Program

TUESDAY, JULY 5, 2016

15:00–17:00 Registration

17:10–17:15 Opening Remarks: Tetsuo NODA

17:15–18:05 Plenary Lecture 1
Chair: Tetsuo NODA

K Ras as a Cancer Target ····· **24**
Frank McCORMICK
(Helen Diller Comprehensive Cancer Center, University of California, San Francisco, USA)

18:05–18:55 Plenary Lecture 2
Chair: Tetsuo NODA

Epigenetics, stem cells and disease research ····· **26**
Rudolf JAENISCH
(Whitehead Institute for Biomedical Research, Department of Biology, MIT, USA)

19:00–20:30 Welcome Reception

WEDNESDAY, JULY 6, 2016

9:00–12:33 Session A
Genetic Heterogeneity
Chairs: Hiroyuki ABURATANI
Peter CAMPBELL

9:00–9:40 **[A-1]**
INTERROGATING THE ARCHITECTURE OF CANCER GENOMES ····· **28**
Peter CAMPBELL
(Cancer Genome Project, Wellcome Trust Sanger Institute, UK)

9:40–10:10 **[A-2]**
Progression of hepatocellular carcinoma ····· **30**
Hiroyuki ABURATANI
(Research Center for Advanced Science and Technology, The University of Tokyo, Japan)

10:10–10:40 Coffee Break

10:40–11:20 [A-3]
Cancer cell of origin and tumor heterogeneity ……32
Benjamin BECK
(IRIBHM, Université Libre de Bruxelles (ULB), Belgium)

11:20–11:50 [A-4]
Integrated molecular analysis of ATL ……34
Seishi OGAWA
(Graduate School of Medicine, Kyoto University, Japan)

11:50–12:20 [A-5]
Targeting essential growth drivers in cancer ……36
Hiroyuki MANO
(Graduate School of Medicine, The University of Tokyo, Japan)

12:20–12:33 [A-6 (PS NO. 49)]
Integrated multiregional analysis revealed temporal signatures in genetic and epigenetic aberrations during colorectal cancer evolution ……129
Ryutaro UCHI
(Department of Surgery, Kyushu University Beppu Hospital, Japan)

12:33–14:00 Lunch

14:00–16:53 Session B
Cancer Stem Cells
Chairs: Nick BARKER
Hideyuki SAYA

14:00–14:40 [B-1]
Lgr5^{+} Stem Cells in Epithelial Homeostasis, Regeneration & Disease of the Stomach ……38
Nick BARKER
(A*STAR Institute of Medical Biology, Singapore, Centre for Regenerative Medicine, The University of Edinburgh, UK)

14:40–15:10 [B-2]
Role of Dclk1-expressing cells in digestive organs ……40
Hiroshi SENO
(Kyoto University Graduate School of Medicine, Japan)

15:10–15:40 [B-3]
Metabolic heterogeneity of cancer stem cells ……42
Hideyuki SAYA
(Institute for Advanced Medical Research, Keio University School of Medicine, Japan)

15:40–16:10 Coffee Break

16:10–16:40 [B-4]
A TIM-3/Gal-9 autocrine stimulatory loop drives self-renewal of human myeloid leukemia stem cells and leukemic progression ……44
Koichi AKASHI
(Kyushu University Graduate School of Medicine, Japan)

16:40–16:53 [B-6 (PS NO. 51)]
In vivo cancer imaging by advanced multi-photon laser excitation microscopy ……131
Takeshi IMAMURA
(Department of Molecular Medicine for Pathogenesis,
Ehime University Graduate School of Medicine, Japan)

16:53–17:31 Flash Talk
(Poster Numbers: 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47, 53, 55, 57, 59)

17:31–19:30 Dinner

19:30–21:30 Poster Session [I]: Odd Numbers

THURSDAY, JULY 7, 2016

9:00–12:33 Session C
Cell Fate Determination and Cancer
Chairs: Inder M. VERMA
Yasuhiro YAMADA

9:00–9:40 [C-1]
Plasticity of Cancer Cells: Lessons from Glioblastomas ……46
Inder M. VERMA
(The Salk Institute, USA)

9:40–10:10 [C-2]
DISSECTING CANCER BIOLOGY WITH iPSC TECHNOLOGY ……48
Yasuhiro YAMADA
(Center for iPS cell Research and Application, Kyoto University, Japan)

