The 1st Day : Friday, June 1

Centennial Hall

13:00~13:05 **Opening Remarks**

13:05~14:15 **Session 1** ▶P.3

Hematopoietic stem cells 1

O-01~O-04

Chair : Atsushi Iwama
Motomi Osato

14:15~14:35 **Coffee Break**

14:35~15:35 **Session 2** ▶P.3

Germline stem cells

O-05~O-07

Chair : Takashi Shinohara

15:35~16:40 **Session 3** ▶P.4

Reprogramming and pluripotent stem cells 1

O-08~O-11

Chair : Katsuhiko Hayashi

16:40~17:00 **Coffee Break**

17:00~18:15 **Session 4** ▶P.4

Tissue stem cells 1

O-12~O-15

Chair : Atsushi Hirao

18:15~18:30 **General Meeting**

18:30~19:30 **Reception / Poster viewing**

The 2nd Day : Saturday, June 2

Centennial Hall

9:30~10:55 **Session 5** ▶P.6

Tissue stem cells 2

O-16~O-20

Chair : Kinichi Nakashima

10:55~11:15 **Coffee Break**

11:15~12:20 **Session 6** ▶P.6

Reprogramming and pluripotent stem cells 2

O-21~O-23

Chair : Hitoshi Niwa

12:20~13:30 **Lunch Time / Poster Session**

13:30~15:05 **Session 7** ▶P.7

Cancer stem cells

O-24~O-29

Chair : Issay Kitabayashi
Takahiro Maeda

15:05~15:20 **Coffee Break**

15:20~16:25 **Session 8** ▶P.8

Hematopoietic stem cells 2

O-30~O-33

Chair : Hitoshi Takizawa

16:25~17:10 **Session 9** ▶P.9

Microenvironment

O-34~O-36

Chair : Keiyo Takubo

17:10~17:20 **Closing Remarks**

Friday, June 1.　The 1st Day

Opening Remarks　13:00～13:05

Organizer　Fumio Arai

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

Session 1: Hematopoietic stem cells 1　13:05～14:15

Chair　Atsushi Iwama

(Department of Cellular and Molecular Medicine, Graduate School of Medicine, Chiba University)

Motomi Osato

(Cancer Science Institute of Singapore, National University of Singapore/International Research Center for Medical Sciences, Kumamoto University)

O-01 Fetal bile acid regulates multiple organ development

Kenichi Miharada

(Div. Molecular Medicine and Gene Therapy, Lund University, Sweden)

O-02 Inflammation-produced TNFα protects hematopoietic stem cells from necroptosis and promotes hematopoietic regeneration

Masayuki Yamashita, Emmanuelle Passegué

(Columbia Stem Cell Initiative, Department of Genetics and Development, Columbia University, New York, NY 10032, USA)

O-03 Acute gut inflammation shifts early hematopoiesis toward myelopoiesis

Yoshikazu Hayashi, Hitoshi Takizawa

(International Research Center for Medical Sciences, Kumamoto University, Kumamoto, 860-0811 Japan)

O-04 Phf6 restricts the self-renewal of hematopoietic stem cells via regulation of Nr4a1 expression

Satoru Miyagi[1], Patrycja Sroczynska[2], Yuko Kato[1], Motohiko Oshima[1], Kristian Helin[2], Atsushi Iwama[1]

([1]Department of Cellular and Molecular Medicine, Graduate School of Medicine, Chiba University, [2]Biotech Research and Innovation Centre (BRIC), University of Copenhagen)

Coffee Break　14:15～14:35

Session 2: Germline stem cells　14:35～15:35

Chair　Takashi Shinohara

(Department of Molecular Genetics, Graduate School of Medicine, Kyoto University)

O-05 Retinoic acid signal for continuous sperm production: Exit from the stem cell pool toward terminally differentiated cells

Tsutomu Endo[1], Dirk de Rooij[2], David Page[2,3,4]

([1]Research Institute for Microbial Diseases, Osaka University, [2]Whitehead Institute, [3]MIT Department of Biology, [4]HHMI)

O-06 Genomic imprinting by maternal histones

Azusa Inoue[1], Zhiyuan Chen[2], Yi Zhang[2]
([1]RIKEN Center for Integrative Medical Sciences, [2]Harvard Medical School/ Boston Childrens Hospital)

O-07 The role of H3K27 demethylases in the regulation of spermatogonial stem cells

