

Friday, May 29. The First Day

Registration · Exhibit posters

9:00~

Opening Remarks Organizer Issay Kitabayashi

9:30~9:40

(National Cancer Center Research Institute, Division of Hematological Malignancy)

Keynote Lecture (1)

9:40~10:30

Chair Yukiko Gotoh

(Laboratory of Molecular Biology, Graduate School of Pharmaceutical Sciences, The University of Tokyo)

K-1 Molecular Regulation of Stem Cell Quiescence

Thomas A. Rando, MD, PhD

(Stanford University School of Medicine)

Coffee Break

10:30~10:50

Special Session on Tissue Stem Cells

10:50~12:05

Chair Yukiko Gotoh

(Laboratory of Molecular Biology, Graduate School of Pharmaceutical Sciences, The University of Tokyo)

SS-1 Slowly dividing neural progenitors are an embryonic origin of adult neural stem cells

Shohei Furutachi and Yukiko Gotoh

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

SS-2 The epidermal stem cell niche instructs the creation and positioning of mesenchymal features

Hironobu Fujiwara

(RIKEN Center for Developmental Biology)

SS-3 Melanocyte stem cells: a key for hair graying and melanoma

Emi K. Nishimura

(Department of Stem Cell Biology, Medical Research Institute, Tokyo Medical and Dental University)

Lunch Time/Poster Session

12:05~13:25

Session 1: Hematopoietic & Neural Stem Cells

13:25~14:40

Chair Yoshihiro Takihara

(Department of Stem Cell Biology, Research Institute for Radiation Biology and Medicine, Hiroshima University)

- O-1** Disruption of Tsukushi function results aberrant neurogenesis in mouse brain.
Naofumi Ito, Riyadh MD Asrafuzzaman, Kunimasa Ohta
(Department of Developmental Neurobiology, Graduate School of Life Sciences, Kumamoto University)
- O-2** Manipulation of the Geminin activity by using cell-penetrating Geminin and its domain-specific mutants
Yoshinori Ohno¹, Shin'ichiro Yasunaga^{1,2}, Kyoko Suzuki-Takedachi¹, Toshiaki Kurogi¹, Mimoko Santo¹, Motoaki Ohtsubo³, Kazuhito Naka^{1,4}, Yoshihiro Takihara¹
(¹Dept. Stem Cell Biol., RIRBM, Hiroshima Univ., ²Dept. Biochem., Facul. Med., Fukuoka Univ., ³Dept. Food and Ferment. Sci., Beppu Univ., ⁴Explor. Proj. Can. Stem Cells, CRI, Kanazawa Univ.)
- O-3** Chromatin remodeling factor BRM is essential for maintaining HSC quiescence
Eriko Nitta^{1,2}, Masayuki Yamashita², Motohiko Oshima¹, Atsushi Iwama¹, Toshio Suda²
(¹Chiba University Graduate School of Medicine, ²Keio University School of Medicine)
- O-4** Highly efficient Runx1 enhancer (eR1)-mediated genetic engineering for fetal and adult hematopoietic stem cells
Motomi Osato^{1,2}, Cai Ping Koh², Tomomasa Yokomizo¹
(¹International Research Center for Medical Sciences, Kumamoto University, ²Cancer Science Institute of Singapore, National University of Singapore)
- O-5** Direct Activation of TLR4-TRIF-ROS-p38 Pathways Limits Hematopoietic Stem Cell Fitness
Hitoshi Takizawa¹, Kristin Fritsch², Yasuyuki Saito², Larisa V. Kovtonyuk², Markus G. Manz²
(¹International Research Center for Medical Sciences, Kumamoto University, ²Division of Hematology, University Hospital Zurich, Switzerland)

Coffee Break

14:40~15:00

Session 2: Leukemia Stem Cells (1)

15:00~15:45

Chair Shigeru Chiba

(Department of Hematology, Faculty of Medicine, University of Tsukuba)

