13th AACR-JCA Joint Conference: From Cancer Discovery Science to Therapeutic Innovation

February 1-5, 2025, Hyatt Regency Maui, Maui, HI

CONFERENCE PROGRAM

Saturday, February 1, 2025

Registration 3-7 p.m.| Grand Promenade

Welcome and Keynotes

6-7:30 p.m. | Monarchy 1-4

- 6:00 p.m. | Welcome and Introduction of Keynote speakers
- **6:05 p.m. | Cancer trajectory in damaged tissues** Hiroyuki Mano, National Cancer Center, Tokyo, Japan
- **6:50 p.m. | Personalized cancer vaccines: Updates and encouraging results** Catherine J. Wu, Dana-Farber Cancer Institute, Boston, Massachusetts, USA

Opening Reception

7:30-9 p.m. | Halona Kai

Sunday, February 2, 2025

Continental Breakfast and "Networking Roundtables"

7-8 a.m. | Sunset Terrace

Plenary Session 1: Advances in Cancer Genomics

8-9:30 a.m. | Monarchy 1-4

Session Chair: Hiromichi Suzuki, National Cancer Center Japan, Kyoto, Japan

- 8 a.m. | Eliminating "luck"- Learning from rare cancer patients to improve outcomes [Virtual presentation] Andrew Futreal, The University of Texas MD Anderson Cancer Center, Houston, Texas, USA
- 8:25 a.m. | Elucidating the pathogenesis of medulloblastoma through the discovery of novel genetic alterations Hiromichi Suzuki
- 8:50 a.m. | New functional genomics methods elucidate the cancer-specific transcriptome Yasuhiro Murakawa, Kyoto University, Kyoto, Japan
- 9:15 a.m. | Anatomical genomic and transcriptomic analyses of Helicobacter pylori-driven gastric transformation*
 Yosuke Tanaka, National Cancer Center Research Institute, Tokyo, Japan

Break

9:30-10 a.m. | Grand Promenade

Plenary Session 2: Cancer Immune Interaction

10-11:30 a.m. | Monarchy 1-4

Session Chairs: Hiroyoshi Nishikawa, National Cancer Center, Tokyo, Japan, and Livnat Jerby, Stanford University, Stanford, California, USA

- 10 a.m. | Immuno-genomic cancer evolution governs immune landscapes in the tumor microenvironment Hiroyoshi Nishikawa
- **10:25 a.m.** | Machine learning for modeling cellular interactions in the tumor microenvironment Elham Azizi, Columbia University, New York, New York, USA
- **10:50 a.m. | Toward new mechanisms to unleash targeted immune responses** Livnat Jerby
- 11:15 a.m. | Spatial transcriptome profiling of multicellular dynamics in metastatic gastric cancers: Efficiency of immunotherapy plus vascular endothelial growth factor receptor 2 (VEGFR2) inhibition* Minae An, Samsung Medical Center, Seoul, South Korea

Free Time

11:30 a.m.-4 p.m.

Plenary Session 3: Cancer Evolution and the Tumor Microenvironment

4-5:30 p.m. | Monarchy 1-4

Session Chairs: Nobuyuki Kakiuchi, Kyoto University, Kyoto, Japan, and Sheila A. Stewart, Washington University in St. Louis, St. Louis, Missouri, USA

- **4 p.m. | Somatic mosaicism in non-cancer digestive epithelium** Nobuyuki Kakiuchi
- **4:25 p.m. | Age related stromal changes drive breast cancer progression** Sheila A. Stewart
- 4:50 p.m. | Distinct tumor microenvironment phenotypes driven by cancer genotype in gastrointestinal cancer: Insights from mouse models and multi-omics analysis Yoku Hayakawa, The University of Tokyo, Tokyo, Japan
- 5:15 p.m. | Multimodal spatial profiling reveals immune suppression and microenvironment remodeling in fallopian tube precursors to high-grade serous ovarian carcinoma* Tanjina Kader, Harvard Medical School, Boston, Massachusetts, USA

Poster Session A

5:30-7:30 p.m. | Monarchy 5-7

Monday, February 3, 2025

Continental Breakfast and "Networking Roundtables"

7-8 a.m. | Sunset Terrace

Plenary Session 4: Genome Instability

8-9:30 a.m. | Monarchy 1-4

Session Chairs: Ashok Venkitaraman, Cancer Science Institute of Singapore, Singapore, and Ivana Bozic, University of Washington, Seattle, Washington, USA