Naoki Iwamori[1], Sakurako Shima[1], Tokuko Iwamori[2], Hiroshi Iida[1]
([1]Laboratory of Zoology, Graduate School of Bioresource and Bioenvironmental Sciences, Kyushu University, [2]Department of Biomedicine, Graduate School of Medical Sciences, Kyushu University)

Session 3: Reprogramming and pluripotent stem cells 1

15:35～16:40

Chair Katsuhiko Hayashi

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

O-08 Higher-order chromatin features in human pluripotent stem cells

Takuya Yamamoto
(Department of Life Science Frontiers, Center for iPS Cell Research and Application, Kyoto University)

O-09 Zfp281 shapes the transcriptome of trophoblast stem cells and regulates placental development

Takashi Ishiuchi
(Division of Epigenomics and Development, Medical Institute of Bioregulation, Kyushu University)

O-10 The intrinsic genetic program that drives trophoblast differentiation from human ES cells

Masatoshi Ohgushi
(Institute for Frontier and Medical Science, Kyoto University)

O-11 Ribosome incorporation into somatic cells promotes lineage transdifferentiation towards multipotency

Kunimasa Ohta, Mohammad Badrul Anam, Shah Adil Ishtiyaq Ahmad, Naofumi Ito
(Graduate School of Life Sciences, Kumamoto University)

Coffee Break 16:40～17:00

Session 4: Tissue stem cells 1 17:00～18:15

Chair Atsushi Hirao

(Division of Molecular Genetics, Cancer Research Institute, Kanazawa University)

O-12 Hox genes control muscle stem cell function in a body-region-specific manner

Yusuke Ono
(Musculoskeletal Molecular Biology Research Group, Nagasaki University Graduate School of Biomedical Sciences)

O-13 Derivation of human trophoblast stem cells

Hiroaki Okae, Takahiro Arima
(Department of Informative Genetics, Tohoku University Graduate School of Medicine)

O-14 Osteoblast production by reserved progenitor cells in zebrafish bone regeneration and maintenance

Atsushi Kawakami
(Tokyo Institute of Technology)

O-15 Different contribution of quiescent stem cells to the maintenance of intestinal, gastric and neoplastic epithelia

Tsunaki Higa, Yasutaka Okita, Akinobu Matsumoto, Hirokazu Nakatsumi, Keiichi I. Nakayama
(Department of Molecular and Cellular Biology, Medical Institute of Bioregulation, Kyushu University)

General Meeting 18:15～18:30

Chief Director Koichi Akashi
(Department of Medicine and Biosystemic Science, Faculty of Medicine, Kyushu University)

Reception / Poster viewing 18:30～19:30

Saturday, June 2. The 2nd Day

Session 5: Tissue stem cells 2 9:30～10:55

Chair Kinichi Nakashima

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

O-16 Regulated IFN-signal preserves stemness of intestinal stem-cells by restricting secretory-cell differentiation

Taku Sato, Toshiaki Ohteki

(Department of Biodefense Research, Medical Research Institute, Tokyo Medical and Dental University)

O-17 Fetalization of colonic epithelium mediated by YAP/TAZ links ECM remodeling to tissue regeneration

Shiro Yui[1], Ryuichi Okamoto[1], Kiichiro Tsuchiya[2], Tetsuya Nakamura[3], Mamoru Watanabe[2]

([1]Center for Stem Cell and Regenerative Medicine, Tokyo Medical and Dental University, [2]Department of Gastroenterology and Hepatology, Tokyo Medical and Dental University, [3]Department of Advanced Therapeutics in GI Diseases, Tokyo Medical and Dental University)

O-18 Regulatory Mechanism of Neural Stem Cells Revealed by Optical Manipulation of Gene Expression

Itaru Imayoshi

(Graduate School of Biostudies, Kyoto University)

O-19 Decoding mouse embryonic neural stem cell fate by BMP2 responsiveness

Sayako Katada, Mizuki Honda, Kinichi Nakashima

(Graduate School of Medical Sciences, Kyushu University)

O-20 Polycomb Group Proteins Ring1A/B regulate early-stage patterning in the telencephalic development

Hikaru Eto, Yusuke Kishi, Yukiko Gotoh

(Graduate School of Pharmaceutical Sciences, The University of Tokyo)

Coffee Break 10:55～11:15

Session 6: Reprogramming and pluripotent stem cells 2 11:15～12:20

Chair Hitoshi Niwa

(Department of Pluripotent Stem Cell Biology, Institute of Molecular Embryology and Genetics, Kumamoto University)