- O-6 The clinical impact of both point mutated and alternatively spliced BCR-ABL in CML patients: Result of highly-sensitive, deep sequencing study
Junichiro Yuda¹, Toshimiro Miyamoto¹, Jun Odawara¹, Yasuyuki Ohkawa², Koichi Akashi¹
(¹Medicine and Biosystemic Science, Kyushu University, Faculty of Medical Sciences, ²Department of Advanced Medical Initiatives, Kyushu University, Faculty of Medical Sciences)
- O-7 Overexpression of the Shortest Isoform of Histone Demethylase LSD1 Primes Hematopoietic Stem/Progenitor Cells for Malignant Transformation
Taeko Wada, Yusuke Furukawa
(Division of Stem Cell Regulation, Center for Molecular Medicine, Jichi Med.Univ.)
- O-8 Gene profiling analyses and mode of action in acute myeloid leukemia during treatment with Hedgehog signaling inhibitor
Yosuke Minami
(Division of Transfusion Medicine and Cell Therapy, Kobe University Hospital)

Session 3: Leukemia Stem Cells (2)

15:45~16:45

Chair Atsushi Iwama

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

- O-9 Truncated Form EZH2 Mutation Promotes Myeloid Tumorigenesis in Mouse BMT Model via Upregulation of Tumor Stem Cell Markers
Kimihito C. Kawabata¹, Daichi Inoue¹, Jiro Kitaura¹, Yasutaka Hayashi¹, Tomofusa Fukuyama¹, Hironori Harada², Susumu Goyama¹, Toshio Kitamura¹
(¹Division of Cell Therapy, Institute of Medical Science, the University of Tokyo, ²Department of Hematology, School of Medicine, Juntendo University)
- O-10 The roles of Glis2 in leukemic and hematopoietic stem cells
Emi Takamatsu-Ichihara, Haruko Shima, Shuhei Fujita, Kazutsune Yamagata, Yukiko Aikawa, Issay Kitabayashi
(Division of Hematological Malignancy, National Cancer Center Research Institute)
- O-11 Enhanced autophagy promotes survival of peripheral blast cells from murine MLL-ENL leukemia.
Yoshiki Sumitomo^{1,2}, Junji Koya¹, Keisuke Kataoka¹, Takako Tsuruta-Kishino¹, Morita Ken¹, Tomohiko Sato^{1,3}, Mineo Kurokawa^{1,4}
(¹Department of Hematology & Oncology, Graduate School of Medicine, The University of Tokyo, ²Oncology Research Laboratories, Kyowa Hakko Kirin Co., Ltd., ³Department of Transfusion Medicine, The University of Tokyo Hospital, ⁴Department of Cell Therapy and Transplantation, The University of Tokyo Hospital.)

O-12 Proteinase-activated receptor 1 (Par-1) inhibits proliferation but enhances leukemia stem cell activity in MLL-fusion leukemia

Susumu Goyama¹, Mahesh Shrestha², Janet Schibler², Leah Rosenfeldt², Whitney Miller², Eric O'Brien², Benjamin Mizukawa², Toshio Kitamura¹, Joseph S. Palumbo², James C. Mulloy²

(¹Division of Cellular Therapy, The Institute of Medical Science, The University of Tokyo, ²Division of Experimental Hematology and Cancer Biology, Cincinnati Children's Hospital Medical Center, University of Cincinnati College of Medicine)

Coffee Break

16:45~17:05

Keynote Lecture (2)

17:05~17:55

Chair Koichi Akashi

(Department of Medicine and Biosystemic Science, Faculty of Medicine, Kyushu University)

K-2 “Stem Cell Niche” – From Cells to Organs and Beyond

Hiromitsu Nakauchi

(Stanford University / University of Tokyo)

General Meeting

17:55~18:05

Chief Director Koichi Akashi

(Department of Medicine and Biosystemic Science, Faculty of Medicine, Kyushu University)

Reception (Venue for Poster Presentation)

18:05~19:05

Saturday, May 30. The Second Day

Special Lecture: Metabolism & Stem Cells

9:30~10:10

Chair **Atsushi Hirao**

(Cancer Research Institute, Kanazawa University)

S-1 Metabolic heterogeneity of cancer stem cells

Hideyuki Saya

(Keio University, School of Medicine, Institute for Advanced Medical Research, Division of Gene Regulation)

