

Friday, May 19. The 1st Day

Opening Remarks 13:00~13:05

Session 1: Keynote Lecture 1

13:05~13:55

Chair Atsushi Iwama

(The Institute of Medical Science, The University of Tokyo)

O-01

Self-renewal capacity in hematopoietic stem cells

<u>Toshio Suda</u> (Kumamoto University, IRCMS)

Session 2: Hematopoietic stem cells 1

13:55~15:20

Chair Fumio Arai

(Department of Stem Cell Biology and Medicine, Graduate School of Medical Sciences, Kyushu University)

Invited Lecture

 $O-02 (13:55 \sim 14:20)$

Nervous-skeletal-hematopoietic integration to understand the phenomena in clinical hematology

Yoshio Katayama (Hematology, Kobe University Hospital)

O-03 $(14:20 \sim 14:35)$

Akkermansia muciniphila induces delayed extramedullary hematopoiesis through cooperative IL-R and TLR signals

Yuxin Wang¹, Tatsuya Morishima^{1,2}, Maiko Sezaki^{1,2}, Ryo Sato¹, Gaku Nakato³, Shinji Fukuda^{3,4,5}, Yuhua Li⁶, Hitoshi Takizawa^{1,7} (¹Laboratory of Stem Cell Stress, International Research Center for Medical Sciences (IRCMS), Kumamoto University, Kumamoto, Japan, ²Laboratory of Hematopoietic Stem Cell Engineering, IRCMS, Kumamoto University, Kumamoto, Japan, ³Gut Environmental Design Group, Kanagawa Institute of Industrial Science and Technology, Kanagawa, Japan, ⁴Institute for Advanced Biosciences (IAB), Keio University, Tokyo, Japan, ⁵Transborder Medical Research Center, University of Tsukuba, Ibaraki, Japan, ⁶Department of Hematology, Zhujiang Hospital, Southern Medical University, Guangzhou, China, ⁷Center for Metabolic Regulation of Healthy Aging (CMHA), Kumamoto University, Kumamoto, Japan)

O-04 (14:35~14:50)

Genome-wide screen in myeloid leukemia cell lines identifies novel upstream regulatory factors of the EVI1 gene

<u>Hiroki Hayashida</u>¹, Yosuke Masamoto¹, Toshiya Hino¹, Ken Morita¹, Mineo Kurokawa^{1,2}

(¹Department of Hematology and Oncology, Graduate School of Medicine, The University of Tokyo, ²Department of Cell Therapy and Transplantation, The University of Tokyo Hospital)

O-05 (14:50~15:05)

Regulation of hematopoietic stem cell aging by adaptive immunity

Yuko Tadokoro, Atsushi Hirao

(Division of Molecular Genetics, Cancer Research Institute, WPI Nano Life Science Institute, Kanazawa University)

 $O-06 (15:05\sim15:20)$

Trisomy 8 remodels epigenome and activates transcription of canonical Runx1-target genes in hematopoietic stem cell

Goro Sashida, Jie Bai, Sho Kubota

(International Research Center for Medical Sciences, Kumamoto University)

Coffee Break 15:20~15:35

Session 3: Tissue stem cells

15:35~17:10

Chair Ritsuko Morita

(Graduate School of Frontier Biosciences, Osaka University)

Invited Lecture

 $O-07 (15:35 \sim 16:00)$

Mechanism of aging-induced intestinal stem cell proliferation in Drosophila

Sa Kan Yoo (RIKEN)

Invited Lecture

O-08 (16:00~16:25)

Chromosome abnormalities in early embryos

<u>Hirohisa Kyogoku^{1,2}</u>, Saori Takahashi³, Ichiro Hiratani³,

Tomoya S Kitajima²

(¹Kobe University, Graduate School of Agricultural Science, Japan, ²Lab for Chromosome segregation, RIKEN BDR, Japan, ³Lab for Developmental epigenetics, RIKEN BDR, Japan)

 $O-09 (16:25 \sim 16:40)$

Self-maintenance strategies of neural stem/progenitor cells via autocrine VEGF-A under hypoxia in the developing brain

<u>Taichi Kashiwagi</u>^{1,2}, Yuuki Takazawa², Tetsushi Kagawa², Tetsuya Taga² (¹Tokyo Medical University, Department of Histology and Neuroanatomy, ²Tokyo Medical and Dental University, Department of Stem Cell Regulation, Medical Research Institute)

 $O-10 (16:40 \sim 16:55)$

Tracing intestinal p57⁺ cells uncovers spatiotemporal reprogramming of regenerating epithelium and the identity of cancer stem cells

Tsunaki Higa, Takeru Oka, Yasutaka Okita, Matsumoto Akinobu,

Keiichi I. Nakayama

(Department of Molecular and Cellular Biology, Medical Institute of Bioregulation,

Kyushu University)

O-11 (16:55~17:10)

Bone marrow CD73+ mesenchymal stem cells display increased stemness and promote fracture healing

<u>Kenichi Kimura</u>¹, Bernd K. Fleischmann², Hiromi Yanagisawa¹ (¹Life Science Center for Survival Dynamics, TARA, University of Tsukuba, ²Institute of Physiology I, University of Bonn)

Miltenyi Biotech technical seminar for multi-dimensional stem cell research 17:10~17:25

Presenter Sohei Nakayama (Miltenyi Biotec K.K.)