- 8 a.m. | Metabolic triggers for cancer genome evolution Ashok Venkitaraman
- 8:25 a.m. | Neoantigen evolution and response to immunotherapy in colorectal cancer Ivana Bozic
- 8:50 a.m. | Dissecting the DNA damage response network Alberto Ciccia, Columbia University, New York, New York, USA
- 9:15 a.m. | Advancing precision medicine in pediatric sarcoma: Exploiting DNA damage response pathway for targeted therapies* Larissa Volken, Children's Cancer Institute Australia, Sydney, Australia

Break

9:30-10 a.m. | Grand Promenade

Plenary Session 5: Cancer Plasticity and Resistance

10-11:30 a.m. | Monarchy 1-4

Session Chairs: Laura D. Attardi, Stanford University, Stanford, California, USA, and Noriko Gotoh, Kanazawa University, Kanazawa, Japan

- 10 a.m. | Illuminating how p53 governs cell state transitions and restricts plasticity in cancer Laura D. Attardi
- 10:25 a.m. | Heterogeneous dormant breast cancer cells leverage bone marrow cell plasticity at the single-cell level to drive metastasis initiation Noriko Gotoh
- 10:50 a.m. | Functional interrogation of high-plasticity cell states in cancer progression and treatment resistance

Tuomas Tammela, Memorial Sloan Kettering Cancer Center, New York, New York, USA

 11:15 a.m. | Systematic interrogation of cancer cell states as drivers of environmental tolerance and therapy resistance in cancer*

Srivatsan Raghavan, Dana-Farber Cancer Institute, Boston, Massachusetts, USA

Free Time

11:30 a.m.-4 p.m.

Plenary Session 6: New Treatment Modalities

4-5:30 p.m. | Monarchy 1-4

Session Chairs: Nathanael S. Gray, Stanford University, Stanford, California, USA, and Mika Kamata-Sakurai, Chugai Pharmaceutical Co., Ltd., Tokyo, Japan

- **4 p.m. | Reprogramming transcription with molecular glues** Nathanael S. Gray
- **4:25 p.m. | Epitope editing enables novel immunotherapies for acute myeloid leukemia** Pietro Genovese, Dana-Farber Cancer Institute, Massachusetts, USA
- 4:50 p.m. | Novel approaches in tumor-specific immunotherapy: Targeting immunosuppressive factors in the tumor microenvironment Mika Kamata-Sakurai
- 5:15 p.m. | CRISPR/Cas9 knockout screen identifies SEMA3F gene for resistance to cyclin-dependent kinase 4 and 6 inhibitors in breast cancer*
 Yuko Kawai, Keio University School of Medicine, Tokyo, Japan

Poster Session B

5:30-7:30 p.m. | Monarchy 5-7

Tuesday, February 4, 2025

Continental Breakfast

7-8 a.m. | Sunset Terrace

Plenary Session 7: Cancer Metabolism

8-9:30 a.m. | Monarchy 1-4

Session Chairs: Marcia C. Haigis, Harvard Medical School, Boston, Massachusetts, USA, and Kenji Chamoto, Kyoto University, Kyoto, Japan

- 8 a.m. | Targeting metabolic vulnerabilities in cancer Marcia C. Haigis
- 8:25 a.m. | Fatty acid oxidation prevents active aldehyde accumulation and metabolic exhaustion in CD8+ T cells in tumor microenvironment Kenji Chamoto
- 8:50 a.m. | Metabolic reprogramming: A bridge between aging and cancer Ana P. Da Silva Gomes, H. Lee Moffitt Cancer Center, Tampa, Florida, USA
- 9:15 a.m. | Novel aneuploidy-associated therapeutic targets for squamous cell carcinoma* Nadja Zhakula-Kostadinova, Columbia University, New York, New York, USA

Break

9:30-10 a.m. | Grand Promenade

Plenary Session 8: Population Sciences

10-11:30 a.m. | Monarchy 1-4

Session Chairs: Elizabeth A. Platz, Johns Hopkins University, Baltimore, Maryland, USA, and Tomotaka Ugai, Harvard Medical School, Boston, Massachusetts, USA

- **10 a.m.** | Molecular epidemiology studies of cancer risk, early detection, and prognosis Elizabeth A. Platz
- 10:30 a.m. | Integrative cancer population sciences to decipher the etiology of early-onset colorectal cancer
 Tomotaka Ugai
- **11 a.m.** | **Bridging mechanisms and prevention: Insights from interactions** Keitaro Matsuo, Aichi Cancer Center, Aichi, Japan

Free Time

11:30 a.m.-4 p.m.