Coffee Break

10:10~10:30

Session 4: Metabolism & Stem Cells

10:30~11:45

Chair **Keiyo Takubo**

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

O-13 AMPK confers metabolic stress resistance to leukemia-initiating cells

Yusuke Saito^{1,2}, Daisuke Nakada¹

(¹Molecular and Human Genetics, Baylor college of medicine, ²Division of Tumor and Cellular Biochemistry, Faculty of Medicine, University of Miyazaki)

O-14 IDH mutants are promising therapeutic targets for acute myeloid leukemia

Yoko Ogawara¹, Hironori Matsunaga², Takahiko Seki², Yukino Machida¹, Kazushi Araki², Issay Kitabayashi¹

(¹Division of Hematological Malignancy, National Cancer Center Research Institute, ²R&D Division, Daiichi Sankyo Co., Ltd.)

O-15 Proliferation of transplanted hematopoietic stem cells is controlled by p38alpha-activated purine metabolism.

Daiki Karigane^{1,2}, Toshio Suda^{3,4}, Keiyo Takubo¹

(¹Department of Stem Cell Biology, Research Institute, National Center for Global Health and Medicine, ²Division of Hematology, Department of Internal Medicine, Keio University School of Medicine, ³Cancer Science Institute, National University of Singapore, ⁴The International Research Center for Medical Sciences (IRCMS), Kumamoto University)

O-16 Specific amino acid environment in bone marrow is crucial for the maintenance of hematopoietic stem cells

Yuki Taya¹, Satoshi Yamazaki¹, Hiroshi Watarai¹, Ayano Kanazawa¹, Yasunori Ota², Takaho Endo³, Hiromitsu Nakauchi^{1,4}

(¹Laboratory of Stem Cell Therapy, Center for Experimental Medicine, The Institute of Medical Science, University of Tokyo, ²Department of Pathology, Research Hospital, The Institute of Medical Science, The University of Tokyo, ³Laboratory for Integrative Genomics, RIKEN Center for Integrative Medical Sciences, The institute of Physical and Chemical Research, ⁴Institute for Stem Cell Biology and Regenerative Medicine, Stanford University School of Medicine)

- O-17** Lactic acid bacteria-derived materials convert human fibroblasts to multipotential cells

Kunimasa Ohta¹, Kaoru Katou², Naofumi Ito¹

(¹Department of Developmental Neurobiology, Graduate School of Life Sciences, Kumamoto University, ²Biomedical Research Institute, National Institute of Advanced Industrial Science and Technology (AIST))

Lunch Time/Poster Session

11:45~12:45

Session 5: Cancer Stem Cells

12:45~13:45

Chair Yohei Shimono

(Division of Molecular and Cellular Biology, Kobe University Graduate School of Medicine)

- O-18** HER2/3-NF κ B-IGF2-ID1 circuit addiction as a fundamental mechanism for stabilization of the stemness of breast cancer cells in their niche

Kana Tominaga^{1,2}, Natsuko Kimura¹, Takahiko Murayama¹,
Yohei Shimono³, Hideshi Ishii⁴, Hideyuki Saya⁵, Masaki Mori⁶,
Koichi Akashi⁷, Kei-ichiro Tada⁸, Arinobu Tojo¹, Noriko Gotoh^{1,9}

(¹Division of Molecular Therapy, Institute of Medical Science, University of Tokyo, ²JSPS DC2, ³Division of Molecular and Cellular Biology, Kobe University, Graduate School of Medicine, ⁴Department of Cancer Profiling Discovery, Osaka University Graduate School of Medicine, ⁵Division of Gene Regulation, Institute Advanced Medicine Research, Graduate School of Medicine, Keio University, ⁶Department of Gastroenterological Surgery, Graduate School of Medicine, Osaka University, ⁷Department of Medicine and Biosystemic Science, Graduate School of Medicine, Kyusyu Univesity, ⁸Department of Breast & Endocrine Surgery, Graduate School of Medicine, University of Tokyo, ⁹Division of Cancer Cell Biology, Cancer Research Institute, Kanazawa University)

- O-19** Epithelial to mesenchymal transition by TGF-beta treatment enhances sphere forming ability in primary colorectal cancer

Michitaka Nakano¹, Hiroshi Ariyama¹, Shingo Tamura¹, Taichi Isobe¹,
Kohta MIyawaki¹, Yuta Okumura¹, Hitoshi Kusaba¹, Takashi Ueki²,
Eishi Baba¹, Koichi Akashi¹

(¹Medicine and Biosystemic Science, Kyushu University, ²Surgery and Oncology, Kyushu University)

- O-20** miR-142 Upregulates miR-150 and Confers an Aberrant Proliferative Ability to Human Breast Cancer Stem Cells.

