The 1st Day : Friday, May 21

Oral Presentation

10:00~11:30
幹細胞若手の会（つくしの会）
Chair : Sho Kubota
Michihiro Hashimoto

12:00~12:10 **Opening Remarks**

12:10~13:10
Special Lecture sponsered by BD
Kiyokazu Agata
Chair : Hiroyuki Kayo

13:10~13:40 **Keynote Lecture Ⅰ** ▶P.3
Takanori Takebe Chair : Ryuichi Nishinakamura

13:40~14:30 **Session 1** ▶P.3
Organoid
O-1~O-2
Chair : Kosaku Nanki

14:30~14:50 **Coffee Break**

14:50~15:40 **Session 2** ▶P.4
Reprogramming/Pluripotent Stem Cell
O-3~O-4
Chair : Hitoshi Niwa, Yasuhiro Yamada

15:40~16:45 ▶P.4
Session 3
Germline Stem Cell
O-5~O-7
Chair : Shosei Yoshida

16:45~17:10 **Coffee Break**

17:10~18:00 ▶P.4
Keynote Lecture Ⅱ
Hiroshi Hamada
Chair : Toshio Suda

Poster

Poster Viewing

The 2nd Day : Saturday, May 22

Oral Presentation

9:00~10:25 ▶P.5
Session 4
Blood Stem Cell
O-8~O-12
Chair : Shigeru Chiba
Fumio Arai

10:25~10:45 **Coffee Break**

10:45~11:40 **Session 5** ▶P.6
Tissue Stem Cell Ⅰ
O-13~O-15
Chair : Hironobu Fujiwara, Yusuke Ono

11:40~13:00
Lunch Time

13:00~13:05 **General Meeting**

13:05~14:35 ▶P.7
Session 6
Tissue Stem Cell Ⅱ
O-16~O-19
Chair : Kunimasa Ohta
Goro Sashida

14:35~14:50 **Coffee Break**

14:50~16:05 ▶P.8
Session 7
Cancer Stem Cell
O-20~O-22
Chair : Atsushi Hirao

16:05~16:55 ▶P.8
Keynote Lecture Ⅲ
Hideyuki Okano
Chair : Yukiko Gotoh

16:55~17:05 **Award Announcement**
17:05~17:10 **Closing Remarks**

Poster

Poster Viewing

Award Voting Due

Friday, May 21. The 1st Day

Opening Remarks 12:00～12:10

Organizer Hitoshi Takizawa
(International Research Center for Medical Sciences, Kumamoto University)

Special Lecture 12:10～13:10

Chair Hiroyuki Kayo
(Nippon Becton Dickinson Company, Ltd., BD Life Sciences-Biosciences)

SL Purification and characterization of planarian adult Pluripotent Stem Cells (aPSC) by FACS
Kiyokazu Agata
(National Institute for Basic Biology, Director General)
Sponsored by : Nippon Becton Dickinson Company

Keynote Lecture I 13:10～13:40

Chair Ryuichi Nishinakamura
(Department of Kidney Development, IMEG, Kumamoto University)

KL-1 **Modeling hepato-biliary-pancreatic organogenesis towards therapy**
Takanori Takebe[1,2]
([1]Division of Gastroenterology, Hepatology and Nutrition, Developmental Biology and Center for Stem Cell and Organoid Medicine (CuSTOM), Cincinnati Children's Hospital Medical Center, [2]Institute of Research, Tokyo Medical and Dental University)

Session 1: Organoid 13:40～14:30

Chair Kosaku Nanki
(Department of Organoid Medicine, Keio University School of Medicine)

Invited Lecture

O-01 **Direct reprogramming to hepatic and intestinal lineages**
Atsushi Suzuki
(Division of Organogenesis and Regeneration, Medical Institute of Bioregulation, Kyushu University)

Invited Lecture

O-02 **Organoid-based analysis of human kidney development and disease**
Ryuichi Nishinakamura
(Department of Kidney Development, IMEG, Kumamoto University)

Coffee Break 14:30～14:50

Session 2: Reprogramming/Pluripotent Stem Cell 14:50～15:40

Chair Hitoshi Niwa
(Department of Pluripotent Stem Cell Biology, IMEG, Kumamoto University)
Yasuhiro Yamada
(Division of Stem Cell Pathology, Center for Experimental Medicine and Systems Biology, Institute of Medical Science, University of Tokyo)

Invited Lecture

O-03 Context-dependent roles of NAT1 in stem cells
Kazutoshi Takahashi
(Center for iPS cell Research and Application, Kyoto University)

