

# CONFERENCE PROGRAM

## Monday, January 13

5:30 p.m.- 6:30 p.m.

**OPENING PLENARY SESSION (WELCOME, KEYNOTE TALK)**

Symphony Ballroom IV

**Plasma DNA-based molecular diagnostics: Fragments, circles, and beyond**

Dennis Lo, The Chinese University of Hong Kong, Shatin New Territories, China

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

**OPENING RECEPTION**

Symphony Ballroom II/III

## Tuesday, January 14

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

**Continental Breakfast**

Symphony Ballroom II/III

8:00 a.m.-10:00 a.m.

**PLENARY SESSION 1: EARLY DETECTION WITH ctDNA**

Symphony Ballroom IV

**Session Chair: Luis A. Diaz, Jr.**, Memorial Sloan Kettering Cancer Center, New York, NY

**Multicancer detection of early-stage cancers with simultaneous tissue localization using a plasma cfDNA-based targeted methylation assay**

Eric T. Fung, GRAIL, Inc., Menlo Park, CA

**Early detection and characterization of cancer using noninvasive liquid biopsies**

Victor E. Velculescu, Johns Hopkins Sidney Kimmel Comprehensive Cancer Center, Baltimore, MD

**Sensitive tumor detection and classification using methylome analysis of plasma cfDNA**

Daniel D. De Carvalho, Princess Margaret Cancer Centre, University Health Network; University of Toronto, Toronto, ON, Canada

**ctDNA shedding dynamics dictate early lung cancer detection potential\***

Johannes Reiter, Stanford University, Stanford, CA

**Epigenetic biomarkers in cell-free DNA for early detection of high-grade serous ovarian carcinoma\***

Ben Yi Tew, University of Southern California, Los Angeles, CA

*\*Short talk from proffered abstract*

# CONFERENCE PROGRAM

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

**BREAK**

Symphony Ballroom Foyer

**10:30 a.m.-12:30 p.m.**

**PLENARY SESSION 2: MRD AND EARLY-STAGE DISEASE**

Symphony Ballroom IV

**Session Chair: Nicholas C. Turner**, Royal Marsden Hospital Institute of Cancer Research, London, United Kingdom

**ctDNA and MRD in colorectal cancer: Time to reinvent adjuvant clinical trials**

Jeanne Tie, Peter MacCallum Cancer Centre, Melbourne, VIC, Australia

**Molecular relapse and residual disease in breast cancer**

Nicholas C. Turner

**Liquid biopsies for personalized monitoring and detection of cancer**

Maximilian Diehn, Stanford University, Stanford, CA

**Use of liquid biopsy to facilitate drug development in early-stage disease—  
FDA perspective**

Julia A. Beaver, FDA, Silver Spring, MD

**12:30 p.m.-12:45 p.m.**

**SPECIAL PRESENTATION**

Symphony Ballroom IV

**The promise of liquid biopsy in the early detection of cancer: Hope or hype?**

Sudhir Srivastava, National Cancer Institute, Bethesda, MD

**12:45 p.m.-2:30 p.m.**

**LUNCH ON OWN**

**2:30 p.m.-4:15 p.m.**

**PLENARY SESSION 3: HEMATOLOGIC MALIGNANCIES**

Symphony Ballroom IV

**Session Chair: Irene M. Ghobrial**, Dana-Farber Cancer Institute, Boston, MA

**Liquid biopsies as biomarkers of disease progression in multiple myeloma**

Irene M. Ghobrial

**Clinical applications of liquid biopsy in multiple myeloma**

Suzanne Trudel, University of Toronto University Health Network, Toronto, ON, Canada

**Genome-wide 5-hydroxymethylcytosine profiles in circulating cell-free DNA and survival in patients with multiple myeloma\***

Brian Chiu, University of Chicago, Chicago, IL

**Clonal landscapes of hematologic malignancies redefined by ultrasensitive duplex sequencing\***

Jake Higgins, TwinStrand Biosciences, Seattle, WA

*\*Short talk from proffered abstract*

**Radiation-assisted Amplification Sequencing (RAMP-Seq): Evaluating the use of stereotactic body radiation therapy (SBRT) for enriching circulating tumor DNA in liquid biopsies\***

Christopher Boniface, Oregon Health & Science University, Portland, OR

**4:15 p.m.-6:45 p.m.**

**POSTER SESSION A / LIGHT REFRESHMENTS**

Symphony Ballroom II/III

**Wednesday, January 15**

**7:00 a.m.-8:00 a.m.**

**CONTINENTAL BREAKFAST**

Symphony Ballroom II/III

**8:00 a.m.-10:00 a.m.**

**PLENARY SESSION 4: GENOTYPING, MONITORING OF ADVANCED DISEASE, AND MOLECULAR RESISTANCE (PART I)**

Symphony Ballroom IV

**Session Chair: Maximilian Diehn**, Stanford University, Stanford, CA

**Response in plasma cfDNA as an early marker of treatment effect in advanced cancer**

Geoffrey R. Oxnard, Dana-Farber Cancer Institute, Boston, MA

**Tracking and targeting colorectal cancer evolution**

Alberto Bardelli, University of Turin School of Medicine, Candiolo To, Italy

**Liquid biopsies for tracking molecular resistance in cancer**

Sarah-Jane Dawson, Peter MacCallum Cancer Centre, Melbourne, VIC, Australia

**Clonal evolution over narrow time frames via circulating tumor DNA in metastatic breast cancer\***

Daniel Stover, Ohio State University Comprehensive Cancer Center, Columbus, OH

**MSI detection in plasma cfDNA: MSI as a marker of disease burden\***

Preethi Srinivasan, Memorial Sloan Kettering Cancer Center, New York, NY

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

**BREAK**

Symphony Ballroom Foyer

*\*Short talk from proffered abstract*

# CONFERENCE PROGRAM

10:30 a.m.-12:30 p.m.