O-21 Flexible generation of male germ cells from female somatic cells of an endangerd Tokudaia osimensis

Arata Honda

(Institute of Laboratory Animals, Kyoto University Graduate School of Medicine)

O-22 Transcriptome Manipulation to Facilitate the Differentiation of Human Pluripotent Stem Cells

Tomohiko Akiyama, Minoru Ko

(Keio University School of Medicine)

O-23 Stochastic models of stem cell differentiation

Ben D. MacArthur[1], Patrick S. Stumpf[1], Rosanna C. G. Smith[1], Colin P. Please[2], Sam D. Howison[2], Fumio Arai[3]
([1]Institute for Life Sciences, University of Southampton, Southampton SO17 1BJ, UK, [2]Mathematical Institute, University of Oxford, Oxford OX2 6GG, UK, [3]Department of Stem Cell Biology and Medicine, Graduate School of Medical Sciences, Kyushu University, Fukuoka 812-8582, Japan)

Lunch Time / Poster Session 12:20～13:30

Session 7: Cancer stem cells 13:30～15:05

Chair Issay Kitabayashi
(Division of Hematological Malignancy, National Cancer Center Research Institute)
Takahiro Maeda
(Center for Cellular and Molecular Medicine, Kyushu University Hospital)

O-24 Identification of BCAAs metabolism pathway as a common machinery for maintaining the stemness of human acute leukemia

Yoshikane Kikushige, Koichi Akashi
(Kyushu University)

O-25 Dual inhibition of EZH1/2 depletes stem cells and over-activates WNT signaling in multiple myeloma

Makoto Nakagawa[1,2], Takuo Katsumoto[1], Kazutsune Yamagata[1], Yoko Ogawara[1], Ayuna Hattori[1], Yukiko Aikawa[1], Daisuke Honma[3], Kazushi Araki[4], Tatsuya Inoue[5], Ayako Kato[5], Koichiro Inaki[5], Chisa Wada[5], Yoshimasa Ono[5], Yasuharu Nakashima[2], Issay Kitabayashi[1]
([1]Division of Hematological Malignancy, National Cancer Center Research Institute, [2]Department of Orthopaedic Surgery, Graduate School of Medical Sciences, Kyushu University, [3]Oncology Laboratories, Daiichi Sankyo Co., Ltd., [4]Oncology Clinical Development Department, Daiichi Sankyo Co., Ltd., [5]Functional Genomics and Proteomics Research Group, Discovery Science and Technology Department, Daiichi Sankyo RD Novare Co., Ltd.)

O-26 Blockade of PAI-1 activity increases therapeutic susceptibility of leukemic stem cells

Takashi Yahata[1], Ibrahim Abd Aziz[1], Toshio Miyata[2], Kiyoshi Ando[1]
([1]Tokai University School of Medicine, [2]Tohoku University Graduate School of Medicine)

O-27 Lineage-specific RUNX2 super enhancer activates MYC via a chromosomal translocation and promotes the development of BPDCN

Sho Kubota[1], Motomi Osato[1,2], Goro Sashida[1]
([1]International Research Center for Medical Sciences, Kumamoto University, [2]Cancer Science Institute of Singapore, National University of Singapore)

O-28 Variable Expression Levels of the Hematopoietic Stem Cell Surface Antigen ESAM Depict Heterogeneity and Fluctuations in Leukemic Stem Cells

Yasuhiro Shingai[1], Takafumi Yokota[1], Takayuki Ozawa[1], Tomoaki Ueda[1], Yukiko Doi[1], Tomoaki Ishibashi[2], Takao Sudo[3], Michiko Ichii[1], Hirohiko Shibayama[1], Yuzuru Kanakura[1]
([1]Department of Hematology and Oncology, Osaka University Graduate School of Medicine, Suita, Japan, [2]Department of Vascular Physiology, Research Institute National Cerebral and Cardiovascular Center, Suita, Japan, [3]Department of Immunology and Cell Biology, Osaka University Graduate School of Medicine, Suita, Japan)

O-29 ASXL1 mutation revealed impaired hematopoiesis caused by derepression of p16Ink4a through aberrant histone modification