Yohei Shimono¹, Taichi Isobe², Shigeo Hisamori³, Michael Clarke²

(¹Kobe University Graduate School of Medicine, ²Institute for Stem Cell Biology and Regenerative Medicine, Stanford University, U.S.A., ³Kyoto University Graduate School of Medicine.)

- O-21** CD74-NRG1 is a potential oncoprotein that promotes cancer stem cell properties.
Takahiko Murayama^{1,2}, Takashi Nakaoku³, Koji Tsuta⁴, Masato Enari⁵,
 Tatsunori Nishimura⁶, Kana Tominaga⁶, Asuka Nakata¹, Arinobu Tojo⁷,
 Sumio Sugano², Takashi Kohno³, Noriko Gotoh^{1,6}
 (¹Division of Cancer Cell Biology, Cancer Research Institute of Kanazawa University, ²Laboratory of Functional Genomics, Department of Medical Genome Sciences, Graduate School of Frontier Sciences, University of Tokyo, ³Division of Genome Biology, National Cancer Center Research Institute, ⁴Pathology Division, National Cancer Center Research Institute, ⁵Division of Refractory Cancer Research, National Cancer Center Research Institute, ⁶Division of Molecular Therapy, Molecular targets laboratory, Institute of Medical Science, University of Tokyo, ⁷Division of Molecular Therapy, Advanced Clinical Research Center, Institute of Medical Science, University of Tokyo)

Session 6: Hematopoiesis

13:45~14:30

Chair Motomi Osato

(International Research Center for Medical Sciences, Kumamoto University)

- O-22** A single micro-RNA can completely rescue B-cell differentiation arrest due to EBF1 deficiency—Can miR-195 control cell fate more than a fine tuner?
Bidisha Chanda¹, Tomokatsu Ikawa², Kazuki Okuyama¹, Katsuto Hozumi³,
 Kiyoshi Ando⁴, Arinobu Tojo⁵, Hiroshi Kawamoto⁶, Ai Kotani¹
 (¹Division of Hematological Malignancy, Institute of Medical Science, Tokai University, ²RIKEN Research Center for Allergy and Immunology, ³Department of Immunology, Tokai University Medical School, ⁴Department of Hematology, Tokai University, ⁵Division of Molecular Therapy, Institute of Medical Science, University of Tokyo, ⁶Department of Immunology, Kyoto University)
- O-23** Modulation of macrophages by tumor-derived secretory small RNAs is critical for EBV lymphoma formation
Natsuko Yamakawa¹, Ken-Ichi Imadome², Takashi Yahata³, Ai Kotani¹
 (¹Department of Hematological Malignancy, Institute of Medical Science, Tokai University, ²Department of Infectious Diseases, National Center for Child Health and Development, ³Research Center for Cancer Stem Cell, Tokai University School of Medicine)
- O-24** A novel 2 amino acids deletion of the transcription factor C/EBP epsilon leads to neutrophil-specific granule deficiency (SGD).
Tadayuki Akagi¹, Taizo Wada², Masahiro Muraoka², Tomoko Toma²,
 Kenzo Kaji³, Kazunaga Agematsu⁴, H. Phillip Koeffler⁵, Takashi Yokota¹,
 Akihiro Yachie²
 (¹Department of Stem Cell Biology, Graduate School of Medical Sciences, Kanazawa University, ²Department of Pediatrics, Graduate School of Medical Sciences, Kanazawa University, ³Department of Dermatology, Komatsu Municipal Hospital, ⁴Department of Infection and Host Defense, Shinshu University Graduate School of Medicine, ⁵Cancer Science Institute of Singapore, National University of Singapore, Singapore)

