## **AACR Precision Medicine Series**

## Integrating Clinical Genomics and Cancer Therapy

June 13-16, 2015 • The Grand America Hotel • Salt Lake City, UT

### Saturday, June 13

7:00 p.m.-8:00 p.m. Opening Keynote Session

Grand Ballroom C

Welcome

Perspectives on genomic approaches to cancer

Todd R. Golub, Broad Institute of MIT and Harvard, Cambridge, MA

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

Grand Ballroom A

Sunday, June 14

7:00 a.m.-8:00 a.m. Continental Breakfast\_

Grand Ballroom A

8:00 a.m.-10:00 a.m. Plenary Session 1: Clinical Genomics of Hematologic Malignancies

Grand Ballroom C

Session Chairperson: Charles M. Mullighan, St. Jude Children's Research Hospital,

Memphis, TN

Precision medicine in acute lymphoblastic leukemia

Charles M. Mullighan

The evolutionary landscape of CLL: Therapeutic implications

Catherine J. Wu, Dana-Farber Cancer Institute, Boston, MA

Functional genomics for discovery of pathogenic mechanisms of disease and novel therapies for hematologic malignancies

Jeffrey W. Tyner, OHSU Knight Cancer Institute, Portland, OR

Precision in Pediatric Sequencing (PIPseq): Clinical implementation of genomic sequencing into pediatric hematology-oncology practice\*

Maria Luisa Sulis, Columbia University Medical Center, New York, NY

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

Grand Ballroom Foyer

#### 10:30 a.m.-12:30 p.m. Plenary Session 2: Clinical Genomics of Solid Tumors 1

Grand Ballroom C

Session Chairperson: Arul Chinnaiyan, University of Michigan, Ann Arbor, MI

#### Clinical genomics alters care, informs new science

Barry S. Taylor, Memorial Sloan Kettering Cancer Center, New York, NY

#### Advances in molecular characterization of colorectal cancer and clinical applications

Sabine Tejpar, University of Leuven, Leuven, Belgium

#### The application of integrative sequencing for precision oncology

Arul Chinnaiyan

### Integrated genomic analysis of a recurrent ghost cell odontogenic carcinoma\*

Pinaki Bose, British Columbia Cancer Agency, Vancouver, BC, Canada

## Molecular profiling of advanced solid tumors at Princess Margaret Cancer Centre and patient outcomes with genotype-matched clinical trials\*

Philippe L. Bedard, Princess Margaret Cancer Centre, Toronto, ON, Canada

12:30 p.m.-3:00 p.m. Free Time/Lunch on Own

#### 3:00 p.m.-5:00 p.m. Plenary Session 3: Single Cell and Circulating Free Nucleic Acid Sequencing

Grand Ballroom C

Session Chairperson: Luis A. Diaz, Johns Hopkins Kimmel Comprehensive Cancer

Center, Baltimore, MD

#### Novel clinical applications of cancer genomics

Luis A. Diaz

## Single cell RNA-sequencing of circulating tumor cells

David Miyamoto, Massachusetts General Hospital, Charlestown, MA

#### Extracellular RNA: A next frontier of biomarker research for precision medicine

Muneesh Tewari, University of Michigan, Ann Arbor, MI

#### Circulating tumor DNA as a precision marker of aggressive prostate cancer and recurrence\*

Adam G. Sowalsky, Beth Israel Deaconess Medical Center, Boston, MA

# Analysis of ctDNA using the mFastSeqS and plasmaSeq methods for screening and therapy monitoring in prostate cancer patients\*

Jelena Belic, Institute of Human Genetics, Medical University of Graz, Graz, Styria, Austria

## 5:15 p.m.-7:15 p.m. Panel Discussion: Panels vs. Comprehensive Sequencing and Implementation into

**Regular Clinical Practice** 

Discussion Chairperson: Arul Chinnaiyan, University of Michigan, Ann Arbor, Michigan Grand Ballroom C