Masahiro Uni[1,2], Yosuke Masamoto[1,2], Tomohiko Sato[1,2], Yasuhiko Kamikubo[1,2], Shunya Arai[1,2], Eiji Hara[3,4], Mineo Kurokawa[1,2]
([1]Department of Hematology and Oncology, Graduate School of Medicine, The University of Tokyo, [2]Department of Transfusion Medicine, The University of Tokyo Hospital, [3]Department of Molecular Microbiology, Research Institute for Microbial Diseases, Osaka University, [4]The Cancer Institute, Japanese Foundation for Cancer Research)

Coffee Break 15:05～15:20

Session 8: Hematopoietic stem cells 2 15:20～16:25

Chair Hitoshi Takizawa

(International Research Center for Medical Sciences, Kumamoto University)

O-30 Thrombopoietin mediates metabolic priming of hematopoietic stem cells for rapid megakaryocyte lineage differentiation

Ayako Nakamura-Ishizu[1], Takayoshi Matsumura[1], A'Qilah Banu Bte Abdul Majeed[1], Terumasa Umemoto[2], Toshio Suda[1]
([1]National University of Singapore, Cancer Science Institute, [2]International Research Center for Medical Sciences, Kumamoto University)

O-31 Metabolic regulation of hematopoietic stem cells by O-linked N-acetylglucosamine transferase

Koichi Murakami[1,2], Daisuke Kurotaki[3], Wataru Kawase[3], Shunsuke Soma[1], Yumi Fukuchi[1], Hiroyoshi Kunimoto[2], Ryusuke Yoshimi[2], Shuhei Koide[4], Motohiko Oshima[4], Mayumi Oda[5], Minoru Ko[5], Noriyo Hayakawa[6], Tomomi Matsuura[6], Takako Hishiki[6], Kiichi Yanagisawa[7], Miho Haraguchi[7], Hiroshi Kobayashi[7], Yoshitoshi Atobe[8], Kengo Funakoshi[8], Atsushi Iwama[4], Keiyo Takubo[7], Shinichiro Okamoto[1], Tomohiko Tamura[3], Hideaki Nakajima[2]
([1]Division of Hematology, Department of Internal Medicine, Keio University School of Medicine, [2]Department of Stem Cell and Immune Regulation, Yokohama City University Graduate School of Medicine, [3]Department of Immunology, Yokohama City University Graduate School of Medicine, [4]Department of Cellular and Molecular Medicine, Graduate School of Medicine, Chiba University, [5]Department of Systems Medicine, Keio University School of Medicine, [6]Department of Biochemistry, Keio University School of Medicine, [7]Department of Stem Cell Biology, Research Institute, National Center for Global Health and Medicine, [8]Department of Neuroanatomy, Yokohama City University School of Medicine)

O-32 Hlf expression marks developmental pathway for hematopoietic stem cells, but not for erythroid-myeloid progenitors

Tomomasa Yokomizo[1], Naoki Watanabe[2], Terumasa Umemoto[1], Tomoiku Takaku[2], Mohamed Gaber[1], Seiichi Mori[3], Mineo Kurokawa[4], Daniel G Tenen[5], Toshio Suda[1], Motomi Osato[1], Norio Komatsu[2]
([1]IRCMS, Kumamoto University, [2]Department of Hematology, Juntendo University School of Medicine, [3]Cancer Institute of Japanese Foundation for Cancer Research, [4]Department of Hematology and Oncology, The University of Tokyo, [5]CSI, National University of Singapore)

O-33 Epigenetic hallmarks of aging hematopoietic stem cells

Motohiko Oshima, Kazumasa Aoyama, Yaeko Nakajima-Takagi, Naoki Itokawa, Wakako Kuribayashi, Shuhei Koide, Atsushi Iwama
(Department of Cellular and Molecular Medicine, Graduate School of Medicine, Chiba University)

Session 9: Microenvironment 16:25～17:10

Chair Keiyo Takubo

(Department of Stem Cell Biology, Research Institute, National Center for Global Health and Medicine)

O-34 Adipsin is an adipokine that functions as a regulator of cancer stem cell-like properties in human breast cancer

Yohei Shimono[1], Hideaki Goto[2], Yohei Funakoshi[2], Yoshinori Imamura[2], Masanori Toyoda[2], Naomi Kiyota[2], Seishi Kono[3], Shintaro Takao[3], Toru Mukohara[4], Hironobu Minami[2]
([1]Division of Molecular and Cellular Biology, Kobe University Graduate School of Medicine, [2]Division of Medical Oncology/Hematology, Kobe University Graduate School of Medicine, [3]Division of Breast and Endocrine Surgery, Kobe University Graduate School of Medicine, [4]Division of Breast and Medical Oncology, National Cancer Center Hospital East)