Coffee Break

14:30~14:50

Session 7: Multi-/pluri-potent Stem Cells 1

14:50~15:35

Chair Takumi Era

(Department of Cell Modulation, IMEG, Kumamoto University)

- O-25** Dynamic expression patterns of Pax6 during spermatogenesis in the mouse
Ryuichi Kimura, Kaichi Yoshizaki, Noriko Osumi
(Department of Developmental Neuroscience, Center for Neuroscience, Tohoku University School of Medicine.)
- O-26** OVOL2 controls transcriptional programs of ectodermal lineage
Shinji Masui¹, Koji Kitazawa¹, Shigeru Kinoshita²
(¹Center for iPS Cell Research and Application, Kyoto University, ²Department of Ophthalmology, Kyoto Prefectural University of Medicine.)
- O-27** Actin regulates cellular reprogramming
Takashi Ikeda, Takafusa Hikichi, Akira Watanabe, Akitsu Hotta, Shinji Masui
(Department of Reprogramming Science, Center for iPS Research and Application (CiRA), Kyoto University)

Session 8: Multi-/pluri-potent Stem Cells 2

15:35~16:20

Chair Shinji Masui

(Center for iPS Cell Research and Application, Kyoto University)

- O-28** A Safeguard System for Induced Pluripotent Stem Cell-Derived Rejuvenated T-Cell Therapy
Miki Ando¹, Toshinobu Nishimura², Satoshi Yamazaki¹, Malcolm Brenner³, Hiromitsu Nakauchi^{1,2}
(¹Division of Stem Cell Therapy, Center for Stem Cell Biology and Regenerative Medicine, The Institute of Medical Science, The University of Tokyo, ²Institute for Stem Cell Biology and Regenerative Medicine, Stanford University, ³Center for Cell and Gene Therapy, Baylor College of Medicine)
- O-29** A newly effective drug candidate was found using iPS cell derived from Niemann-Pick disease type C
Minami Soga¹, Yoichi Ishitsuka², Makoto Hamasaki¹, Kaori Yoneda³, Hirokazu Furuya⁴, Muneaki Matsuo⁵, Hironobu Ihn⁶, Noemi Fusaki⁷, Kimitoshi Nakamura³, Naomi Nakagata⁸, Fumio Endo³, Tetsumi Irie², Takumi Era¹
(¹Department of Cell Modulation, Institute of Molecular Embryology and Genetics, Kumamoto University, ²Department of Clinical Chemistry and Informatics, Graduate School of Pharmaceutical Sciences, Kumamoto University, ³Department of Pediatrics, Graduate School of Medical Sciences, Kumamoto University, ⁴Department of Cardiology, Neurology and Aging Science, Kochi University Medical School, ⁵Department of Pediatrics, Saga University, Faculty of Medicine, ⁶Department of Dermatology and Plastic Surgery, Faculty of Life Sciences, Kumamoto University, ⁷Department of Ophthalmology, Keio University School of Medicine, ⁸Division of Reproductive Engineering, Center for Animal Resources and Development, Kumamoto University.)

O-30 New Type of Sendai Virus Vector Provides Transgene-Free iPS Cells Derived from Chimpanzee Blood

Makoto Hamasaki¹, Yasumitsu Fujie¹, Noemi Fusaki^{2,3},
Tomohiko Katayama¹, Yumi Soejima¹, Minami Soga¹, Hiroshi Ban²,
Mamoru Hasegawa², Satoshi Yamashita⁴, Shigemi Kimura⁵, Saori Suzuki⁶,
Tetsuro Matsuzawa⁷, Hirofumi Akari^{6,8}, Takumi Era¹

(¹Department of Cell Modulation, Institute of Molecular Embryology and Genetics, Kumamoto University, ²DNAVEC Corporation, ³Department of Ophthalmology, Keio University School of Medicine, ⁴Department of Neurology, Graduate School of Medical Sciences, Kumamoto University, ⁵Department of Child Development, Graduate School of Medical Sciences, Kumamoto University, ⁶Section of Comparative Microbiology and Immunology, Center for Human Evolution Modeling Research, Primate Research Institute, Kyoto University, ⁷Section of Language and Intelligence, Primate Research Institute, Kyoto University, ⁸Laboratory of Evolutional Virology, Experimental Research Center for Infectious Diseases, Institute for Virus Research, Kyoto University)