Sponsored by: Miltenyi Biotec K.K.

Session 4: Keynote Lecture 2

17:25~18:10

Chair Issay Kitabayashi

(National Cancer Center Research Institute)

O-12

Cell Analysis with Networked Measurement Machines

Sadao Ota

(Research Center for Advanced Science and Technology, The University of Tokyo)

Saturday, May 20. The 2nd Day

Session 5: Pluripotent stem cells

8:30~9:35

Chair Toshihiro Kobayashi

(Division of Mammalian Embryology, Center for Stem Cell Biology and Regenerative Medicine, The Institute of Medical Science, The University of Tokyo)

Invited Lecture

O-13 (8:30~8:55)

Reconstituting human axial development & disease in vitro

Cantas Alev

(Institute for the Advanced Study of Human Biology (ASHBi), Kyoto University)

Invited Lecture

 $O-14 (8:55 \sim 9:20)$

Molecular programming for human early germ cell development

Naoko Irie

(Metabolic Systems Laboratory, Live Imaging Center, Central Institute for Experimental Animals)

O-15 (9:20~9:35)

Self-organization, quality control, and preclinical studies of human iPSC-derived retinal sheets for first-in-human clinical research

Atsushi Kuwahara¹, Kenji Watari¹, Suguru Yamasaki¹, Tatsuya Kamei¹, Hideki Adachi², Tomoaki Tochitani², Yasuyuki Kita¹, Masayo Fujiwara¹, Yoriko Hori¹, Anna Tanabe¹, Rina Hirai¹, Keiichi Ono³, Kazuki Ueyama³, Aya Nakamura³, Tetsuya Hayama¹, Akiyoshi Kishino¹, Atsushi Ikeda¹, Shin Kawamata⁴, Michiko Mandai⁵, Toru Kimura¹ (¹Regenerative & Cellular Medicine Kobe Center, Sumitomo Pharma Co., Ltd., ²Preclinical Research Unit, Research Division, Sumitomo Pharma Co., Ltd., ³Technology Research & Development Division, Sumitomo Pharma Co., Ltd., ⁴Research & Development Center for Cell Therapy, Foundation for Biomedical Research and Innovation at Kobe, ⁵Laboratory for Retinal Regeneration, RIKEN Center for Biosystems Dynamics Research, ⁶RIKEN Program for Drug Discovery and Medical Technology Platforms, RIKEN Cluster for Science, Technology and Innovation Hub.)

Session 6: Cancer stem cells

9:35~10:55

Chair Yohei Shimono

(Fujita Health University)

Invited Lecture

 $O-16 (9:35\sim10:00)$

Early stages of pancreatobiliary cancer development

Hiroshi Seno, Munemasa Nagao, Mio Namikawa, Yuichi Fukunaga,

Takahisa Maruno, Akihisa Fukuda

(Kyoto University, Department of Gastroenterology & Hepatology)

Invited Lecture

O-17 $(10:00 \sim 10:25)$

Cellular heterogeneity of tumor stem cells causes treatment resistance

Norikatsu Miyoshi^{1,2}

(¹Department of Innovative Oncology Research and Regenerative Medicine, Osaka International Cancer Institute, ²Department of Gastroenterological Surgery, Graduate School of Medicine, Osaka University)

$O-18 (10:25 \sim 10:40)$

γ -Glutamylcyclotransferase, a novel regulator of cancer stem cell properties in breast cancer

<u>Takanori Hayashi</u>¹, Seiji Okada², Munetsugu Hirata¹, Yasuyoshi Mizutani¹, Yuko Kijima¹, Motoshi Suzuki¹, Yohei Shimono¹ (¹Fujita Health University School of Medicine, ²Joint Research Center for Human Retrovirus Infection, Kumamoto Univ.)

