer Diversity**
4:00 p.m.-6:00 p.m.
*Session Chair: Laura J. van ’t Veer, UCSF Helen Diller Family Comprehensive Cancer Center, San Francisco, CA*
Ray Dolby Ballroom

4:00-4:30  **Distinct immune microenvironments stratify triple negative breast cancer**
Morag Park, McGill University Goodman Cancer Center, Montréal, QC, Canada
4:30-5:00  Precision medicine for triple-negative breast cancer patients using a systems biology approach  
Charles M. Perou, University of North Carolina, Chapel Hill, NC

5:00-5:30  Extrinsic control of the breast cancer spectrum  
Mary-Helen Barcellos-Hoff, University of California, San Francisco, San Francisco, CA

5:30-6:00  Breast tumor evolution: The role of the microenvironment  
Kornelia Polyak, Dana-Farber Cancer Institute, Boston, MA

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

MONDAY, OCTOBER 9

Registration  
7:30 a.m.-5:30 p.m.  
Salon 3 of the Ray Dolby Ballroom Terrace

Continental Breakfast  
7:30 a.m.-8:30 a.m.  
Salons 3, 4, 5, and 6 of the Ray Dolby Ballroom

Plenary Session 4: DNA Damage  
8:30 a.m.-10:00 a.m.  
Session Chair: Myles Brown, Dana-Farber Cancer Institute / Harvard Medical School, Boston, MA  
Ray Dolby Ballroom

8:30-9:00  PARP inhibitor resistance and acquired vulnerability in breast cancer  
Alan D. D'Andrea, Dana-Farber Cancer Institute, Boston, MA

9:00-9:30  Targeting DNA repair defects in breast cancer  
Samuel Aparicio, BC Cancer Research Center, Vancouver, BC, Canada

9:30-10:00  Precision medicine with therapies targeting defective DNA repair  
Nicholas C. Turner, Royal Marsden Hospital Institute of Cancer Research, London, United Kingdom

Break  
10:00 a.m.-10:30 a.m.  
Ray Dolby Ballroom Terrace
Spotlight Session: Short Talks from Proffered Papers
10:30 a.m.-11:30 a.m.
Session Chair: Laura J. van ’t Veer, UCSF Helen Diller Family Comprehensive Cancer Center, San Francisco, CA
Ray Dolby Ballroom

10:30-10:42  Bcl11b maintains the long-term mammary stem cell and is crucial for drug resistance in breast cancer
Shang Cai, Stanford University, Palo Alto, CA

10:42-10:54  Minor clones can drive polyclonal metastasis by affecting immune microenvironment
Michalina Janiszewska, Dana-Farber Cancer Institute, Boston, MA

10:54-11:06  Neoadjuvant chemotherapy promotes macrophage-induced MenaINV-dependent prometastatic changes in breast tumors
George S. Karagiannis, Albert Einstein College of Medicine, Bronx, NY

11:06-11:18  Differentiation dynamics of the developing mammary gland revealed by single-cell RNA-sequencing
Karsten Bach, University of Cambridge, Cambridge, United Kingdom

11:18-11:30  The kinome of chemotherapy-resistant TNBC and identification of targetable kinases
Carolien Leonie Van Der Borden, University of California, San Francisco, San Francisco, CA

Plenary Session 5: Personalized Risk
11:45 a.m.-1:15 p.m.
Session Chair: Laura J. van ’t Veer, UCSF Helen Diller Family Comprehensive Cancer Center, San Francisco, CA
Ray Dolby Ballroom

11:45-12:15  Personalized risk assessment to improve health care outcomes
Laura J. van ’t Veer, UCSF Helen Diller Family Comprehensive Cancer Center, San Francisco, CA

12:15-12:45  Homologous recombination repair deficiency and breast cancer progression in high-risk populations
Olufunmilayo I. Olopade, University of Chicago Medical Center, Chicago, IL
12:45-1:15  A coding region variant in the TP53 tumor-suppressor gene may underlie cancer disparities in African Americans
Maureen E. Murphy, The Wistar Institute, Philadelphia, PA

Free Time / Lunch on Own
1:15 p.m.-3:00 p.m.

Plenary Session 6: Mechanisms of Resistance to Targeted Therapy
3:00 p.m.-5:00 p.m.
Session Chair: Myles Brown, Dana-Farber Cancer Institute / Harvard Medical School, Boston, MA
Ray Dolby Ballroom

3:00-3:30  CDK 4/6 inhibitors: Moving beyond ER in ER+ breast cancer
Richard S. Finn, David Geffen School of Medicine at UCLA, Los Angeles, CA

3:30-4:00  Overcoming therapeutic resistance by integrating targeted and immunotherapy: Insights from mouse models of human cancer
Jean J. Zhao, Dana-Farber Cancer Institute and Harvard Medical School, Boston, MA

4:00-4:30  Enhancer remodeling in response to MEK inhibition in TNBC
Gary L. Johnson, University of North Carolina School of Medicine, Chapel Hill, NC

4:30-5:00  Drivers of endocrine resistance and synthetic lethal vulnerabilities in ER+ breast cancer
Myles Brown, Dana-Farber Cancer Institute / Harvard Medical School, Boston, MA

Poster Session B / Reception
5:15 p.m.-7:45 p.m.
Salons 3, 4, 5, and 6 of the Ray Dolby Ballroom

TUESDAY, OCTOBER 10

Registration
7:30 a.m.-12:30 p.m.
Salon 3 of the Ray Dolby Ballroom Terrace

Continental Breakfast
7:30 a.m.-8:30 a.m.
Salons 3, 4, 5, and 6 of the Ray Dolby Ballroom
Plenary Session 7: Early Clinical Opportunities
8:30 a.m.-10:00 a.m.
Session Chair: Tak W. Mak, University of Toronto Health Network / Princess Margaret Hospital, Toronto, ON, Canada
Ray Dolby Ballroom

8:30-9:00 Title to be announced
Tak W. Mak, University of Toronto Health Network / Princess Margaret Hospital, Toronto, ON, Canada

9:00-9:30 Clinical development of PI3K/AKT pathway inhibitors in breast cancer
Mika Derynck, Genentech, Inc., South San Francisco, CA

9:30-10:00 Developmental therapeutics in TNBC
Funda Meric-Bernstam, The University of Texas MD Anderson Cancer Center, Houston, TX

Break
10:00 a.m.-10:15 a.m.
Ray Dolby Ballroom Terrace

Plenary Session 8: What Limits the Response of Breast Cancer to Immunotherapy?
10:15 a.m.-11:45 a.m.
Session Chair: Tak W. Mak, University of Toronto Health Network / Princess Margaret Hospital, Toronto, ON, Canada
Ray Dolby Ballroom

10:15-10:45 What resistance to PD-1 blockade in melanoma can tell us for breast cancer
Antoni Ribas, UCLA Medical Center, Los Angeles, CA

10:45-11:15 Setting the stage for immunotherapy in breast cancer: Where are we and where are we going in the clinic?
Hope S. Rugo, UCSF Helen Diller Family Comprehensive Cancer Center, San Francisco, CA

11:15-11:45 What limits the response of breast cancer to immunotherapy?
Sherene Loi, Peter MacCallum Cancer Center, East Melbourne, VIC, Australia

Departure