Closing Remarks

16:20~16:30

Next Organizer Atsushi Hirao

(Cancer Research Institute, Kanazawa University)

Poster Session

- P-1** Functional analysis of neurodevelopmental disorder causative protein MeCP2 in neural stem cells
Keita Tsujimura, Hideyuki Nakashima, Koichiro Irie, Kinichi Nakashima (Stem Cell Biology and Medicine, Department of Stem Cell Biology and Medicine, Graduate School of Medical Science, Kyushu University)
- P-2** Identification of a potential progenitor cell population of bile duct epithelial cells with clonal proliferation activity in regenerating mouse liver
Kenji Kamimoto, Tohru Itoh, Atsushi Miyajima (IMCB, The University of Tokyo, Department of Biophysics and Biochemistry, the University of Tokyo)
- P-3** Characterization of Liver Stem/Progenitor Cell by the Expression Profile of Lutheran
Yasushi Miura¹, Minoru Tanaka², Yamato Kikkawa³, Nobuhito Goda¹, Atsushi Miyajima⁴
(¹Department of Life Science and Medical Bioscience, School of Science and Engineering, Waseda University, ²Department of Regenerative Medicine, Research Institute of National Center for Global Health and Medicine, ³Laboratory of Clinical Biochemistry, Tokyo University of Pharmacy and Life Sciences, ⁴Laboratory of Cell Growth and Differentiation, Institute of Molecular and Cellular Biosciences, The University of Tokyo)
- P-4** Roles of metabolic signals in differentiation and de-differentiation of mouse primordial germ cells
Yuki Yoshimura¹, Mizuki Wakabayashi¹, Shigeyuki Nada², Masato Okada², Yoichi Sekita¹, Tohru Kimura¹
(¹Laboratory of Stem Cell Biology, Department of Biosciences, Kitasato University School of Science, ²Department of Oncogene Research, Research Institute for Microbial Diseases, Osaka University)
- P-5** Identification of mouse Biliary Tree Stem/Progenitor Cell (BTSC) based on TROP2 expression profile.
Satoshi Matsui^{1,2}, Minoru Tanaka^{1,2}, Atsushi Miyajima¹
(¹Laboratory of Cell Growth and Differentiation, Institute of Molecular and Cellular Biosciences (IMCB), The University of Tokyo., ²Dept. of Regenerative Medicine, National Center for Global Health and Medicine (NCGM).)
- P-6** Locus-specific expansion of Polycomb domain determines the temporal repression of the neurogenic genes in neocortical development
Yusuke Kishi¹, Yusuke Hirabayashi², Kelsey Tyssowski², Haruhiko Koseki³, Yutaka Suzuki⁴, Yukiko Gotoh¹
(¹Grad Sch Pharma, Univ of Tokyo, ²IMCB, Univ of Tokyo, ³RIKEN, IMS-RCAI, ⁴Grad Sch Frontier Sci, Univ of Tokyo)
- P-7** Sp1/3 sustain self-renewal of Embryonic stem cell through regulating core Klf circuitry
Hiroki Ura
(RIKEN Center for Developmental Biology)