O-19 (10:40~10:55)

Developing next-generation drug sensitivity screening using primary tumor specimens derived from patients of myeloid malignancies

<u>Kimihito Cojin Kawabata</u>, Yasuhito Nannya, Satoshi Takahashi (Institute of Medical Science, the University of Tokyo)

Coffee Break 10:55~11:10

Chair Koji Okamoto

(Teikyo University

Session 7: Organoid and microenvironment

Advanced Comprehensive Research Organization)

Invited Lecture

O-20 (11:10~11:35)

Cancer evolution by positive selection and negative selection

Masanobu Oshima¹, Sau Yee Kok¹, Dong Wang², Mizuho Nakayama¹,

Hiroko Oshima¹

(¹Cancer Research Institute, Kanazawa University, ²Nano Life Science Institute, Kanazawa University)

Invited Lecture

 $O-21 (11:35 \sim 12:00)$

Application of organoid/spheroid culture as tools for understanding heterogeneity, chemoresistance, and metastasis of refractory cancers

Koji Okamoto

(Teikyo University, Advanced Comprehensive Research Organization)

11:10~12:30

$O-22 (12:00 \sim 12:15)$

The membrane-linked adaptor FRS2 β fashions a cytokine-rich microenvironment that promotes breast cancer carcinogenesis

Yasuto Takeuchi¹, Natsuko Kimura¹, Takahiko Murayama¹, Yukino Machida², Daisuke Iejima², Tatsunori Nishimura¹, Minoru Terashima³, Wang Yuming¹, Mengjiao Li¹, Rieko Sakamoto⁴, Mizuki Yamamoto⁵, Naoki Itano⁶, Yusuke Inoue⁷, Masataka Ito⁸, Nobuaki Yoshida⁴, Jun-ichiro Inoue⁵, Koichi Akashi⁹, Hideyuki Saya¹⁰ Koji Fujita¹¹, Masahiko Kuroda¹¹, Issay Kitabayashi¹², Voon Dominic¹³, Takeshi Suzuki¹⁴, Arinobu Tojo², Noriko Gotoh¹ (¹Division of Cancer Cell Biology, Cancer Research Institute, Kanazawa University, ²Division of Molecular Therapy, Institute of Medical Science, University of Tokyo, ³Division of Functional Genomics, Cancer Research Institute, Institute for Frontier Science Initiative, Kanazawa University, ⁴Laboratory of Developmental Genetics, Institute of Medical Science, University of Tokyo, ⁵Division of Cellular and Molecular Biology, Institute of Medical Science, University of Tokyo, ⁶Department of Molecular Biosciences, Faculty of Life Sciences, Kyoto Sangyo University, ⁷Department of Diagnostic Radiology, Kitasato University of School of Medicine, ⁸Department of Anatomy, National Defense Medical College, ⁹Department of Medicine and Biosystemic Science, Graduate School of Medicine. Kvushu University, ¹⁰Division of Gene Regulation, Insitute of Advanced Medical Research, Keio University, ¹¹Department of Molecular Pathology, Tokyo Medical University, ¹²Division of Hematological Malignancy, National Cancer Center Research Institute, ¹³Cancer Research Institute, Institute for Frontier Science Initiative, Kanazawa University, 14 Division of Functional Genomics, Cancer Research Institute, Institute for Frontier Science Initiative, Kanazawa University)

O-23 (12:15~12:30)

Nociceptive nerves facilitate hematopoietic stem and progenitor cell homing to bone marrow by regulating microcirculation

Shinya Fujita^{1,2}, Takayuki Morikawa¹, Keisuke Kataoka^{2,3}, Keiyo Takubo¹ (¹Department of Stem Cell Biology, Research Institute, National Center for Global Health and Medicine, Tokyo, Japan, ²Division of Hematology, Department of Medicine, Keio University School of Medicine, Tokyo, Japan, ³Division of Molecular Oncology, National Cancer Center Research Institute, Tokyo, Japan)

General Meeting 12:30~12:40

Lunch Seminar: Recent advances in CAR-T therapy 12:45~13:20

Chair Koichi Akashi

(Kyushu University)

Presenter Koji Kato

(Kyushu University)

Sponsored by: LSI Medience Corporation

Coffee Break 13:20~13:30

Session 8: Hematopoietic stem cells 2 13:30~15:40

Chair Satoshi Yamazaki

(University of Tsukuba)

Invited Lecture O-24 (13:30~13:55)

Development of the hematopoietic system in the mouse embryo

<u>Tomomasa Yokomizo</u> (Tokyo Women's Medical University)

O-25 (13:55~14:10)

A large scale paired-daughter cell analysis reveals that hematopoietic stem cells exhibit different division patterns according to subtypes

Yosuke Tanaka¹, Tsuyoshi Fukushima², Toshio Suda¹, Toshio Kitamura³ (¹IRCMS, Kumamoto University, ²Center for Regenerative Medicine, Massachusetts General Hospital, Harvard Stem Cell Institute and the Department of Stem Cell and Regenerative Biology, Harvard University, ³Division of Cellular Therapy, IMS, The University of Tokyo)

O-26 (14:10~14:25)

Two distinctive hematopoietic stem cell populations coordinate hematopoietic aging

Shuhei Koide¹, Motohiko Oshima¹, Akira Nishiyama², Koichi Murakami^{2,3}, Naoki Itokawa², Yuta Yamada², Yaeko Nakajima-Takagi², Zhiqian Zheng², Tomohiko Tamura^{2,3}, Atsushi Iwama²

(¹Division of Stem Cell and Molecular Medicine, Center for Stem Cell Biology and Regenerative Medicine, The Institute of Medical Science, The University of Tokyo, Tokyo, Japan., ²Department of Immunology, Yokohama City University Graduate School of Medicine, Yokohama, Japan., ³Advanced Medical Research Center, Yokohama City University, Yokohama, Japan.)