**PLENARY SESSION 5: GENOTYPING, MONITORING OF ADVANCED DISEASE, AND MOLECULAR RESISTANCE (PART II)**

Symphony Ballroom IV

**Session Chair:** Nitzan Rosenfeld, Cancer Research UK Cambridge Research Institute, Cambridge, United Kingdom

**Liquid biopsies: Implications for therapeutic response/resistance and prognosis**

Razelle Kurzrock, UCSD Moores Cancer Center, La Jolla, CA

**Enhancing detection of ctDNA in patients with early-stage or residual disease**

Nitzan Rosenfeld

**Comprehensive genomic profiling of cell-free DNA enables treatment response monitoring**

Viktor Adalsteinsson, Broad Institute, Cambridge, MA

**Validation and clinical implementation of MSK-ACCESS, an ultra-deep sequencing assay for noninvasive somatic mutation profiling\***

A. Rose Brannon, Memorial Sloan Kettering Cancer Center, New York, NY

**Frequency and etiology of ctDNA-positive metastatic prostate cancer with BRCA2, ATM, or CDK12 mutations\***

Evan Warner, Vancouver Prostate Centre, Vancouver, BC, Canada

12:30 p.m.-3:00 p.m.

**POSTER SESSION B / LUNCH**

Symphony Ballroom II/III

3:00 p.m.-5:00 p.m.

**PLENARY SESSION 6: CIRCULATING TUMOR CELLS**

Symphony Ballroom IV

**Session Chair: Caroline Dive**, Cancer Research UK Manchester Institute, Manchester, United Kingdom

**Molecular signatures of circulating tumor cells**

Daniel A. Haber, Massachusetts General Hospital, Charlestown, MA

**Multiple uses of circulating tumor cells in lung cancer?**

Caroline Dive

**Circulating tumor cells: Biology and clinical applications as liquid biopsy**

Klaus Pantel, University Medical Center Hamburg-Eppendorf, Hamburg, Germany

**Analytical validation and preliminary clinical utility of PD-L1 and HLA I expression profiling of circulating tumor cells using automated exclusion-based sample preparation technology\***

Jennifer Schehr, University of Wisconsin, Madison, WI

**Multimodal analysis of circulating tumor cell RNA, circulating cell-free DNA and genomic DNA from a single blood sample collected into a PAXgene Blood ccfDNA Tube\***

Anna Babayan, PreAnalytiX, Hombrechtikon, Switzerland

*\*Short talk from proffered abstract*

## Thursday, January 16

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

### CONTINENTAL BREAKFAST

Symphony Ballroom II/III

8:00 a.m.-10:00 a.m.

### PLENARY SESSION 7: EMERGING APPROACHES

Symphony Ballroom IV

**Session Chair: Muneesh Tewari**, University of Michigan, Ann Arbor, MI

#### **Exploiting the biology of exosomes for diagnosis and treatment of cancer**

Raghu Kalluri, The University of Texas MD Anderson Cancer Center, Houston, TX

#### **Tumor-educated platelets for the detection of cancer**

Thomas Würdinger, VU University Medical Center, Amsterdam, The Netherlands

#### **Phospho-RNA-seq: A liquid biopsy approach for cell-free mRNA/lncRNA profiling**

Muneesh Tewari

#### **Detection of EV-based signatures in prostate cancer using microflow cytometry and machine learning\***

John Lewis, University of Alberta, Edmonton, AB, Canada

#### **Comprehensive detection of ctDNA in localized head and neck cancer by genome- and methylome-based analysis\***

Justin Burgener, Princess Margaret Cancer Centre, Toronto, ON, Canada

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

### BREAK

Symphony Ballroom Foyer

10:30 a.m.-12:30 p.m.

### PLENARY SESSION 8: ALTERNATIVE "FLUIDS"

Symphony Ballroom IV

**Session Chair: Nishant Agrawal**, University of Chicago Pritzker School of Medicine, Chicago, IL

#### **Title to be announced**

Pedram Razavi, Memorial Sloan Kettering Cancer Center, New York, NY

#### **Detection of somatic mutations and HPV in saliva of patients with head and neck squamous cell carcinoma**

Nishant Agrawal

#### **Liquid biopsy in precision pathology: Plasma and beyond!**

George J. Netto, University of Alabama at Birmingham, Birmingham, AL

#### **Sub-nucleosomal fragmentation in urine cell-free DNA\***

Havell Markus, Translational Genomics Research Institute, Phoenix, AZ

*\*Short talk from proffered abstract*

# CONFERENCE PROGRAM

## **Charting extracellular transcriptomes in The Human Biofluid RNA Atlas\***

Eva Hulstaert, Ghent University, Ghent, Belgium

**12:30 p.m.-12:45 p.m.**

### **CLOSING REMARKS**

Symphony Ballroom IV

Luis A. Diaz, Jr., Memorial Sloan Kettering Cancer Center, New York, NY

Maximilian Diehn, Stanford University, Stanford, CA

Irene M. Ghobrial, Dana-Farber Cancer Institute, Boston, MA

Nicholas C. Turner, Royal Marsden Hospital Institute of Cancer Research, London, United Kingdom

*\*Short talk from proffered abstract*