## **Conference Program**

# Thursday, February 21

5:00 p.m.-6:30 p.m. Keynote Session

Monarchy Ballroom

Co-Chairpersons: Kohei Miyazono, University of Tokyo, Tokyo, Japan, and Tyler Jacks, David H. Koch Institute for Integrative

Cancer Research at MIT, Cambridge, MA, USA

5:00 p.m. The biology of noncoding RNAs in cancer\*

Phillip A. Sharp, David H. Koch Institute for Integrative Cancer Research at

MIT, Cambridge, MA, USA

5:45 p.m. Targeting essential growth drivers in human cancers\*

Hiroyuki Mano, Jichi Medical University, Tochigi, Japan; University of Tokyo,

Tokyo, Japan

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

Regency Ballroom

### Friday, February 22

7:00 a.m.-8:00 a.m. Breakfast/Mentoring Roundtables

**Sunset Terrace** 

8:00 a.m.-9:30 a.m. Session 1: Cancer Genomes and Tumor Evolution

Monarchy Ballroom

Co-Chairpersons: William C. Hahn, Dana-Farber Cancer Institute,

Boston, MA, USA, and Yoshio Miki, Tokyo Medical and

Dental University, Tokyo, Japan

8:00 a.m. Survival of the fittest: Cancer genome evolution towards adaptation\*

Tatsuhiro Shibata, National Cancer Center Research Institute, Tokyo, Japan

8:35 a.m. Interrogating the architecture of cancer genomes

Peter J. Campbell, Wellcome Trust Sanger Institute, Cambridge, United

Kingdom

9:10 a.m. Genome-wide analyses of rhabdomyosarcoma\*

Junko Takita, University of Tokyo, Tokyo, Japan

<sup>\*</sup>An extended abstract for this presentation is available in the Invited Abstracts section of the Proceedings.

9:30 a.m.-10:00 a.m. Break

Sunset Terrace

10:00 a.m.-11:30 a.m. Session 2: Circulating Tumor Cells and Other New Diagnostic

**Technologies** 

Monarchy Ballroom

Co-Chairpersons: Okio Hino, Juntendo University School of Medicine, Tokyo, Japan, and Sean J. Morrison, UT Southwestern

Medical Center, Dallas, TX, USA

10:00 a.m. Bioengineering and clinical applications of circulating tumor cell chips\*

Shyamala Maheswaran, Massachusetts General Hospital, Charlestown, MA,

USA

10:35 a.m. PLS3 expression in circulating blood is a good marker for colon cancer

recurrence\*

Masaki Mori, Osaka University, Osaka, Japan

11:10 a.m. The clinical application of circulating tumor DNA

Luis A. Diaz, Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins,

Baltimore, MD, USA

11:30 a.m.-3:30 p.m. Free Time

3:30 p.m.-5:00 p.m. Session 3: Noncoding RNAs

Monarchy Ballroom

Co-Chairpersons: Phillip A. Sharp, David H. Koch Institute for Integrative Cancer Research at MIT, Cambridge, MA, USA, and Hitoshi Nakagama, National Cancer Center Research Institute,

Tokyo, Japan

3:30 p.m. Senescence-associated microRNAs, a novel approach to tumor

suppression\*

Hidetoshi Tahara, Hiroshima University, Hiroshima, Japan

4:05 p.m. microRNA reprogramming in cancer: Mechanisms and consequences

Joshua Mendell, UT Southwestern Medical Center, Dallas, TX, USA

4:40 p.m. Linking RNA to human health and disease

John L. Rinn, Harvard University, Cambridge, MA, USA

5:00 p.m.-7:00 p.m. Poster Session A

Regency Ballroom and Grand Promenade

<sup>\*</sup>An extended abstract for this presentation is available in the Invited Abstracts section of the *Proceedings*.