$O-27 (14:25 \sim 14:40)$

Rasip1 gene functioning downstream of Sox17 maintains the hematopoietic cluster-forming cells in E10.5 mouse embryos

Gerel Melig¹, Ikuo Nobuhisa^{1,2}, Kiyoka Saito¹, Ryota Tsukahara¹, Ayumi Itabashi¹, Yoshiakira Kanai³, Masami Kanai-Azuma⁴, Tetsuya Taga¹ (¹Department of Stem Cell Regulation, Medical Research Institute, Tokyo Medical and Dental University, ²Department of Nutritional Science, Faculty of Nutritional Sciences, Nakamura Gakuen University, ³Department of Veterinary Anatomy, Graduate School of Agricultural and Life Science, University of Tokyo, ⁴Department of Experimental Animal Model for Human Disease, Center for Experimental Animals, Tokyo Medical and Dental University)

$O-28 (14:40 \sim 14:55)$

Unveiling highly fluctuating single-cell transcriptome dynamics at a novel bifurcation point in a human lymphoid pathway

<u>Keiki Nagaharu</u>^{1,2}, Yasuhiro Kojima³, Haruka Hirose³, Kodai Minoura³, Kunihiko Hinohara^{4,5}, Yuka Sugimoto⁶, Shigeru Nii⁷, Masahide Seki⁸, Yutaka Suzuki⁸, Isao Tawara⁶, Teppei Shimamura³, Naoyuki Katayama⁶, Hiroyoshi Nishikawa^{4,5,9,10}, Kohshi Ohishi⁶

(¹Department of Hematology and Oncology, Mie University Graduate School of Medicine, ²Yokkaichi Municipal Hospital, ³Division of Systems Biology, Nagoya University Graduate School of Medicine, ⁴Department of Immunology, Nagoya University Graduate School of Medicine, ⁵Institute for Advanced Research, Nagoya University, ⁵Department of Hematology and Oncology, Mie University Graduate School of Medicine, ¬Shiroko Women's Hospital, ®Department of Computational Biology and Medical Sciences, The University of Tokyo, ¬Division of Cancer Immunology, Research Institute, National Cancer Center, ¬Division of Cancer Immunology, Exploratory Oncology Research and Clinical Trial Center (EPOC), National Cancer Center)

$O-29 (14:55 \sim 15:10)$

Functional analysis of novel mesenchymal stem cells in the endosteal niche of hematopoietic stem cells

<u>Hisayuki Yao</u>, Ryosuke Yuta, Fumio Arai (Stem Cell Regulation/ Cancer Stem Cell, Department of Stem Cell Biology and Medicine, Graduate School of Medical Sciences, Kyushu University)

$O-30 (15:10 \sim 15:25)$

Terminal erythroid differentiation is mediated by mitochondrial translation through regulation of iron homeostasis

<u>Tatsuya Morishima</u>^{1,2}, Md. Fakruddin^{1,2}, Takeshi Masuda³, Yuxin Wang¹, Vivien A. C. Schoonenberg⁴, Falk Butter⁴, Yuichiro Arima⁵, Takaaki Akaike⁶, Kazuhito Tomizawa⁷, Fan-Yan Wei⁸, Toshio Suda^{9,10}, Hitoshi Takizawa¹

(¹Laboratory of Stem Cell Stress, International Research Center for Medical Sciences (IRCMS), Kumamoto University, ²Laboratory of Hematopoietic Stem Cell Engineering, IRCMS, Kumamoto University, ³Department of Pharmaceutical Microbiology, Faculty of Life Sciences, Kumamoto University, ⁴Quantitative Proteomics, Institute of Molecular Biology, Mainz, Germany, ⁵Laboratory of Developmental Cardiology, IRCMS, Kumamoto University, ⁴Department of Environmental Medicine and Molecular Toxicology, Tohoku University Graduate School of Medicine, ¹Department of Molecular Physiology, Faculty of Life Sciences, Kumamoto University, ³Department of Physiology and Metabolism, IDAC, Tohoku University, ¹Laboratory of Stem Cell Regulation, IRCMS, Kumamoto University, ¹Cancer Science Institute of Singapore, National University of Singapore)