Invited Lecture

O-04 Exploring the developmental regulation of 3D genome organization through single-cell DNA replication profiling
Ichiro Hiratani
(Laboratory for Developmental Epigenetics, RIKEN BDR, Kobe, Japan)

Session 3: Germline Stem Cell 15:40～16:45

Chair Shosei Yoshida
(National Institute for Basic Biology, National Institutes of Natural Sciences)

Invited Lecture

O-05 Reconstitution of molecular and cellular networks regulating oocyte formation
Katsuhiko Hayashi
(Department of Stem Cell Biology and Medicine, Graduate School of Medical Sciences, Kyushu University)

Invited Lecture

O-06 Restoration of fertility by tuning the post-transplantation fate of mouse spermatogonial stem cells
Yoshiaki Nakamura[1], David Jörg[2], Benjamin Simons[2], Shosei Yoshida[3]
([1]Hiroshima University, [2]University of Cambridge, [3]National Institute for Basic Biology)

O-07 Multistate dynamics of stem cells in steady-state mouse spermatogenesis
Toshinori Nakagawa[1], David Jorg[2], Ben Simons[2], Shosei Yoshida[1]
([1]National Institute for Basic Biology, [2]University of Cambridge)

Coffee Break 16:45～17:10

Keynote Lecture Ⅱ 17:10～18:00

Chair Toshio Suda
(International Research Center for Medical Sciences, Kumamoto University)

KL-2 Mechanism for left-right symmetry breaking: diversity among vertebrates
Hiroshi Hamada
(RIKEN Center for Biosystems Dynamics Research)

Saturday, May 22. The 2nd Day

Session 4: Blood Stem Cell 9:00～10:25

Chair Shigeru Chiba
(Department of Hematology, Faculty of Medicine, University of Tsukuba)
Fumio Arai
(Department of Stem Cell Biology and Medicine, Graduate School of Medical Sciences, Kyushu University)

Invited Lecture

O-08 Insights into the metabolic control of hematopoietic stem cell fate
Keisuke Ito
(Albert Einstein College of Medicine)

O-09 HMGA2 protects hematopoietic stem cell in stress hematopoiesis
Sho Kubota[1], Yuqi Sun[1], Jie Bai[1], Takako Yokomizo-Nakano[1], Mariko Morii[1], Supannika Sorin[1,2], Ai Hamashima[1], Mihoko Iimori[1], Motomi Osato[3], Kimi Araki[4], Terumasa Umemoto[5], Goro Sashida[1]
([1]Laboratory of Transcriptional Regulation in Leukemogenesis, International Research Center for Medical Sciences (IRCMS), Kumamoto University, Kumamoto, Japan., [2]Department of Biochemistry Faculty of Medicine, Khon Kaen University, Thailand, [3]Cancer Science Institute of Singapore, National University of Singapore, Singapore, [4]Institute of Resource Development and Analysis, Kumamoto University, Kumamoto, Japan., [5]Laboratory of Hematopoietic Stem Cell Engineering, IRCMS , Kumamoto University, Kumamoto, Japan.)

O-10 Hematopoietic stem and progenitor cells integrate microbial signals to enhance gut tissue repair
Maiko Sezaki[1], Yoshikazu Hayashi[2], Gaku Nakato[3], Subinoy Biswas[1], Tatsuya Morishima[4], Jieun Moon[5], Soyeon Ahn[5], Pilhan Kim[6,7], Yuji Miyamoto[8,9], Hideo Baba[8,9], Shinji Fukuda[3,10,11], Hitoshi Takizawa[9,12]
([1]Laboratory of Stem Cell Stress, International Research Center for Medical Sciences (IRCMS), Kumamoto University, Japan, [2]Division of Functional Structure, Department of Morphological Biology, Fukuoka Dental College, Fukuoka, Japan, [3]Intestinal Microbiota Project, Kanagawa Institute of Industrial Science and Technology (KISTEC-KAST), Kanagawa, Japan, [4]Laboratory of Hematopoietic Stem Cell Engineering, International Research Center for Medical Sciences (IRCMS), Kumamoto University, Japan, [5]Graduate School of Nanoscience and Technology, Korea Advanced Institute of Science and Technology (KAIST), Daejeon, Republic of Korea, [6]Graduate School of Nanoscience and Technology, [7]Graduate School of Medical Science and Engineering, Korea Advanced Institute of Science and Technology (KAIST), Daejeon, Republic of Korea, [8]Department of Gastroenterological Surgery, Graduate School of Medical Sciences, [9]Center for Metabolic Regulation of Healthy Aging, Kumamoto University, Kumamoto, Japan, [10]Institute for Advanced Biosciences (IAB), Keio University, Yamagata, Japan, [11]Transborder Medical Research Center, University of Tsukuba, Ibaraki, Japan, [12]Laboratory of Stem Cell Stress, International Research Center for Medical Sciences (IRCMS))