Plenary Session 9: Novel Clinical Trials Platforms

4-5:30 p.m. | Monarchy 1-4

Session Chairs: Naoto T. Ueno, University of Hawaii Cancer Center, Honolulu, Hawaii, USA, and Takashi Owa, Eisai Inc., Nutley, New Jersey, USA

- 4 p.m. | Repurposing JNK inhibitors: A new path to target cancer through modulation of the tumor microenvironment Naoto T. Ueno
- 4:25 p.m. | Combined inhibition of MEK and HDACs improves the cytotoxicity of CD4 and CD8 T cells in NRAS;ASXL1-driven acute myeloid leukemia mice*
 Jing Zhang, University of Wisconsin - Madison, Madison, Wisconsin, USA
- 4:40 p.m. | Biomarker-based target tumor selection and tissue-agnostic trial design with the FGFR inhibitor tasurgratinib and the RBM39 degrader E7820 Takashi Owa
- 5:05 p.m. | DXd ADCs, emerging anti-cancer therapeutics with potent efficacy and manageable safety Naoya Harada, Daiichi Sankyo, Tokyo, Japan

Poster Session C

5:30-7:30 p.m. | Monarchy 5-7

Wednesday, February 5, 2025

Continental Breakfast

7-8 a.m. | Sunset Terrace

Plenary Session 10: Novel Roles of RNA in Cancer

8-9:30 a.m. | Monarchy 1-4

Session Chairs: Akiko Takahashi, Japanese Foundation for Cancer Research, Tokyo, Japan, and Adrian R. Krainer, Cold Spring Harbor Laboratory, Cold Spring Harbor, New York, USA

- **8 a.m. | Targeting epigenetic aberrations in the cancer microenvironment** Akiko Takahashi
- 8:25 a.m. | Harnessing mRNA splicing and stability for cancer treatment Akihide Yoshimi, National Cancer Center Japan, Tokyo, Japan
- 8:50 a.m. | Antisense oligonucleotide therapy for diffuse midline glioma Adrian R. Krainer
- 9:15 a.m. | PMR-116, a second generation RNA polymerase I inhibitor* Luc Furic, Peter MacCallum Cancer Centre, Melbourne, Australia

Break

9:30-10 a.m. | Grand Promenade

Plenary Session 11: Data Science

10-11:30 a.m. | Monarchy 1-4

Session Chairs: Benjamin Haibe-Kains, University of Toronto, Toronto, Ontario, Canada, and Shumpei Ishikawa, University of Tokyo, Tokyo, Japan

- **10 a.m. | The surprisingly complex data science journey of clinical trial matching** Benjamin Haibe-Kains
- **10:25 a.m. | Title to be announced** Jorge S. Reis-Filho, AstraZeneca, Gaithersburg, Maryland, USA
- **10:50 a.m. | Exploring deep biomedical information from histopathology images** Shumpei Ishikawa
- 11:15 a.m. | Estimating divergence times of founder mutations in cancer predisposition genes in the Japanese population using shared haplotype regions*
 Wataru Nakamura, National Cancer Center Research Institute, Tokyo, Japan

Free Time

11:30 a.m.-4 p.m.

Plenary Session 12: Novel Immunotherapies

4-5:30 p.m. | Monarchy 1-4

Session Chairs: Aude G. Chapuis, Fred Hutchinson Cancer Center, Seattle, Washington, USA, and Yuki Kagoya, Keio University School of Medicine, Tokyo, Japan

- **4 p.m.** | Surpassing the efficacy barriers of T cell receptor-based therapies Aude G. Chapuis
- **4:25 p.m.** | Understanding T-cell and tumor cell molecular mechanisms of CAR T-cell therapy failure Yuki Kagoya
- **4:50 p.m. | Programming natural killer cell recall to combat cancer** Todd A. Fehniger, Washington University in St. Louis, St. Louis, Missouri, USA
- 5:15 p.m. | KROS 101: A next-generation GITR agonist boosting anti-tumor T cell responses and reprogramming the tumor microenvironment* Tesfahun Admasu, Cedars Sinai Medical Center, Los Angeles, California, USA

Poster Session D

5:30-7:30 p.m. | Monarchy 5-7

*Short talk from proffered abstract