O-31 $(15:25 \sim 15:40)$

Functional HSCs Preferentially Migrate to Spleen During Hematopoietic Regeneration

Alban Johansson¹, Ahad Khalilnezhad², Hitoshi Takizawa³, Hidenobu Mizuno⁴, Toshio Suda⁵, Terumasa Umemoto¹ (¹Laboratory of Hematopoietic Stem Cell Engineering, International Research Center for Medical Sciences, Kumamoto University, Japan, ²Department of Neurology, Brigham and Women's Hospital and Harvard Medical School, Boston, MA, USA, ³Laboratory of Stem Cell Stress, International Research Center for Medical Sciences, Kumamoto University, Japan, ⁴Laboratory of Multi-dimensional imaging, International Research Center for Medical Sciences, Kumamoto University, Japan, ⁵Laboratory of Stem Cell Regulation, International Research Center for Medical Sciences, Kumamoto University, Japan)

Award Announcement 15:40~15:50

Closing Remarks 15:50~15:55

Poster Session

P-01 Elongation of long-chain fatty acids is crucial for hematopoietic stem cell engraftment and leukemia propagation

<u>Takayasu Kato^{1,2}</u>, Yusuke Kiyoki¹, Sakura Kito³, Takashi Matsuzaka⁴, Shin Morioka⁵, Junko Sasaki⁵, Tatsuhiro Sakamoto¹, Hidekazu Nishikii¹, Naoshi Obara¹, Mamiko Sakata-Yanagimoto^{1,4}, Takehiko Sasaki³, Hitoshi Shimano⁶, Shigeru Chiba¹

(¹Department of Hematology, Faculty of Medicine, University of Tsukuba, Ibaraki, Japan., ²Department of Laboratory Medicine, Faculty of Medicine, University of Tsukuba, Ibaraki, Japan., ³Graduate School of Comprehensive Human Sciences, University of Tsukuba, Ibaraki, Japan, ⁴Division of Advanced Hemato-Oncology, Transborder Medical Research Center, University of Tsukuba, Ibaraki, Japan., ⁵Department of Lipid Biology, Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University, Tokyo, Japan., ⁵Department of Endocrinology and Metabolism, Faculty of Medicine, University of Tsukuba, Ibaraki, Japan.)

P-02 Screening of TPO receptor agonists for efficient ex-vivo expansion of human hematopoietic stem cells in polymer based culture system

<u>Riko Kikuchi</u>¹, Kantaro Ishitsuka¹, Takaharu Kimura¹, Hidekazu Nishikii², Satoshi Yamazaki¹

(¹Stem Cell Therapy, Institute of Medicine, University of Tsukuba, ²Department of Hematology, Institute of Medicine, University of Tsukuba)

P-03 Thrombopoietin deficiency accelerates LPS-induced inflammatory response

Ayano Yahagi, Makiko Mochizuki-Kashio, Tomomasa Yokomizo, Ayako Nakamura-Ishizu

(Department of Microscopic and Developmental Anatomy, Tokyo Women's Medical University)

P-04 Chromatin remodeling factors BRM and BRG1 regulate the rapid immune response in hematopoietic cells

<u>Hiroki Nishikawa</u>, Haruka Suzuki, Hiroki Miyachi, Tatsuro Shiina, Nonoko Kawabata, Tsuyoshi Imasaki, Ryo Nitta, Eriko Nitta (Division of Structural Medicine and Anatomy, Kobe University Graduate School of Medicine)

P-05 Chromatin remodeling factor BRM maintains hematopoietic stem cells via the bone marrow microenvironment niche

<u>Haruka Suzuki</u>¹, Hiroki Miyachi¹, Hiroki Nishikawa¹, Tatsuro Shiina¹, Nonoko Kawabata¹, Ryo Yoshikawa², Yoshiaki Sakihama¹, Tomiyoshi Setsu¹, Satoshi Kikkawa¹, Tsuyoshi Imasaki¹, Ryo Nitta¹, Eriko Nitta¹

(¹Division of Structural Medicine and Anatomy, Kobe University Graduate School of Medicine, ²Kobe University Orthopaedic Surgery)

P-06 The Pbx1-G9a axis dysregulates lineage output of aged hematopoietic stem cells

Hiroshi Kobayashi¹, Shintaro Watanuki¹, Yusuke Shiozawa^{2,3}, Naoya Takayama⁴, Seishi Ogawa², Atsushi Iwama⁵, Keiyo Takubo¹ (¹Research Institute, National Center for Global Health and Medicine, ²Graduate School of Medicine, Kyoto University, ³Nippon Medical School, ⁴Graduate School of Medicine, Chiba University, ⁵Institute of Medical Science, The University of Tokyo)

P-07 Phip deficiency leads to the expansion of hematopoietic stem/progenitor cells and splenomegaly upon aging

