Friday, February 8

6:30 p.m.-8:00 p.m.  WELCOME AND KEYNOTE SESSION  
Valley Isle Ballroom  

Session Chairs: Elaine R. Mardis, Nationwide Children’s Hospital, Columbus, Ohio, USA, and Hitoshi Nakagama, National Cancer Center, Tokyo, Japan  

Cancer genomics: Discovery to clinical translation*  
Elaine R. Mardis  

Regulatory T cells in tumor immunity  
Shimon Sakaguchi, Osaka University, Osaka, Japan  

8:00 p.m.-9:30 p.m.  OPENING RECEPTION  
Aloha Pavilion and Ko’ala  

Saturday, February 9

7:00 a.m.-8:00 a.m.  CONTINENTAL BREAKFAST AND NETWORKING ROUNDTABLES  
Aloha Pavilion and Ko’ala  

8:00 a.m.-9:30 a.m.  PLENARY SESSION 1: TUMOR MICROENVIRONMENT  
Valley Isle Ballroom  

Session Chairs: Kohei Miyazono, The University of Tokyo, Tokyo, Japan, and Raghu Kalluri, The University of Texas MD Anderson Cancer Center, Houston, TX, USA  

Exploiting the biology of exosomes for diagnosis and treatment of cancer*  
Raghu Kalluri  

Role of actin dynamics in cell fate plasticity of microenvironmental cells*  
Hideyuki Saya, Keio University School of Medicine, Tokyo, Japan  

Neutrophil extracellular traps activated during inflammation awaken dormant cancer cell*  
Mikala Egeblad, Cold Spring Harbor Laboratory Cancer Center, Cold Spring Harbor, NY, USA  

9:30 a.m.-10:00 a.m.  COFFEE BREAK  
Valley Isle Terrace  

*An extended abstract for this presentation is available in the Invited Abstracts section of the Proceedings.
CONFERENCE PROGRAM

10:00 a.m.-11:30 a.m.  PLENARY SESSION 2: CANCER PRECISION MEDICINE, PREVENTION, INTERCEPTION, AND EARLY DETECTION

Valley Isle Ballroom

**Session Chairs:** Nickolas Papadopoulos, Johns Hopkins Sidney Kimmel Comprehensive Cancer Center, Baltimore, MD, USA, and Yoshinori Murakami, The University of Tokyo, Tokyo, Japan

**Noninvasive earlier detection of cancer***

Nickolas Papadopoulos

**Construction of cancer genomic medicine platform in Japan***

Hiroyuki Mano, National Cancer Center Research Institute, Tokyo, Japan

**Genome-wide analysis of plasma cell-free DNA for cancer detection***

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

11:30 a.m.-4:00 p.m.  FREE TIME

4:00 p.m.-5:30 p.m.  PLENARY SESSION 3: HETEROGENEITY, CLONAL EVOLUTION, AND BIG DATA

Valley Isle Ballroom

**Session Chairs:** Yoshio Miki, Tokyo Medical and Dental University, Tokyo, Japan, and Samuel Aparicio, British Columbia Cancer Agency, Vancouver, Canada

**Clonal dynamics and cellular fitness in cancer to single cell resolution***

Samuel Aparicio

**Strong potential for combinatorial approaches involving TGF-β kinase inhibitor: Considerable utility in a wide variety of cancers***

Seong-Jin Kim, Seoul National University, Seoul, South Korea

**Quantifying clonal evolution through treatment and metastasis***

Christina Curtis, Stanford University, Stanford, CA, USA

5:30 p.m.-7:30 p.m.  POSTER SESSION A

Haleakala Ballroom

*An extended abstract for this presentation is available in the Invited Abstracts section of the Proceedings.
Sunday, Feb. 10, 2019

7:00 a.m.-8:00 a.m.  CONTINENTAL BREAKFAST AND NETWORKING ROUNDTABLES
Aloha Pavilion and Ko‘ala

8:00 a.m.-9:30 a.m.  PLENARY SESSION 4: METABOLISM
Valley Isle Ballroom

Session Chairs: Lewis C. Cantley, Weill Cornell Medical College, New York-Presbyterian Hospital, New York, NY, USA, and Takashi Takahashi, Aichi Cancer Center, Aichi, Japan