10:10–10:40 Coffee Break

10:40–11:20 [C-3]
Human ES cell-based Modeling of Glioblastoma ……50
Kosuke FUNATO
(Department of Neurosurgery, Memorial Sloan-Kettering
Cancer Center, NY, USA)

11:20–11:50 [C-4]
Development of a human pancreatic cancer organoid recapitulating the tumor microenvironment ……52
Hideki TANIGUCHI
(School of Medicine, Yokohama City University, Japan)

11:50–12:20 [C-5]
Disease modeling of colorectal cancer using organoids ……54
Toshiro SATO
(Keio University School of Medicine, Japan)

12:20–12:33 [C-6 (PS NO. 34)]

ROR1 functions as a scaffold of cavin-1 and CAV1, sustaining caveolae and RTK-mediated survival signaling in lung cancer ……114

Tomoya YAMAGUCHI

(Center for Neurological Diseases and Cancer,
Nagoya University Graduate School of Medicine, Japan)

12:33–14:00 Lunch

14:00–17:33 Session D

Plasticity of Cancer Cells

Chairs: Rik DERYNCK
Kohei MIYAZONO

14:00–14:30 [D-1]

The Dickkopf1-CKAP4 axis creates a novel cancer cell proliferation pathway and might represent a therapeutic target for cancer. ……56

Akira KIKUCHI

(Graduate School of Medicine, Osaka University, Japan)

14:30–15:10 [D-2]

Control of TGF-beta responsiveness and epithelial plasticity ……58

Rik DERYNCK

(Institute of Regeneration Medicine and
Department of Cell and Tissue Biology,
University of California at San Francisco, USA)

15:10–15:40 [D-3]

Regulation of plasticity of tumor endothelial cells by signal networks in cancer microenvironment ……60

Tetsuro WATABE

(Graduate School of Medical and Dental Sciences,
Tokyo Medical and Dental University, Japan)

15:40–16:10 Coffee Break

16:10–16:40 [D-4]

TGF-β-induced EMT and progression of cancers ……62

Kohei MIYAZONO

(Graduate School of Medicine, The University of Tokyo, Japan)

16:40–17:20 [D-5]

Zeb1 induction in K-Ras-initiated lung cancer represses Zeb2 to launch a cancer initiation signature ……64

Douglas C. DEAN

(University of Louisville Health Sciences Center,
James Graham Brown Cancer Center, USA)

17:20–17:33 [D-6 (PS NO. 28)]

Heterogeneity of tumor endothelium ……108

Kyoko HIDA

(Vascular Biology, Frontier Research Unit, Institute for Genetic Medicine,
Hokkaido University, Sapporo, Japan)

17:33–18:05 Flash Talk
(Poster Numbers: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 30, 32, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60)

18:05–19:30 Dinner

19:30–21:30 Poster Session [II]: Even Numbers

FRIDAY, JULY 8, 2016

9:00–12:20 Session E
Molecular Basis of Metastasis
Chairs: Tetsuo NODA
Charles SWANTON

9:00–9:40 **[E-1]**
Mammary gland cell fate determinants as regulators of breast cancer progression and metastasis ……66
Yibin KANG
(Princeton University, USA)

9:40–10:10 **[E-2]**
Platelet-tumor interactions as new therapeutic targets for suppressing hematogenous metastasis ……68
Naoya FUJITA
(The Cancer Chemotherapy Center, Japanese Foundation for Cancer Research, Japan)

10:10–10:40 Coffee Break

10:40–11:10 **[E-3]**
Genetic analysis of metastatic legions of human cancers. ……70
Tetsuo NODA
(Cancer Institute, Japanese Foundation for Cancer Research, Japan)

11:10–11:40 **[E-4]**
Exosome-based novel diagnostic and therapeutic strategy against cancer ……72
Takahiro OCHIYA
(Division of Molecular and Cellular Medicine, National Cancer Center Research Institute, Japan)

11:40–12:20 **[E-5]**
Cancer diversity and evolution ……74
Charles SWANTON
(The Francis Crick Institute, Translational Cancer Therapeutics Laboratory, UK)

12:20–12:35 Announcement of Grant Recipients

12:35–12:40 Closing Remarks: Kohei MIYAZONO

12:40–13:30 Lunch