- P-8** Slowly dividing neural progenitors are an embryonic origin of adult neural stem cells
Shohei Furutachi, Yukiko Gotoh
(Graduate School of Pharmaceutical Sciences, The University of Tokyo)
- P-9** Investigation of the lower c-kit expressing cells in murine hematopoietic stem cell compartment
Yutaka Sasaki, Yoshikazu Matsuoka, Ryusuke Nakatsuka,
Keisuke Sumide, Hiroshi Kawamura, Tatsuya Fujioka, Sonoda Yoshiaki
(Department of Stem Cell Biology and Regenerative Medicine, Graduate School of Medical Science, Kansai Medical University)
- P-10** Role of the Polycomb Gene Bcor in Hematopoiesis
Tomoyuki Tanaka^{1,2}, Sha Si³, Shiro Tara³, Atsunori Saraya³,
Yaeko Nakajima-Takagi⁴, Hirohito Sone⁴, Haruhiko Koseki⁵,
Atsushi Iwama³
(¹Department of Hematology, Endocrinology and Metabolism, Niigata University, ²Department of Cellular and Molecular Medicine, Graduate School of Medicine, Chiba University, ³Department of Cellular and Molecular Medicine, Graduate School of Medicine, Chiba University, ⁴Department of Hematology, Endocrinology and Metabolism, Niigata University, ⁵Laboratory for Developmental Genetics, RIKEN Research Center for Integrative Medical Sciences, IMS.)
- P-11** Quality control of undifferentiated status in hematopoietic stem cells during cell division by Spred1
Yuko Tadokoro¹, Akihiko Yoshimura², Hiromitsu Nakauchi³,
Atsushi Hirao¹
(¹Division of Molecular Genetics, Cancer Research Institute, Kanazawa University, ²Department of Microbiology and Immunology, Keio University School of Medicine, ³Division of Stem Cell Therapy, The Institute of Medical Science, The University of Tokyo)
- P-12** Maintenance of intra-aortic hematopoietic cell clusters in the AGM region through the Sox17-Notch1-Hes1 axis
Kiyoka Saito, Ikuo Nobuhisa, Maha Anani, Kaho Harada,
Satomi Takahashi, Tetsuya Taga
(Department of Stem Cell Regulation, Medical Research Institute, Tokyo Medical and Dental University (TMDU))
- P-13** Exo-utero surgical technique enables us to investigate hematopoietic homing from fetal liver to bone marrow.
Yuka Tanaka^{1,2}, Tomoko Inoue³, Kasem Kulkeaw³, Chiyo Yanagi²,
Keai Sinn Tan³, Naoko Kojima³, Anthony Swain³, Senji Shirasawa²,
Yoichi Nakanishi⁴, Daisuke Sugiyama^{1,5}
(¹Center for Advanced Medical Innovation, Kyushu University, ²Department of Cell Biology, Faculty of Medicine, Fukuoka University, ³Department of Research and Development of Next Generation Medicine, Kyushu University Faculty of Medical Sciences, ⁴Center for Clinical and Translational Research, Kyushu University Hospital, ⁵Center for Clinical and Translational Research, Kyushu university Hospital)

- P-14** Role of UTX, a histone H3K27 demethylase, in normal hematopoiesis and hematologic malignancies
Yasuyuki Sera¹, Takeshi Ueda¹, Yuichiro Nakata¹, Ken-ichiro Ikeda¹, Norimasa Yamasaki¹, Hideaki Oda², Zen-ichiro Honda³, Hiroaki Honda¹
(¹Department of Disease Model, Research Institute for Radiation Biology and Medicine, Hiroshima University, ²Department of Pathology, Tokyo Women's Medical University, ³Health Care Center and Graduate School of Humanities and Sciences, Institute of Environmental Science for Human Life, Ochanomizu University)
- P-15** A transient treatment of GSK3 β inhibitor enhances hematopoietic differentiation of human pluripotent stem cells.
Kenji Kitajima¹, Marino Nakajima^{1,2}, Mai Kanokoda^{1,2}, Takahiko Hara^{1,2}
(¹Stem Cell project, Tokyo Metropolitan Institute of Medical Science, ²Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University)
- P-16** Induction of the megakaryocyte differentiation from mouse/human pluripotent stem cells by Gata transcription factors
Mai Kanokoda^{1,2}, Kenji Kitajima¹, Manami Kawaguchi^{1,2}, Marino Nakajima^{1,2}, Michael Kyba³, Takahiko Hara^{1,2}
(¹Stem Cell project, Tokyo Metropolitan Institute of Medical Science, ²Graduate School of Medical and Dental Sciences, ³Lillehei Heart Institute, University of Minnesota)
- P-17** Full hematopoietic differentiation potentials of tetraploid pluripotent stem cells generated by cell fusion between mouse T cells and embryonic stem cells
Marino Nakajima^{1,2}, Kenji Kitajima¹, Mai Kanokoda^{1,2}, Takahiko Hara^{1,2}
(¹Stem Cell project, Tokyo Metropolitan Institute of Medical Science, ²Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University)
- P-18** Promotion of iPS cell induction by AKT signaling activation
Eriko Kanai, Toshihisa Haraoka, Yuki Yoshimura, Keita Fujikawa, Yoichi Sekita, Tohru Kimura
(Laboratory of Stem Cell Biology, Department of Biosciences, Kitasato University School of Science.)
- P-19** Zfp296 associates with Klf4 and regulates its activity as an activator and a repressor.
Yuka Fujii, Tadayuki Akagi, Takashi Yokota
(Department of Stem Cell Biology, Graduate School of Medical Sciences, Kanazawa University)
- P-20** Dynamic regulation of colon tumor-derived stem cells demonstrated by single-cell qPCR
Daisuke Shiokawa, Hirokazu Ohata, Koji Okamoto
(Division of Cancer Differentiation, National Cancer Center Research Institute)