Next-generation proteomics unveils a global landscape of cancer metabolism:
Discovery of the “second” Warburg effect
Kei-ichi Nakayama, Kyushu University, Fukuoka, Japan

PI3-kinase and cancer metabolism*
Lewis C. Cantley

NRF2 addiction in cancer cells and its impact on metabolism*
Hozumi Motohashi, Tohoku University, Sendai, Japan

9:30 a.m.-10:00 a.m.  COFFEE BREAK
Valley Isle Terrace

10:00 a.m.-11:30 a.m.  PLENARY SESSION 5: EPIGENETICS
Valley Isle Ballroom

Session Chairs: Wataru Yasui, Hiroshima University, Hiroshima, Japan, and Mathieu Lupien, Princess Margaret Cancer Centre, Toronto, Canada

A vicious combination of inflammatory signals induces aberrant DNA methylation, and its accumulation level precisely predicts cancer risk*
Toshikazu Ushijima, National Cancer Center Research Institute, Tokyo, Japan

Primary glioblastoma arise from a heterogeneous population of cancer stem cells defined by chromatin state
Mathieu Lupien

ATAC-seq analysis reveals epigenomic heterogeneity in breast cancer
Reo Maruyama Cancer Institute, Japanese Foundation for Cancer Research Cancer Institute, Tokyo, Japan

11:30 a.m.-4:00 p.m.  FREE TIME

*An extended abstract for this presentation is available in the Invited Abstracts section of the Proceedings.
4:00 p.m.-5:30 p.m.  PLENARY SESSION 6: IMMUNOTHERAPY  Valley Isle Ballroom

**Session Chairs:** Yutaka Kawakami, Keio University, Tokyo, Japan, and Cassian Yee, The University of Texas MD Anderson Cancer Center, Houston, TX, USA

**Potent antitumor effects of IL-7/CCL19-producing CAR-T cells against solid tumors***
Koji Tamada, Yamaguchi University, Yamaguchi, Japan

**Adoptive T cell therapy: Impersonalized precision medicine**
Cassian Yee

**Genetic alterations involving PD-1 ligands in virus-associated lymphomas***
Keisuke Kataoka, National Cancer Center Research Institute, Tokyo, Japan

5:30 p.m.-7:30 p.m.  POSTER SESSION B  Haleakala Ballroom

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**Monday, February 11**

7:00 a.m.-8:00 a.m.  CONTINENTAL BREAKFAST  Aloha Pavilion and Ko'ala

8:00 a.m.-9:30 a.m.  PLENARY SESSION 7: MICROBIOME  Valley Isle Ballroom

**Session Chairs:** Takuro Nakamura, Cancer Institute, Japanese Foundation for Cancer Research, Tokyo, Japan, and Jennifer A. Wargo, The University of Texas MD Anderson Cancer Center, Houston, TX, USA

**The role of the microbiome in response to cancer therapy**
Jennifer A. Wargo

**The impact of *Helicobacter pylori* infection on gastric carcinogenesis***
Masanori Hatakeyama, The University of Tokyo, Tokyo, Japan

**Microbial regulation of tumor-elicited inflammation***
Sergei Grivennikov, Fox Chase Cancer Center, Philadelphia, PA, USA

9:30 a.m.-10:00 a.m.  COFFEE BREAK  Valley Isle Terrace

*An extended abstract for this presentation is available in the Invited Abstracts section of the Proceedings.*
10:00 a.m.-11:30 a.m.  
**PLENARY SESSION 8: ENGINEERING, NANOTECHNOLOGY, AND IMAGING**  
Valley Isle Ballroom  

*Session Chairs: Daniel A. Heller*, Memorial Sloan Kettering Cancer Center, New York, NY, USA, and *Masanobu Oshima*, Kanazawa University, Ishikawa, Japan  

- **Macrocyclic pseudo-natural peptides for anticancer therapies**  
  Hiroaki Suga, The University of Tokyo, Tokyo, Japan  

- **Nanomedicines to improve the therapeutic index of precision medicines**  
  Daniel A. Heller  

- **Application of tissue clearing technology in cancer research**  
  Kei Takahashi, The University of Tokyo, Tokyo, Japan  

11:30 a.m.-4:00 p.m.  
**FREE TIME**  

4:00 p.m.-5:30 p.m.  
**PLENARY SESSION 9: LIQUID BIOPSY**  
Valley Isle Ballroom  