<u>Yuko Kato¹</u>, Takako Yokomizo², Goro Sashida³, Atsushi Iwama², Satoru Miyagi⁴

(¹Department of Life Science, Faculty of Medicine, Shimane University, ²Division of Stem Cell and Molecular Medicine, Center for Stem Cell Biology and Regenerative Medicine, The Institute of Medical Science, The University of Tokyo, ³International Research Center for Medical Sciences, Kumamoto University, ⁴Department of Biochemistry, Faculty of Medicine, Shimane University)

P-08 Distinct subunit composition between Polycomb bodies within the nucleus of a neocortical neural stem-progenitor cell

Natsumi Yamada¹, Kazunori Hojo¹, Hiroki Sugishita^{1,2}, Yukiko Gotoh^{1,2} (¹Graduate School of Pharmaceutical Sciences, Faculty of Pharmaceutical Sciences, The University of Tokyo, ²International Research Center for Neurointelligence (WPI-IRCN), The University of Tokyo)

P-09 Development of synthetic polymer scaffolds mimicking a niche that maintains neural stem cells in a growth factor- and serum-free system

Norihisa Bizen^{1,2}, Kouichi Tabu¹, Mei Wu³, Christian Mangani³, Rong Zhang³, Mark Bradley³, Tetsuya Taga¹ (¹Department of Stem Cell Regulation, Medical Research Institute, Tokyo Medical and Dental University (TMDU), Tokyo, Japan, ²Division of Neurobiology and Anatomy, Graduate School of Medical and Dental Sciences, Niigata University, Niigata, Japan, ³EaStChem, School of Chemistry, University of Edinburgh, Edinburgh, London, United Kingdom)

P-10 The balance between ERK/MAPK and IFN-g signaling activities regulates intestinal epithelial homeostasis during aging

May Nakajima-Koyama¹, Eisuke Nishida², Takuya Yamamoto^{1,3,4} (¹Center for iPS Cell Research and Application (CiRA), Kyoto University, ²RIKEN Center for Biosystems Dynamics Research (BDR), ³Institute for the Advanced Study of Human Biology (ASHBi), Kyoto University, ⁴Medical-Risk Avoidance Based on iPS Cells Team, RIKEN Center for Advanced Intelligence Project (AIP))

P-11 Strain differences in cellular dynamics characteristic of carcinogenesis in the mammary gland after radiation exposure

<u>Daisuke Iizuka</u>, Mari Ogawa, Mayumi Shinagawa, Chizuru Tsuruoka, Masaaki Sunaoshi, Tatsuhiko Imaoka, Shizuko Kakinuma (Department of Radiation Effects Research, National Institute of Radiological Sciences, QST)

P-12 Dermatan sulphate contributes to differentiation and self-renewal in stem cells

<u>Chika Ogura</u>¹, Kazumi Hirano², Shuji Mizumoto³, Shuhei Yamada³, Shoko Nishihara⁴

(¹Department of Science and Engineering for Sustainable Innovation, Faculty of Science and Engineering, Soka University, ²Molecular Neurophysiology Research Group, Biomedical Research Institute, The National Institute of Advanced Industrial Science and Technology (AIST), ³Department of Pathobiochemistry, Faculty of Pharmacy, Meijo University, ⁴Department of Bioinformatics, Graduate School of Engineering, Soka University Glycan & Life System Integration Center (GaLSIC), Soka University)

P-13 O-GlcNAc on serine 111 of Psme3 is a key proteasome regulator for mouse embryonic stem cell pluripotency by controlling P-body homeostasis

<u>Hayato Ota</u>¹, Federico Pecori¹, Nanako Kondo², Chika Ogura², Taichi Miura^{1,3}, Masahiko Kume⁴, Youhei Minamijima⁴, Kazuo Yamamoto⁴, Shoko Nishihara^{1,2,5}

(¹Department of Bioinformatics, Graduate School of Engineering, Soka University, ²Department of Science and Engineering for Sustainable Innovation, Faculty of Science and Engineering, Soka University, ³National Institute of Radiological Sciences (NIRS), National Institutes for Quantum and Radiological Science and Technology, ⁴Department of Integrated Biosciences, Graduate School of Frontier Sciences, The University of Tokyo, ⁵Glycan & Life Systems Integration Center (GaLSIC), Soka University)

P-14 Essential roles of TIP60 in acute myeloid leukemia with NPM mutation

<u>Yukiko Aikawa</u>, Kazutune Yamagata, Issay Kitabayashi (Division of Hematological Malignancy, National Cancer Center Research Institute)

P-15 CCTC-binding factor (CTCF) is necessary for development and maintenance of CALM-AF10-induced leukemia

Yoko Kuroki, Yukiko Aikawa, Kazutsune Yamagata, Issay Kitabayashi (Division of Hematological Malignancy, National Cancer Center Research Institute)

