Saturday, October 7

3:00 p.m.-7:00 p.m.  REGISTRATION

6:00 p.m.-7:30 p.m.  WELCOME AND KEYNOTE LECTURES
Session Chair: Ramon E. Parsons, Icahn School of Medicine at Mount Sinai, New York, NY

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

6:45 p.m.-7:30 p.m.  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

7:30 p.m.-9:30 p.m.  OPENING RECEPTION

Sunday, October 8

7:30 a.m.-5:30 p.m.  REGISTRATION

7:30 a.m.-8:30 a.m.  CONTINENTAL BREAKFAST

8:30 a.m.-10:30 a.m.  PLENARY SESSION 1: METABOLISM AND BREAST CANCER
Session Chair: Ramon E. Parsons, Icahn School of Medicine at Mount Sinai, New York, NY

8:30 a.m.-9:00 a.m.  Increased dependence on glutamine in PTEN-deficient breast cancer
Ramon E. Parsons

9:00 a.m.-9:30 a.m.  PI 3-Kinase and breast cancer
Lewis C. Cantley, Weill Cornell Medical College, New York-Presbyterian Hospital, New York, NY

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

10:00 a.m.-10:30 a.m.  Redefining druggability using chemoproteomic platforms for cancer therapy
Daniel Nomura, University of California, Berkeley, Berkeley, CA
CONFERENCE PROGRAM

10:30 a.m.-11:00 a.m.  BREAK

11:00 a.m.-1:00 p.m.  PLENARY SESSION 2: FUNCTIONAL VALIDATION OF DRIVER MUTATIONS / INTERACTION MAPPING
Session Chair: Ramon E. Parsons, Icahn School of Medicine at Mount Sinai, New York, NY
11:00 a.m.-11:30 a.m.  Title to be announced
Jos Jonkers, Netherlands Cancer Institute, Amsterdam, The Netherlands
11:30 a.m.-12:00 p.m.  From systems to structure: Bridging network and mechanism
Nevan J. Krogan, University of California, San Francisco, San Francisco, CA
12:00 p.m.-12:30 p.m.  Title to be announced
José Baselga, Memorial Sloan Kettering Cancer Center, New York, NY
12:30 p.m.-1:00 p.m.  Targeting RNA metabolism in TNBC: From genetic networks to therapeutic opportunities
Thomas F. (Trey) Westbrook, Baylor College of Medicine, Houston, TX

1:15 p.m.-3:45 p.m.  POSTER SESSION A / LUNCH

4:00 p.m.-6:00 p.m.  PLENARY SESSION 3: EXTRINSIC REGULATION OF BREAST CANCER DIVERSITY
Session Chair: Laura J. van 't Veer, UCSF Helen Diller Family Comprehensive Cancer Center, San Francisco, CA
4:00 p.m.-4:30 p.m.  Distinct immune microenvironments stratify triple negative breast cancer
Morag Park, McGill University Goodman Cancer Center, Montréal, QC, Canada
4:30 p.m.-5:00 p.m.  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 p.m.-5:30 p.m.  Extrinsic control of the breast cancer spectrum
Mary-Helen Barcellos-Hoff, University of California, San Francisco, San Francisco, CA
5:30 p.m.-6:00 p.m.  Breast tumor evolution: The role of the microenvironment
Kornelia Polyak, Dana-Farber Cancer Institute, Boston, MA

6:00 p.m.  EVENING OFF / DINNER ON OWN
Monday, October 9

7:30 a.m.-5:30 p.m.  REGISTRATION

7:30 a.m.-8:30 a.m.  CONTINENTAL BREAKFAST

8:30 a.m.-10:00 a.m.  PLENARY SESSION 4: DNA DAMAGE
Session Chair: Myles Brown, Dana-Farber Cancer Institute / Harvard Medical School, Boston, MA

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

9:00 a.m.-9:30 a.m.  Title to be announced
Samuel Aparicio, BC Cancer Research Center, Vancouver, BC, Canada

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

10:00 a.m.-10:30 a.m.  BREAK

10:30 a.m.-11:30 a.m.  SPOTLIGHT SESSION: SHORT TALKS FROM PROFFERED PAPERS
Session Chair: Laura J. van ’t Veer, UCSF Helen Diller Family Comprehensive Cancer Center, San Francisco, CA

10:30 a.m.-10:42 a.m.  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 a.m.-10:54 a.m.  Minor clones can drive polyclonal metastasis by affecting immune microenvironment
Michalina Janiszewska, Dana-Farber Cancer Institute, Boston, MA

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

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

11:18 a.m.-11:30 a.m.  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
Session Chair: Laura J. van ‘t Veer, UCSF Helen Diller Family Comprehensive Cancer Center, San Francisco, CA

11:45 a.m.-1:15 p.m.
Personalized risk assessment to improve health care outcomes
Laura J. van ‘t Veer

12:15 p.m.-12:45 p.m.
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

PLENARY SESSION 6: MECHANISMS OF RESISTANCE TO TARGETED THERAPY
Session Chair: Myles Brown, Dana-Farber Cancer Institute / Harvard Medical School, Boston, MA

3:00 p.m.-5:00 p.m.
CDK 4/6 inhibitors: Moving beyond ER in ER+ breast cancer
Richard S. Finn, David Geffen School of Medicine at UCLA, Los Angeles, CA

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

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

Drivers of endocrine resistance and synthetic lethal vulnerabilities in ER+ breast cancer
Myles Brown

POSTER SESSION B / RECEPTION
Tuesday, October 10

7:30 a.m.-12:30 p.m.  REGISTRATION

7:30 a.m.-8:30 a.m.  CONTINENTAL BREAKFAST

8:30 a.m.-10:00 a.m.  PLENARY SESSION 7: EARLY CLINICAL OPPORTUNITIES
Session Chair: Tak W. Mak, University of Toronto Health Network / Princess Margaret Hospital, Toronto, ON, Canada
8:30 a.m.-9:00 a.m.  Title to be announced
Tak W. Mak
9:00 a.m.-9:30 a.m.  Clinical development of PI3K/AKT pathway inhibitors in breast cancer
Mika Derynck, Genentech, Inc., South San Francisco, CA
9:30 a.m.-10:00 a.m.  Developmental therapeutics in TNBC
Funda Meric-Bernstam, The University of Texas MD Anderson Cancer Center, Houston, TX

10:00 a.m.-10:15 a.m.  BREAK

10:15 a.m.-11:45 a.m.  PLENARY SESSION 8: WHAT LIMITS THE RESPONSE OF BREAST CANCER TO IMMUNOTHERAPY?
Session Chair: Tak W. Mak, University of Toronto Health Network / Princess Margaret Hospital, Toronto, ON, Canada
10:15 a.m.-10:45 a.m.  What resistance to PD-1 blockade in melanoma can tell us for breast cancer
Antoni Ribas, UCLA Medical Center, Los Angeles, CA
10:45 a.m.-11:15 a.m.  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 a.m.-11:45 a.m.  What limits the response of breast cancer to immunotherapy?
Sherene Loi, Peter MacCallum Cancer Center, East Melbourne, VIC, Australia

DEPARTURE