*Session Chairs: Fuyuki Ishikawa*, Kyoto University, Kyoto, Japan, and *Alberto Bardelli*, University of Turin - Candiolo Cancer Institute IRCCS, Candiolo, Italy  

- **The emerging role of exosomal microRNAs in cancer diagnostic and therapeutics**  
  Takahiro Ochiya, Tokyo Medical University; National Cancer Center Research Institute, Tokyo, Japan  

- **Inactivation of DNA repair to improve immune surveillance**  
  Alberto Bardelli  

- **Proteome-wide profiling of viable tissue-derived exosomes, toward development of cancer liquid biopsy**  
  Koji Ueda, Japanese Foundation for Cancer Research, Tokyo, Japan  

5:30 p.m.-7:30 p.m.  
**POSTER SESSION C**  
Haleakala Ballroom  

*An extended abstract for this presentation is available in the Invited Abstracts section of the Proceedings.*
Tuesday, February 12

7:00 a.m.-8:00 a.m.  CONTINENTAL BREAKFAST
Aloha Pavilion and Ko’ala

8:00 a.m.-9:30 a.m.  PLENARY SESSION 10: DRUG RESISTANCE
Valley Isle Ballroom

Session Chairs: Alan Ashworth, University of California San Francisco Helen Diller Family Comprehensive Cancer Center, San Francisco, CA, USA, and Naoya Fujita, Cancer Chemotherapy Center, Japanese Foundation for Cancer Research, Tokyo, Japan

Mechanism of the intrinsic resistance and emergence of tolerant cells to osimertinib in EGFR mutated lung cancer*
Seiji Yano, Cancer Research Institute, Kanazawa University, Ishikawa, Japan

Synthetic lethal targeting of defects in DNA repair as cancer therapy*
Alan Ashworth

Cellular diversity by genetic and nongenetic alteration in cancer induces acquired resistance in NSCLC
Ryohei Katayama, Cancer Chemotherapy Center, Japanese Foundation for Cancer Research, Tokyo, Japan

9:30 a.m.-10:00 a.m.  COFFEE BREAK
Valley Isle Terrace

10:00 a.m.-11:00 a.m.  PLENARY SESSION 11: NOVEL TARGETS AND DRUG DISCOVERY
Valley Isle Ballroom

Session Chairs: Atsushi Ochiai, Exploratory Oncology Research and Clinical Trial Center, National Cancer Center, Chiba and Tokyo, Japan, and Kevan M. Shokat, University of California San Francisco and Howard Hughes Medical Institute, San Francisco, CA, USA

Chemical strategies for discovering direct inhibitors of K-Ras and other oncogenic GTPases
Kevan M. Shokat

Telomere as the starting point of anticancer drug discovery*
Hiroyuki Seimiya, Cancer Chemotherapy Center, Japanese Foundation for Cancer Research, Tokyo, Japan

*An extended abstract for this presentation is available in the Invited Abstracts section of the Proceedings.
CONFERENCE PROGRAM

11:00 a.m.-3:30 p.m.   FREE TIME

3:30 p.m.-5:30 p.m.   PLENARY SESSION 12: TRANSLATIONAL AND CLINICAL RESEARCH AND CLINICAL TRIALS
Valley Isle Ballroom

Session Chairs: Riccardo Dalla-Favera, Columbia University Institute for Cancer Genetics, New York, NY, USA, and Hiroyuki Seimiya, Cancer Chemotherapy Center, Japanese Foundation for Cancer Research, Tokyo, Japan

Drug repurposing for diffuse large B-cell lymphoma*
Riccardo Dalla-Favera

Metabolic regulation of stemness in hematopoietic malignancy*
Atsushi Hirao, Cancer Research Institute, Kanazawa University, Ishikawa, Japan

Targeting oncogene dependencies in metastatic breast cancer: A clinical and translational perspective
Dejan Juric, Massachusetts General Hospital Cancer Center, Boston, MA, USA

Phase II clinical trial of oncolytic herpes virus G47Δ in patients with glioblastoma*
Tomoki Todo, The University of Tokyo, Tokyo, Japan

5:30 p.m.-7:30 p.m.   POSTER SESSION D
Haleakala Ballroom

*An extended abstract for this presentation is available in the Invited Abstracts section of the Proceedings.