O-35 Acute lymphoblastic leukemia cells hijack a neuronal pathfinding mechanism to invade the central nervous system

Hisayuki Yao[1,2], Trevor Price[1], Matthew Warner[1,3], Gaia Cantelli[1], Lindsey Olivere[1], Brandon Ngo[1], Sarah Ridge[1], Joe Therrien[4], Stacey Tannheimer[4], Chad McCall[1], Anjen Chenn[5], Dorothy Sipkins[1]
([1]Duke university, [2]Hiroshima-Nishi Medical Center, [3]Vitrisa Therapeutics, Inc., [4]Gilead Sciences, Inc., [5]LabCorp, Research Triangle Park)

O-36 Age-related alteration in nitric oxide signaling attenuates arrival of transplanted hematopoietic stem/progenitor cells to bone marrow

Takayuki Morikawa, Keiyo Takubo
(Department of Stem Cell Biology, Research Institute, National Center for Global Health and Medicine)

Closing Remarks 17:10～17:20

Next Organizer Yukiko Gotoh

(Graduate School of Pharmaceutical Sciences, The University of Tokyo)

Poster Session

P-01 Identification of a novel marker that defines bona fide and complement-resistant HSC fractions

Takashi Jiromaru
(Medicine and Biosystemic Science, Kyushu University)

P-02 G0 phase analysis of hematopoietic stem cell in mVenus-p27K- mice

Tsuyoshi Fukushima[1], Yosuke Tanaka[1], Toshihiko Oki[2], Toshio Kitamura[1]
([1]Institute of medical medicine, [2]Harvard university)

P-03 Ca^{2+}-Mitochondrial axis drives cell division in hematopoietic stem cells

Terumasa Umemoto[1], Michihiro Hashimoto[1], Takayoshi Matsumura[2], Toshio Suda[1,2]
([1]International Research Center for Medical Sciences, Kumamoto University, [2]Cancer Science Institute of Singapore, National University of Singapore)

P-04 CGRP-CRLR/RAMP1 signal is essential in stress-induced hematopoiesis

Akira Suekane[1], Yusuke Saito[1], Tomonaga Ichikawa[1], Nakahata Shingo[1], Honami Ogoh[1], Kazutake Tsujikawa[2], Kazuhiro Morishita[1]
([1]Division of Tumor and Cellular Biochemistry, Department of Medical Science, Faculty of Medicine, University of Miyazaki, Miyazaki, Japan, [2]Laboratory of Molecular and Cellular Physiology, Graduate School of Pharmaceutical Sciences, Osaka University, Osaka, Japan)

P-05 Foxp2 is necessary for maintenance of quiescence in hematopoietic stem cells

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

P-06 Expression of TET family members on intra-aortic hematopoietic cell clusters of the dorsal aorta in midgestation mouse embryo

Ikuo Nobuhisa, Kiyoka Saito, Tetsuya Taga
(Department of Stem Cell Regulation, Medical Research Institute, Tokyo Medical and Dental University (TMDU))

P-07 Tbx3-dependent amplifying stem cell progeny drives interfollicular epidermal expansion during pregnancy and regeneration

Ryo Ichijo[1], Hiroki Kobayashi[1], Yoneda Saori[1], Yui Iizuka[1], Hirokazu Kubo[1], Shigeru Matsumura[1], Tetsuya Honda[2], Fumiko Toyoshima[1]
([1]Institute for Frontier Life and Medical Science, Kyoto University, [2]Department of Dermatology, Kyoto University Graduate School of Medicine)

P-08 Basic properties of the mammary stem cell system of rats: towards mathematical modeling of its response to ionizing radiation

Tatsuhiko Imaoka[1], Ken-ichi Kudo[1], Yukiko Nishimura[1], Daisuke Iizuka[1], Yuya Hattori[2,3], Ritsuko Watanabe[3], Akinari Yokoya[3], Shizuko Kakinuma[1]
([1]QST National Institute of Radiological Sciences, [2]Tokyo Institute of Technology, [3]QST Quantum Beam Science Research Directorate)

P-09 Evaluation of low-dose radiation effect on mammary stem cells using three-dimensional immunnohistochemical analysis

Daisuke Iizuka, Tatsuhiko Imaoka, Yukiko Nishimura, Shizuko Kakinuma
(Department of Radiation Effects Research, National Institute of Radiological Sciences, QST)