O-11 Group 2 innate lymphoid cells (ILC2s) support hematopoietic stem and progenitor cell recovery under stress conditions
Takao Sudo[1], Soichiro Hashimoto[2], Takafumi Yokota[3], Naoki Hosen[3], Masaru Ishii[2]
([1]Department of Hematology and Oncology/Immunology and Cell Biology, Graduate School of Medicine, Osaka University, [2]Department of Immunology and Cell Biology, Graduate School of Medicine, Osaka University, [3]Department of Hematology and Oncology, Graduate School of Medicine, Osaka University)

O-12 Tracing the origin of hierarchical hematopoietic structure in fetal liver
Tomomasa Yokomizo[1], Takako Ideue[1], Mineo Kurokawa[2], Norio Komatsu[3], Kimi Araki[4], Motomi Osato[1,5], Toshio Suda[1,5]
([1]IRCMS, Kumamoto University, [2]Department of Hematology and Oncology, University of Tokyo, [3]Department of Hematology, Juntendo University School of Medicine, [4]Institute of Resource Development and Analysis, Kumamoto University, [5]CSI, National University of Singapore)

Coffee Break 10:25～10:45

Session 5: Tissue Stem Cell Ⅰ 10:45～11:40

Chair Hironobu Fujiwara
(RIKEN Center for Biosystems Dynamics Research)
Yusuke Ono
(Department of Muscle Development and Regeneration, IMEG, Kumamoto University)

Invited Lecture

O-13 Behaviors of muscle stem cells in overloaded muscle
So-ichiro Fukada
(Graduate School of Pharmaceutical Sciences, Osaka University)

O-14 Nutrition-dependent de-differentiation of enteroendocrine cells ensures adaptive growth in the adult *Drosophila* midgut
Yuichiro Nakajima[1,2], Erina Kuranaga[2], Hiroki Nagai[1]
([1]FRIS, Tohoku University, [2]Graduate School of Life Sciences, Tohoku University)

O-15 Airway tissue stem cells reutilize the embryonic proliferation regulator, Tgfβ-Id2 axis, for tissue regeneration
Mitsuru Morimoto, Hirofumi Kiyokawa
(RIKEN Center for Biosystems and Dynamics Research)

Lunch Time 11:40～13:00

General Meeting 13:00～13:05

Session 6: Tissue Stem Cell Ⅱ 13:05～14:35

Chair Kunimasa Ohta
(Department of Stem Cell Biology, Faculty of Arts and Science, Kyushu University)
Goro Sashida
(Laboratory of Transcriptional Regulation in Leukemogenesis, International Research Center for Medical Sciences (IRCMS), Kumamoto University)

Invited Lecture

O-16 Artificially-induced neurogenesis and its therapeutic application to injury in the adult central nervous systems
Kinichi Nakashima
(Graduate School of Medical Sciences, Kyushu University)

Invited Lecture

O-17 Stem cell dynamics in skin regeneration and aging
Aiko Sada
(International Research Center for Medical Sciences (IRCMS), Kumamoto University)

Invited Lecture

O-18 Origin and induction process of hair follicle stem cells

Ritsuko Morita[1], Noriko Sanzen[1], Hiroko Sasaki[1], Tetsutaro Hayashi[2], Mana Umeda[2], Mika Yoshimura[2], Takaki Yamamoto[3,4], Tatsuo Shibata[3], Takaya Abe[5], Hiroshi Kiyonari[5], Yasuhide Furuta[5,6], Itoshi Nikaido[2,7] and Hironobu Fujiwara[1]
([1]Laboratory for Tissue Microenvironment, RIKEN Center for Biosystems Dynamics Research (BDR), Kobe, Japan, [2]Laboratory for Bioinformatics Research, RIKEN Center for Biosystems Dynamics Research (BDR), Kobe, Japan, [3]Laboratory for Physical Biology, RIKEN Center for Biosystems Dynamics Research (BDR), Kobe, Japan, [4]Nonequilibrium Physics of Living Matter RIKEN Hakubi Research Team, RIKEN Center for Biosystems Dynamics Research (BDR), Kobe, Japan, [5]Laboratory for Animal Resources and Genetic Engineering, RIKEN Center for Biosystems Dynamics Research (BDR), Kobe, Japan, [6]Mouse Genetics Core Facility, Sloan Kettering Institute, Memorial Sloan Kettering Cancer Center, USA, [7]Bioinformatics Course, Master's/Doctoral Program in Life Science, Innovation (T-LSI), School of Integrative and Global Majors (SIGMA), University of Tsukuba, Wako, Saitama, Japan)

