Saturday, July 5

Opening Remarks — July 5 (Sat),9:00-9:05

Seishi Ogawa

Welcome Address — July 5 (Sat),9:05-9:10

Masanori Hatakeyama

Session 1. Gastrointestinal cancer — July 5 (Sat), 9:10-10:25

Chairperson: Nobuyuki Kakiuchi

S1-1 **Emerging roles of IL-6 in gastrointestinal tumorigenesis** 26
Koji Taniguchi
Department of Pathology, Faculty of Medicine and Graduate School of Medicine, Hokkaido University

S1-2 **Understanding of GI cancers using organoid technology** 28
Toshiro Sato
Keio University School of Medicine

S1-3 **Differential roles of Wnt pathway mutations in colorectal cancer** 30
Yoshikage Inoue[1], Nobuyuki Kakiuchi[1], Satoshi Nagayama[2], Seishi Ogawa[1]
1 Department of Pathology and Tumor Biology, Graduate School of Medicine, Kyoto University
2 Department of Gastroenterological Surgery, Uji Tokushukai Hospital

10:25-10:40 Coffee Break

Keynote Lecture 1 — July 5 (Sat), 10:40-11:25

Chairperson: Seishi Ogawa

KL1 ***Somatic Evolution*** **as a Lens into Human Biology and Disease** 18
Dan Landau
New York Genome Center

Session 2. Clonal Evolution of normal tissue — July 5 (Sat), 11:25-12:45

Chairperson: Mamiko Sakata-Yanagimoto

S2-1 **Clonal evolution in normal epithelium of the bronchi and bladder** 32
Kenichi Yoshida
Division of Cancer Evolution, National Cancer Center Research Institute

S2-2 **Somatic Mosaicism in Brain Tumor Evolution** 34
Jeong Ho Lee[1,2]
1 Graduate School of Medical Science and Engineering, Korea Advanced Institute Science and Technology (KAIST), Daejeon, Korea.
2 Sovargen Co. LTD., Daejeon, Korea

S2-3 **Clonal evolution from normal cells to cancer**
- Cancer risk evaluation using somatic mosaicism in the buccal mucosa – 36
Akira Yokoyama[1], Nobuyuki Kakiuchi[2,3]
1 Department of Medical Oncology, Kyoto University Graduate School of Medicine, Kyoto, Japan
2 The Hakubi Center for Advanced Research, Kyoto University, Kyoto, Japan
3 Department of Gastroenterology and Hepatology, Graduate School of Medicine, Kyoto University, Kyoto, Japan

Luncheon Seminar 1 — July 5 (Sat), 12:45-13:30

Chairperson: Taka-Aki Sato

Co-Sponsored: iLAC Co., Ltd. / Robotic Biology Institute Inc. / Crecon Genomics Inc.

LS1 **Challenge of developing a custom cfDNA methylation panel in metastatic urothelial carcinoma** 22
Yoshiyuki Nagumo
Department of Urology, University of Tsukuba, Japan

Special Lecture — July 5 (Sat), 13:30-14:00

Chairperson: Toshiro Sato

SL **Publishing in *Nature* journals** 16
Safia Danovi
Nature Genetics

Session 3. Hematological malignancies 1 — July 5 (Sat), 14:00-14:50

Chairperson: Yasuhito Nannya

S3-1 **Chromatin landscape and epigenetic heterogeneity of acute myeloid leukemia** 38
Seishi Ogawa
Department of Pathology and Tumor Biology, Kyoto University

S3-2 **Spatial multiomics reveals distinct follicular T cell subsets in follicular lymphoma**.....40
Mamiko Sakata-Yanagimoto[1,2]
1 Department of Hematology, Institute of Medicine, University of Tsukuba
2 Division of Advanced Hemato-Oncology, Transborder Medical Research Center, University of Tsukuba

14:50-15:05 Coffee Break

Session 4. Hematological malignancies 2 — July 5 (Sat), 15:05-16:25

Chairperson: Masahiro Nakagawa

S4-1 **Whole-genome landscapes of 1,364 breast cancers with clinical outcomes**.....42
Young Seok Ju[1,2], Ryul Kim[1], Jonghan Yu[3], Jeongmin Lee[4], Yeon Hee Park[3]
1 Inocras Inc., San Diego, USA
2 Korea Advanced Institute of Science and Technology, Daejeon, Korea
3 Samsung Medical Center, Seoul, Korea
4 Seoul St Mary's Hospital, Seoul, Korea

S4-2 **Heterogeneous breast cancer cells leverage bone marrow cell plasticity at the single-cell level to drive metastasis initiation** 44
Noriko Gotoh
Cancer Research Institute, Kanazawa University

S4-3 **Variation of Centromere and its Impact on Cancer Translocation** 46
Yuichi Shiraishi
Division of Genome Analysis Platform Development, National Cancer Center Research Institute

Poster Session — July 5 (Sat), 16:25-17:40

Sunday, July 6

Session 5. Hematological malignancies 3 — July 6 (Sun), 9:00-10:20

Chairperson: Motohiro Kato

Keynote Lecture 2 — July 6 (Sun), 10:20-11:05

Chairperson: Kenichi Yoshida

11:05-11:15 Coffee Break

Session 6. Cancer environment — July 6 (Sun), 11:15-12:30

Chairperson: Masahiro Sonoshita

Luncheon Seminar 2 — July 6 (Sun), 12:30-13:15

Chairperson: Akira Watanabe

Co-Sponsored: CyberomiX Inc.

Session 7. Spatial omics — July 6 (Sun), 13:15-14:30

Chairperson: Genta Nagae

Poster Session

Poster Session July 5 (Sat), 16:25-17:40