P-16 Adipocytes promote cancer stem cell properties and metastatic progression of breast cancer cells through adipsin

Behnoush Khaledian¹, Jumpei Yoshida^{1,2}, Masahiro Mizuno¹, Masao Maeda^{1,3}, Takanori Hayashi¹, Eiji Munetsuna¹, Seiya Mizuno⁴, Yasuyoshi Mizutani⁵, Seiji Okada⁶, Motoshi Suzuki⁵, Fumihiro Sugiyama⁴, Satoru Takahashi⁴, Naoya Asai³, Kenji Kawada², Yohei Shimono¹ (¹Department of Biochemistry, Fujita Health University School of Medicine, ²Department of Medical Oncology, Fujita Health University School of Medicine, ³Department of Pathology, Fujita Health University School of Medicine, ⁴Laboratory Animal Resource Center, Faculty of Medicine, University of Tsukuba, ⁵Department of Molecular Oncology, Fujita Health University School of Medicine, ⁴Joint Research Center for Human Retrovirus Infection, Kumamoto University)

P-17 Pathogenic mechanism of amino acid metabolism in acute myeloid leukemia <u>Hiromi Yamazaki</u>, Hiromi Ito, Koutarou Nishimura, Yui Koike, Inoue Daichi

(Department of Hematology-Oncology, Institute of Biomedical Research and Innovation, Foundation for Biomedical Research and Innovation at Kobe)

P-18 Uncovering the unrecognized roles on cell fate and leukemogenesis of p53 mutations

<u>Koutarou Nishimura</u>, Weijia Zang, Hiromi Ito, Yui Koike, Daichi Inoue (Department of Hematology-Oncology, Institute of Biomedical Research and Innovation, Foundation for Biomedical Research and Innovation at Kobe)

P-19 *In vivo* visualization of senescence-associated gene expression during cancer development

<u>Fumie Nakasuka</u>, Nao Sankoda, Sho Ohta, Yasuhiro Yamada (Department of Molecular Pathology, Graduate School of Medicine, The University of Tokyo)

参加者へのご案内とお願い

1. 参加者の皆様へ

今大会は参加者の皆様に安心してご来場いただけますよう、新型コロナウイルス(COVID-19)の感染対策を徹底した運営を行い、「現地開催」とさせていただきます。

なお、今大会の発表言語は「日本語」としますが、抄録、スライド、ポスターの表示は「英語」 とします。

開催に向けて最善の準備を行うよう努めて参りますので、ご理解とご支援のほど、何卒よろしく お願い申し上げます。

2. 参加登録について

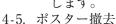
- 2-1. 受付場所:兵庫県立淡路夢舞台国際会議場 2F ロビー (〒656-2306 兵庫県淡路市夢舞台1番地)
- 2-2. 受付時間:5月19日(金)12時~
- 2-3. 参加費:10,000円

3. 口演発表について

- 3-1. 発表時間
 - ・事前に通知された発表時間内でのご発表をお願いいたします。
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 - 3) PC 受付では、PC 本体(Windows または Macintosh)あるいは、メディア(CD-R または USB フラッシュメモリ)で受付させていただきます。
 - 4) メディア持ち込みの場合、受付したデータは発表用 PC にインストールします。発表用 PC の OS は Windows で、アプリケーションは PowerPoint です。発表後のデータは、シンポジウム終了後に事務局で削除いたします。
 - 5) PC 本体持ち込みの場合、Windows、Macintosh 共に使用可能です。
 - ・また、外部モニター接続端子(MiniD-sub15ピン)を確認の上、コネクタを必要とする場合はこちらもご持参ください。
 - ・ACアダプターを必ずご持参くださいますようお願いいたします。
 - ・予め、スクリーンセーバーならびに省電力設定を「なし」にしてください。
 - ・PC 本体持ち込みの場合でも、CD-R または USB フラッシュメモリに保存したバックアップデータをご用意ください。
 - 6) 動画のある方やアニメーション効果を多用される場合は、ご自身の PC をご持参ください。

4. ポスターセッションについて

- 4-1. ポスター会場
 - ・淡路夢舞台国際会議場 2F レセプションホール B
- 4-2. ポスター貼付
 - ・5月19日(金) 13時~
 - ・通知されたポスター番号に従い、掲示をお 願いいたします。
- 4-3. ポスター発表
 - ・発表は、5月19日(金) 18時30分~です。
 - ・発表時間になりましたら、ご自身のポスター前で待機していただき、閲覧者からの質問への回答、発表、討議を行ってください。
- 4-4. 貼付パネル
 - ・パネルの大きさは全体で縦205cm×横90cm です。(演題番号は事務局準備)
 - ・演題名・演者名・所属名は縦20cm×横70cm、 本文は縦160cm×横90cm 以内でお願いいた します。