P-10 Af10 regulates spatiotemporal cell proliferation of neural progenitor and neural crest cells in mid facial development via H3K79 methylation

Honami Ogoh[1,2], Kazutsune Yamagata[3], Tomomi Nakao[4], Lisa L. Sandell[5], Kazuhiro Morishita[6], Issay Kitabayashi[3], Toshio Watanabe[4], Daisuke Sakai[7]
([1]Division of Tumor and Cellular Biochemistry Department of Medical, Faculty of Medicine, University of Miyazaki, [2]Department of Biological, Graduate School of Humanities and Science, Nara Women's University, [3]Division of Hematological Malignancy, National Cancer Center Research Institute, [4]Department of Biological, Graduate School of Humanities and Science, Nara Women's University, [5]Department of Oral immunology and Infectious Disease, University of Louisville, School of Dentistry, [6]Division of Tumor and Cellular Biochemistry Department of Medical, Faculty of Medicine, University of Miyazaki, [7]Laboratory of Developmental Neurobiology, Graduate School of Brain Science, Doshisha University)

P-11 The hemi-methylated DNA recognition factor, Np95 maintains adult hippocampal neurogenesis

Shuzo Matsubara[1], Naoya Murao[2], Taito Matsuda[1], Kinichi Nakashima[1]
([1]Department of Stem Cell Biology and Medicine, Graduate School of Medical Science, Kyushu University, [2]Laboratory of Biochemistry and Molecular Biology, Department of Medical Sciences, University of Miyazaki)

P-12 The role of DNA repair machinery and cell death in induced pluripotent stem cells

Mikio Shimada, Yoshihisa Matsumoto
(Laboratory for Advanced Nuclear Research, Institute of Innovative Research, Tokyo Institute of Technology)

P-13 Phenotypic differences associated with the loss of Mbd3 between ESCs and EpiSCs

Masataka Hirasaki, Masamitsu Asaka, Kousuke Uranishi, Ayumu Suzuki, Masazumi Nishimoto, Akihiko Okuda
(Division of Developmental Biology, Research Center for Genomic Medicine, Saitama Medical University)

P-14 Generation of keratinocytes from human induced pluripotent stem cells and analysis of its DNA damage response

Tomoko Miyake[1,2], Mikio Shimada[3], Yoshihisa Matsumoto[3], Akitoshi Okino[1]
([1]FIRST, Institute of Innovative Research, Tokyo Institute of Technology, [2]Cosmetic R&D Department, Takara Belmont Corp., [3]LANE, Institute of Innovative Research, Tokyo Institute of Technology)

P-15 Neural dysfunction of Tay-Sachs disease (TSD) neurons established from induced pluripotent stem cells derived from TSD patients

Kozo Matsushita
(Department of Cell Modulation, Institute of Molecular Embryology and Genetics, Kumamoto University)

P-16 Reprograming of domestic and wild animal fibroblast by cell fusion with mouse embryonic stem cells

Hiroyuki Imai, Yasuo Kiso, Takeshi Kusakabe, Kiyoshi Kano
(Yamaguchi University, Veterinary Anatomy)

P-17 Analysis of the microenvironment for the maintenance of primordial follicle

Go Nagamatsu, Katsuhiko Hayashi
(Kyushu University Department of Stem Cell Biology and Medicine Graduate School of Medical Science)

P-18 AKT promotes somatic cell nuclear reprogramming through α-KG

Yoichi Sekita[1], Akari Matsumoto[1], Yuki Kawasaki[2], Yuki Sugiura[3], Ryo Konno[4], Yoshio Kodera[4], Takashi Kohda[2], Fumitoshi Ishino[2], Tohru Kimura[1]
([1]Lab Stem Cell Biol, Kitasato University School of Science, [2]Medical Research Institute, Tokyo Medical and Dental University, [3]Keio University School of Medicine, [4]Lab Biophysics, Kitasato University School of Science)

P-19 Mutant ASXL1 provokes mitochondrial dysregulation and ROS-induced DNA damage in haematopoietic stem and progenitor cells

Takeshi Fujino, Susumu Goyama, Toshio Kitamura
(Division of Cellular Therapy, The Institute of Medical Science, The University of Tokyo)

P-20 Loss of *Tet2* and *Tet3* alleles accentuate development of myeloid and lymphoid malignancies