### Saturday, February 23

7:00 a.m.-8:00 a.m. Breakfast/Mentoring Roundtables

**Sunset Terrace** 

8:00 a.m.-10:00 a.m. Session 4: DNA Damage Response

Monarchy Ballroom

Co-Chairpersons: Fuyuki Ishikawa, Kyoto University, Kyoto, Japan, and Kevin M. Shannon, University of California,

San Francisco, CA, USA

8:00 a.m. DNA damage response and cellular senescence in cancer\*

Eiji Hara, Japanese Foundation for Cancer Research, Tokyo, Japan

8:35 a.m. Modeling resistance to anticancer drugs

Jeffrey E. Settleman, Genentech, Inc., South San Francisco, CA, USA

9:10 a.m. Complex regulation of homologous recombination by E3 ligases\*

Shinichiro Nakada, Osaka University, Osaka, Japan

9:30 a.m. A systems approach to understanding and predicting therapeutic

response

Joe W. Gray, Oregon Health and Science University's Knight Cancer Institute,

Portland, OR, USA

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

Sunset Terrace

10:30 a.m.-12:00 p.m. Session 5: Epigenetics and Cancer Cell States

Monarchy Ballroom

Co-Chairpersons: Joshua Mendell, UT Southwestern Medical Center, Dallas, TX, USA, and Masahide Takahashi, Nagoya University Graduate School of Medicine, Nagoya, Japan

10:30 a.m. Epigenetic plasticity and its clinical implications in human neoplasia\*

Yutaka Kondo, Aichi Cancer Center, Nagoya, Japan

11:05 a.m. Human melanoma metastasis in NSG mice correlates with clinical

outcome in patients\*

Sean J. Morrison, UT Southwestern Medical Center, Dallas, TX, USA

11:40 a.m. Dysregulation of noncoding RNA genes and its clinical application\*

Hiromu Suzuki, Sapporo Medical University, Sapporo, Japan

<sup>\*</sup>An extended abstract for this presentation is available in the Invited Abstracts section of the Proceedings.

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

3:30 p.m.-5:00 p.m. Session 6: Cancer Progression and Metastasis

Monarchy Ballroom

Co-Chairpersons: Motoharu Seiki, University of Tokyo Institute of Medical Science, Tokyo, Japan, and Lynda Chin, The University of

Texas MD Anderson Cancer Center, Houston, TX, USA

3:30 p.m. Molecular characterization of lung cancer progression\*

Tyler Jacks, David H. Koch Institute for Integrative Cancer Research at MIT,

Cambridge, MA, USA

4:05 p.m. Hypoxia-inducible factor activity is an excellent marker for

tumorigenesis and cancer progression\*

Shinae Kondoh, Tokyo Institute of Technology, Tokyo, Japan

4:40 p.m. The systemic environment as an important determinant of malignancy

Sandra S. McAllister, Brigham and Women's Hospital, Boston, MA, USA

5:00 p.m.-7:00 p.m. Poster Session B

Regency Ballroom and Grand Promenade

#### Sunday, February 24

7:00 a.m.-8:00 a.m. Breakfast/Mentoring Roundtables

**Sunset Terrace** 

8:00 a.m.-9:30 a.m. Session 7: Tumor Microenvironment

Monarchy Ballroom

Co-Chairpersons: Kevin M. Haigis, Massachusetts General Hospital, Charlestown, MA, USA, and Atsushi Ochiai, National

Cancer Center, Hospital East, Kashiwa, Japan

8:00 a.m. Molecular targeting of tumor vasculature\*

Gou Young Koh, Korea Advanced Institute of Science and Technology

(KAIST), Daejeon, Korea (Rep.)

8:35 a.m. Inflammation and cancer: Reprogramming the immune

microenvironment as an anticancer therapeutic strategy\*

Lisa M. Coussens, Oregon Health and Science University's Knight Cancer

Institute, Portland, OR, USA

9:10 a.m. Mint3 promotes tumor malignancy in cancer and stromal cells\*

Takeharu Sakamoto, University of Tokyo, Institute of Medical Science, Tokyo,

Japan

<sup>\*</sup>An extended abstract for this presentation is available in the Invited Abstracts section of the *Proceedings*.

