

CONFERENCE PROGRAM

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*.

CONFERENCE PROGRAM

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

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CONFERENCE PROGRAM

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

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

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CONFERENCE PROGRAM

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

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CONFERENCE PROGRAM

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

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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 G47 Δ 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

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