Raksha Shrestha[1], Koichiro Maie[1], Mamiko Sakata-Yanagimoto[1,2], Motohiko Oshima[3], Yaeko Nakajima-Takagi[3], Hirotaka Matsui[4], Takayasu Kato[1,2], Hideharu Muto[1,2], Enguerran Mouly[5], Olivier A. Bernard[5], Haruhiko Koseki[6], Atsushi Iwama[3], Shigeru Chiba[1,2]
([1]Graduate School of Comprehensive Human Sciences, University of Tsukuba, Tsukuba, Japan, [2]Faculty of Medicine, University of Tsukuba, Tsukuba, Japan, [3]Department of Cellular and Molecular Medicine, Graduate School of Medicine, Chiba University, Chiba, Japan, [4]Department of Molecular Laboratory Medicine, Kumamoto University, Kumamoto, Japan, [5]INSERM U1170, Institut Gustave Roussy, Villejuif, France, [6]RIKEN Research Center for Allergy and Immunology, Yokohama, Japan)

P-21 Identification of a subpopulation of glioma cells with a potential for tumor niche development involving myeloid cells

Kouichi Tabu, Tetsuya Taga
(Department of Stem Cell Regulation, Medical Research Institute, Tokyo Medical and Dental University (TMDU))

P-22 The novel imipridone ONC212 induces pronounced GPR132-mediated anti-leukemia effects and is highly synergistic with Bcl-2 inhibitor ABT-199

Takenobu Nii[1], Jo Ishizawa[1], Varun Prabhu[2], Vivian Ruvolo[1], Neel Madhukar[3], Ran Zhao[1], Hong Mu[1], Lauren Heese[1], Kensuke Kojima[4], Mathew Garnett[5], Ultan McDermott[5], Cyril Benes[6], Neil Charter[7], Sean Deacon[7], Olivier Elemento[3], Joshua Allen[2], Wolfgang Oster[2], Martin Stogniew[2], Michael Andreeff[1]
([1]Section of Molecular Hematology and Therapy, Department of Leukemia, The University of Texas MD Anderson Cancer Center, Houston, TX, [2]Oncoceutics, Inc., Philadelphia, PA, [3]Weill Cornell Medicine, New York, NY, [4]Saga University, Saga, Japan, [5]Wellcome Trust Sanger Institute, Hinxton, UK, [6]Massachusetts General Hospital, Boston, MA, [7]DiscoverX Corporation, Fremont, CA)

P-23 Characterization of Chronic Myeloid Leukemia Initiating Cells Using a Novel G_0 Marker

Yosuke Tanaka, Keiko Mikami, Tsuyoshi Fukushima, Susumu Goyama, Toshio Kitamura
(University of Tokyo, Institute for Medical Science)

P-24 The core targets of polycomb repressive complex 2 in the maintenance of myelodysplastic syndrome stem cells

Kazumasa Aoyama[1], Motohiko Oshima[1], Makiko Mochizuki-Kashio[1], Shuhei Koide[1], Emi Suzuki[1], Yuko Kato[1], Yaeko Nakajima-Takagi[1], Nobuhiro Hiura[1], Goro Sashida[1,2], Atsushi Iwama[1]
([1]Department of Cellular and Molecular Medicine, Graduate School of Medicine, Chiba University, [2]International Research Center for Medical Sciences, Kumamoto University)

P-25 The role of one-carbon metabolic enzyme MTHFD1L for cancer stem-like cells in triple-negative breast cancer

Tatsunori Nishimura[1], Mengjiao Li[2], Kazuki Nishimura[1], Shigeki Sato[1], Noriko Gotoh[1]
([1]Kanawazwa University Cancer Research Institute, [2]Fudan University Shanghai Cancer Center)

P-26 Roles of angiopoietin-l in reconstruction of vascular niches by leukemia

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

P-27 The polycomb protein Bmi1 restrains perivascular mesenchymal stromal cells from adipogenic differentiation to maintain the integrity of hematopoietic stem cell niche

Yuko Kato[1], Li-Bo Hou[1], Shuhei Koide[1], Satoru Miyagi[1], Motohiko Oshima[1], Kazumasa Aoyama[1], Sha Si[1], Satoshi Yamazaki[2], Erico Nitta[1], Atsushi Iwama[1]
([1]Department of Cellular and Molecular Medicine, Graduate School of Medicine, Chiba University, [2]Laboratory of Stem Cell Therapy, Center for Experimental Medicine, The institute of Medical Science, The University of Tokyo)