9:30 a.m.-10:00 a.m. Break

Sunset Terrace

10:00 a.m.-11:30 a.m. Session 8: Cancer Immunology and Immunotherapy

Monarchy Ballroom

Co-Chairpersons: Masao Seto, Aichi Cancer Center Research Institute, Nagoya, Japan, and Lisa M. Coussens, Oregon Health & Science University's Knight Cancer Institute, Portland, OR, USA

10:00 a.m. Immune checkpoint blockade in cancer therapy: New insights and

opportunities

James P. Allison, The University of Texas MD Anderson Cancer Center,

Houston, TX, USA

10:35 a.m. Impact of innate and acquired immune responses in adult T-cell

leukemia\*

Mari Kannagi, Tokyo Medical and Dental University, Tokyo, Japan

11:10 a.m. microRNAs and myeloid-derived suppressor cells in tumor immune

escape\*

Qingqing Wang, Zhejiang University School of Medicine, Hangzhou,

China

11:30 a.m.-3:30 p.m. Free Time

3:30 p.m.-5:00 p.m. Session 9: Preclinical Models

Monarchy Ballroom

Co-Chairpersons: Katerina A. Politi, Yale Cancer Center, New Haven, CT, USA, and Masanori Hatakeyama, University of Tokyo,

Tokyo, Japan

3:30 p.m. GEM models in translational research

Lynda Chin, The University of Texas MD Anderson Cancer Center, Houston,

TX, USA

3:35 p.m. Novel strategies for targeting cancer stem cells\*

Hideyuki Saya, Keio University, Tokyo, Japan

4:10 p.m. Contributions of the tumor microenvironment to chemoresistance

Mikala Egeblad, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY, USA

5:00 p.m.-7:00 p.m. Poster Session C

Regency Ballroom and Grand Promenade

<sup>\*</sup>An extended abstract for this presentation is available in the Invited Abstracts section of the *Proceedings*.

### Monday, February 25

7:00 a.m.-8:00 a.m. Breakfast/Mentoring Roundtables

Sunset Terrace

8:00 a.m.-9:00 a.m. Session 10: Signaling and Systems Biology

Monarchy Ballroom

Co-Chairpersons: Seong-Jin Kim, CHA Cancer Institute, Seoul, Korea, and Cornelia M. Ulrich, German Cancer Research Center,

Heidelberg, Germany

8:00 a.m. Genomic profiles of Asian-endemic cancers\*

Patrick Tan, Duke-NUS Graduate Medical School Singapore, Singapore

8:35 a.m. Statistical gene network analysis for understanding cancer

heterogeneity\*

Seiya Imoto, University of Tokyo, Institute of Medical Science, Tokyo, Japan

9:00 a.m.-10:30 a.m. Session 11: Cancer Prevention

Monarchy Ballroom

Co-Chairpersons: Tyler Jacks, David H. Koch Institute for Integrative Cancer Research at MIT, Cambridge, MA, USA, and Johji Inazawa, Tokyo Medical and Dental University, Tokyo, Japan

9:00 a.m. Energy balance and inflammation in cancer prevention and prognosis

Cornelia M. Ulrich, German Cancer Research Center, Heidelberg, Germany

9:35 a.m. GWAS revealed the roles of gene-environmental interaction in

carcinogenesis\*

Koichi Matsuda, University of Tokyo, Institute of Medical Science, Tokyo,

Japan

10:10 a.m. Targeting cellular survival responses to replication stress as a novel

approach for cancer prevention \*

Guang Peng, The University of Texas MD Anderson Cancer Center, Houston,

TX, USA

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

<sup>\*</sup>An extended abstract for this presentation is available in the Invited Abstracts section of the *Proceedings*.

11:00 a.m.-12:00 p.m. Session 12: Targeted Therapies and Resistance

Monarchy Ballroom

Co-Chairpersons: Tomoki Naoe, Nagoya University Hospital, Nagoya, Japan, and Mikala Egeblad, Cold Spring Harbor

Laboratory, Cold Spring Harbor, NY, USA

11:00 a.m. TTF-1/NKX2-1: A double-edged sword in lung adenocarcinoma \*

Takashi Takahashi, Nagoya University, Nagoya, Japan

11:35 a.m. Biological mechanisms of resistance to targeted therapies

Katerina A. Politi, Yale Cancer Center, New Haven, CT, USA

12:00 p.m.-4:30 p.m. Free Time

4:30 p.m.-6:30 p.m. Poster Session D

Regency Ballroom and Grand Promenade

7:00 p.m.-10:00 p.m. Closing Banquet

Monarchy Ballroom