- P-21** Estrogen induces proliferation of breast cancer stem cells via NO/sGC/cGMP signaling pathway
Naoya Hirata¹, Yosuke Demizu², Masaaki Kurihara², Yuko Sekino¹, Yasunari Kanda¹
(¹Div. Pharmacol., NIHS, ²Div. Org. Chem., NIHS)
- P-22** The roles of p62/SQSTM1, an adaptor protein for selective autophagy, for stemness of breast cancer cells
Chiaki Ito, Noriko Gotoh
(Division of Cancer Cell Biology, Cancer Research Institute, Kanazawa University)
- P-23** GDF15 promotes mammosphere formation in breast cancer
Asako Sasahara¹, Tominaga Kana¹, Arinobu Tojo¹, Noriko Gotoh^{2,3}
(¹Division of Molecular Therapy, Institute of Medical Science, University of Tokyo, ²Division of Molecular Therapy, Institute of Medical Science, University of Tokyo, ³Division of Cancer Cell Biology, Cancer Research Institute, Kanazawa University)
- P-24** Notch3 regulates the quiescence of neural stem cells in the adult mouse subependymal zone
Hiroki Kawai, Shohei Furutachi, Yukiko Gotoh
(Laboratory of Molecular Biology, Graduate School of Pharmaceutical Sciences, The University of Tokyo)
- P-25** Distinctive Thy1-expressing mesenchymal cells contribute to hepatic tissue remodeling in mouse models of cholestatic liver injury
Len Katsumata, Tohru Itoh, Atsushi Miyajima
(Laboratory of Cell Growth and Differentiation, Institute of Molecular and Cellular Biosciences, The University of Tokyo)
- P-26** Dppa3 accelerates erythroid differentiation accompanied with globin synthesis in the mouse fetal liver
Kasem Kulkeaw¹, Daisuke Sugiyama², Tomoko Inoue¹, Naoko Kojima¹, Anthony Swain¹, Muttika Madtookung¹, Kaori Takakusagi³, Yuka Tanaka¹, Akane Yonehara³
(¹Department of Research and Development of Next Generation Medicine, Faculty of Medical Sciences, Kyushu University, ²Department Head, Professor Department of Clinical Study Center for Advanced Medical Innovation Kyushu University, ³International Cooperation Unit Center for Clinical and Translational Research Kyushu University Hospital)
- P-27** Apoptosis inducing factor 2 functions in erythropoiesis by regulating Klf1 gene and enucleation related genes in mouse erythro-leukemic cells
Naoko Kojima¹, Kasem Kulkeaw², Tomoko Inoue², Yuka Tanaka³, Keai Sinn Tan², Anthony Swain², Muttika Madtookung², Yoichi Nakanishi⁴, Senji Shirasawa¹, Daisuke Sugiyama³
(¹Department of Cell Biology, Faculty of Medicine, Graduate school of Fukuoka University, ²Department of Research and Development of Next Generation Medicine, Faculty of Medical Sciences, Kyushu University, ³Department of Clinical Study, Center for Advanced Medical Innovation, Kyushu University, ⁴Center for Clinical and Translational Research, Kyushu University Hospital)