P-28 Impairment of bone marrow erythropoiesis is induced by disruption of Notch signaling in specific bone marrow microenvironment

Tatsuhiro Sakamoto[1,2], Naoshi Obara[1], Hidekazu Nishikii[1], Takayasu Kato[1], Ryosuke Fujimura[3], Luan Cao Sy[4], Mamiko Sakata-Yanagimoto[1], Satoru Takahashi[5], Shigeru Chiba[1]
([1]Department of Hematology, Faculty of Medicine, University of Tsukuba, [2]Department of Hematology, University of Tsukuba Hospital, [3]School of Medical Sciences, University of Tsukuba, [4]Graduate School of Comprehensive Human Sciences, University of Tsukuba, [5]Department of Anatomy and Embryology, Faculty of Medicine, University of Tsukuba)

P-29 Hierarchical differentiation of mesenchymal progenitors forming hematopoietic stem cell niches

Yasufumi Uehara[1], Kentaro Hosokawa[2], Yuya Kunisaki[3], Fumio Arai[2]
([1]Department of Medicine and Biosystemic Science, Kyushu University, [2]Department of Stem Cell Biology and Medicine, Kyushu University, [3]Center for cellular and Molecular Medicine, Kyushu University Hospital)

P-30 Abcg2-induced MDS/AML cells inhibited hematopoiesis through blocking osteoblastic differentiation of bone marrow mesenchymal stem cells

Yasutaka Hayashi[1], Kimihito C Kawabata[2], Yasufumi Uehara[3], Yosuke Tanaka[1], Shigeru Kiryu[4], Yasunori Ota[5], Yuya Kunisaki[3], Tomofusa Fukuyama[1], Susumu Goyama[1], Fumio Arai[3], Toshio Kitamura[1]
([1]Division of Cellular Therapy, The Institute of Medical Science, The University of Tokyo, [2]Division of Hematology/Medical Oncology, Department of Medicine, Weill-Cornell Medical College, Cornell University, [3]Department of Stem Cell Biology and Medicine/Cancer Stem Cell Research, Graduate School of Medical Sciences, Kyushu University, [4]Department of Radiology, The Institute of Medical Science, The University of Tokyo, [5]Department of Pathology, Research Hospital, The Institute of Medical Science, The University of Tokyo)

P-31 Oligodendrocyte Progenitor Cells and Macrophages/Microglia Produce Glioma Stem Cell Niches at the Tumor Border

Takuichiro Hide[1], Yoshihiro Komohara[2], Yuko Miyasato[2], Hideo Nakamura[1], Keishi Makino[1], Motohiro Takeya[2], Jun-ichi Kuratsu[1], Akitake Mukasa[1], Shigetoshi Yano[1]
([1]Department of Neurosurgery, Kumamoto University Medical School, [2]Department of Cell Pathology, Kumamoto University Medical School)

P-32 Analysis of the effects of choroid plexus on adult neurogenesis by focusing on a chronic inflammatory regulator, Angiopoietin-like protein 2

Rie Yamashita, Kinichi Nakashima, Sayako Katada
(Department of Stem Cell Biology and Medicine, Graduate School of Medical Sciences, Kyushu University)

P-33 Maintenance of breast cancer stem-like cells by cancer associated fibroblast-derived soluble factors

Takahiko Murayama[1], Tatsunori Nishimura[2], Masao Yano[3], Kei-ichiro Tada[4], Kazuhiro Ikeda[5], Koji Okamoto[6], Kuniko Horie-Inoue[5], Satoshi Inoue[5], Arinobu Tojo[1], Noriko Gotoh[2]
([1]Division of Molecular Therapy, Institute of Medical Science, The University of Tokyo, [2]Division of Cancer Cell Biology, Cancer Research Institute of Kanazawa University, Kanazawa University, [3]Department of Breast Surgery, Minamimachida Hospital, [4]Department of Breast & Endocrine Surgery, Graduate School of Medicine, University of Tokyo, [5]Division of Gene Regulation and Signal Transduction, Research Center for Genomic Medicine, Saitama Medical University, [6]Division of Cancer Differentiation, National Cancer Center Research Institute)

P-34 Hematopoietic stem cells from human pluripotent stem cells

Ryohichi Sugimura
(Stem Cell Transplantation Program, Division of Pediatric Hematology and Oncology, Dana-Farber Cancer Institute, Boston Children's Hospital and Dana-Farber Cancer Institute)