#### Panelists:

Charles M. Mullighan, St. Jude Children's Research Hospital, Memphis, TN Donald (Will) Parsons, Baylor College of Medicine Cancer Center, Houston, TX John D. Carpten, TGen, Phoenix, AZ David B. Solit, Memorial Sloan Kettering Cancer Center, New York, NY

#### Monday, June 15

7:00 a.m.-8:00 a.m. Continental Breakfast

Grand Ballroom A

#### 8:00 a.m.-10:00 a.m. Plenary Session 4: "N of 1" and Exceptional Responders

Grand Ballroom C

Session Chairperson: Elaine R. Mardis, Washington University School of Medicine, St. Louis, MO

#### Clinical application of next-generation sequencing as a guide to treatment selection

David B. Solit, Memorial Sloan Kettering Cancer Center, New York, NY

#### Open-source, crowdsourcing-capable tools for N of 1 cancer genomics

Elaine R. Mardis

# Understanding response and resistance to targeted therapies through the study of extraordinary responders

Nikhil Wagle, Dana-Farber Cancer Institute, Boston, MA

## Precision medicine for newly diagnosed and refractory/recurrent pediatric cancer patients: Lessons learned from "N=1" studies\*

Troy A. McEachron, Integrated Cancer Genomics Division, Translational Genomics Research Institute, Phoenix, AZ

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

Grand Ballroom Foyer

#### 10:30 a.m.-12:30 p.m. Plenary Session 5: Clinical Genomics of Solid Tumors 2

Grand Ballroom C

Session Chairperson: Gordon B. Mills, The University of Texas MD Anderson Cancer

Center, Houston, TX

## A platform for comprehensive clinical sequencing to support oncology: Early lessons, opportunities, and challenges

John D. Carpten, TGen, Phoenix, AZ

#### "Next-gen" genomics-based clinical trials

Lillian L. Siu, Princess Margaret Cancer Centre, Toronto, ON, Canada

#### Clinical genomics for children with solid tumors: Current realities and future opportunities

D. William Parsons, Texas Children's Cancer Center, Baylor College of Medicine, Houston, TX

#### Delivering on the promise of personalized medicine

Gordon B. Mills

12:30 p.m.-3:00 p.m. Poster Session and Lunch

Grand Ballroom B

#### 3:00 p.m.-5:00 p.m. Panel Discussion: Challenges and Opportunities of Genomics-Driven Clinical Trials

Grand Ballroom C

Discussion Chairperson: Elaine R. Mardis, Washington University School of Medicine,

St. Louis, MO

#### **Panelists:**

Barbara A. Conley, National Cancer Institute-DCTD, Rockville, MD Patricia M. LoRusso, Yale Cancer Center, New Haven, CT Lillian L. Siu, Princess Margaret Cancer Centre, Toronto, ON, Canada

#### Tuesday, June 16

#### 7:00 a.m.-8:00 a.m. Continental Breakfast

Grand Ballroom A

### 8:00 a.m.-10:00 a.m. Plenary Session 6: Personalized Immunotherapies

Grand Ballroom C

Session Chairperson: Renier J. Brentjens, Memorial Sloan Kettering Cancer Center,

New York, NY

#### Cancer genomes and immunotherapy efficacy

Timothy A. Chan, Memorial Sloan Kettering Cancer Center, New York, NY

### Human melanoma neoantigens: Identification and vaccination

Gerald P. Linette, Washington University, St. Louis, MO

#### Moving CAR T cell therapy forward: CARs and armored CARs

Renier J. Brentjens

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

Grand Ballroom Foyer

10:15 a.m.-12:15 p.m. Plenary Session 7: Model and Cell Systems for Studying Therapeutic Response

and Acquired Resistance

Grand Ballroom C

Session Chairperson: Charles L. Sawyers, Memorial Sloan Kettering Cancer Center,

New York, NY

Overcoming resistance to kinase inhibitors in lung cancer

Jeffrey A. Engelman, Massachusetts General Hospital, Boston, MA

Reflections on precision medicine

Charles L. Sawyers

Precision genomic medicine improves clinical outcomes in advanced cancer patients\*

Lincoln D. Nadauld, Intermountain Healthcare, St. George, UT