- ・2日目(5月20日(土))の11時以降、各自の責任で撤去してお帰りください。
- ・撤去されないポスターは事務局にて処分させていただきますので、予めご了承ください。

5. 宿泊先について(事前にお申し込みいただきました先生方へ)

- 5-1. 宿泊施設
 - ・グランドニッコー淡路
- 5-2. 宿泊受付
 - ・5月19日(金) 15時20分からの Coffee Break 時に、メインホール (口演会場) のホワイエ にて、宿泊の方全員のキーケースを机に並べておりますので、各自でお取りください。
 - ・それ以降の時間帯につきましては、ホテルフロントにて各自でチェックインをお願いしま す。
- 5-3. 宿泊費 (朝食付き、税金・サービス料込み) 15,000円
 - ・5月20日(土)のチェックアウト時に各自でお支払いください。

6. 問合せ先

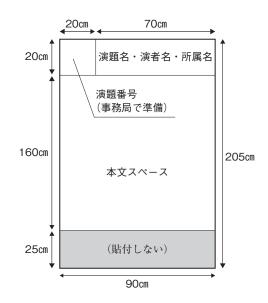
第20回幹細胞シンポジウム事務局

(東京大学医科学研究所 システム疾患モデル研究センター)

E-mail: scrs-office@umin.ac.jp

幹細胞シンポジウムホームページ

http://stem-cell.jp



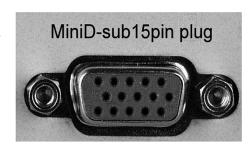
Registration Hours and PC/Data Registration

Registration Hours: May 19(Fri) 12:00pm-

Awaji Yumebutai International Conference Center

PC/Data Registration:

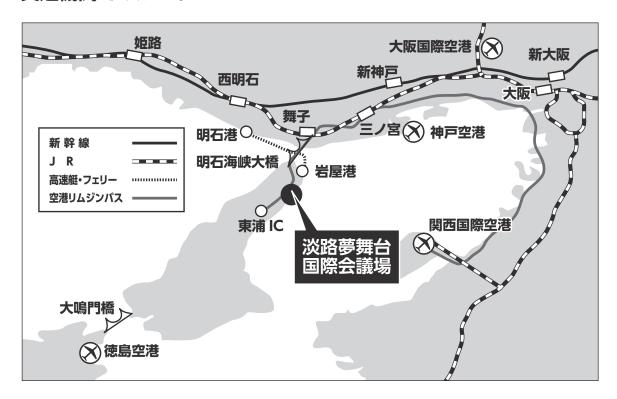
- 1. Please check your presentation date and time, and bring your PC/Data to the PC desk next to the registration desk at least one session prior to your scheduled presentation.
- 2. Please bring backup of your presentation data (USB flash memory). Only the software "PowerPoint" is allowed.

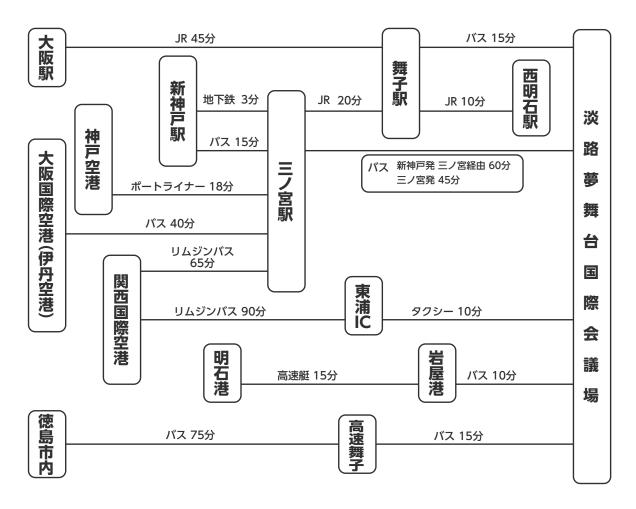


- 3. Please name the file as [Presentation number_Name of first author.pptx].
- 4. When you presentation, please use the PC on the lectern to project your PowerPoint data by using "Share Screen" function on Zoom.
- 5. If you are bringing your own PC, you may bring either Windows or Macintosh. Please install Zoom application in advance as you are requested to use "Share Screen" function on Zoom to make your presentation.
- 6. Please confirm the LAN port (network cable (LAN cable) outlet), and be sure to bring the connector if you need it.
- 7. Please check your PC's "Mini D-Sub 15 pin". If your PC does not have the port, please bring a converting adaptor.
 - ** Mini D-Sub 15 pin is a junction part of a cable which connects your PC with a projector.
- 8. If you prefer to bring your own PC for the presentation, please do not fail to bring your AC-adapter.

交通案内

交通機関でのルート





会場案内