O-19 Distinct types of stem cell divisions determine organ regeneration and aging in hair follicles

Hiroyuki Matsumura[1], Nan Liu[1], Daisuke Nanba[1], Shizuko Ichinose[2], Aki Takada[1], Sotaro Kurata[3], Hironobu Morinaga[1], Yasuaki Mohri[1], Adèle De Arcangelis[4], Shigeo Ohno[5], Emi K. Nishimura[1]
([1]Department of Stem Cell Biology, Medical Research Institute, Tokyo Medical and Dental University, Tokyo, Japan., [2]Research Center for Medical and Dental Sciences, Tokyo Medical and Dental University, Tokyo, Japan., [3]Beppu Garden-Hill Clinic, Kurata Clinic, Beppu City, Japan., [4]Institut de Génétique et de Biologie Moléculaire et Cellulaire, Department of Development and Stem Cells, CNRS UMR7104, Inserm U1258, Université de Strasbourg, Illkirch, France., [5]Department of Molecular Biology, Yokohama City University School of Medicine, Kanazawa, Yokohama, Japan)

Coffee Break 14:35～14:50

Session 7: Cancer Stem Cell 14:50～16:05

Chair Atsushi Hirao

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

Invited Lecture

O-20 Epithelial Mesenchymal Transition (EMT) in developmental and cancer biology

Guojun SHENG, Sofiane HAMIDI, Hiroki NAGAI, Galym ISMAGULOV, Wei WENG
(International Research Center for Medical Sciences, Kumamoto University)

Invited Lecture

O-21 Somatic mutations in human ulcerative colitis epithelium

Kosaku Nanki[1,2], Toshiro Sato[2]
([1]Department of Gastroenterology, Keio University School of Medicine, [2]Department of Organoid Medicine, Keio University School of Medicine)

Invited Lecture

O-22 Metabolic regulation of cancer cell fate in myeloid leukemia

Takahiro Ito
(Institute for Frontier Life and Medical Sciences, Kyoto University)

Keynote Lecture Ⅲ 16:05～16:55

Chair Yukiko Gotoh
(Graduate School of Pharmaceutical Sciences, The University of Tokyo)

KL-3 Investigation of human neurological diseases using iPSCs and GM Non-human Primates
Hideyuki Okano
(Keio University School of Medicine)

Award Announcement 16:55～17:05

Closing Remarks 17:05～17:10

Next Organizer Yasuhiro Yamada

Poster Session

Poster Session 1: Tissue Stem Cell

P-01 GFI1 Is a Downstream Target of EVI1 in Normal Hematopoiesis
Akira Chiba, Yosuke Masamoto, Hideaki Mizuno, Mineo Kurokawa
(Department of Hematology and Oncology, Graduate School of Medicine, The University of Tokyo)

P-02 Dysfunction of the proteoglycan Tsukushi causes hydrocephalus through altered neurogenesis in the subventricular zone in mice
Kunimasa Ohta[1,2], Shah Adil Ishtiyaq Ahmad[2], Naofumi Ito[2]
([1]Kyushu University, [2]Kumamoto University)

P-03 NRP2^{+} human mesenchymal stem cells have stemness-associated properties
Kotaro Tanaka[1], Rintaro Yoshikawa[1], Satoru Miyagi[1], Takashi Suyama[1,2], Hiromi Miyauchi[1,2], Yuko Kato[1,2], Ayako Watanabe[1], Kenichi Miyamoto[1], Yumi Matsuzaki[1,2]
([1]Department of Life Science, Faculty of Medicine, Shimane University, [2]PuREC Co., Ltd.)

P-04 Defining diversity and similarity of epithelial stem cell populations and their anatomical environment in murine skin and oral mucosa
Yen Xuan Ngo[1,2,3], Hiroko Kato[4], Kenji Izumi[4], Hiromi Yanagisawa[2,5], Aiko Sada[2,3]
([1]Ph.D. Program in Human Biology, School of Integrative and Global Majors, University of Tsukuba, Tsukuba, Japan, [2]Life Science Center for Survival Dynamics, Tsukuba Advanced Research Alliance (TARA), University of Tsukuba, Tsukuba, Japan, [3]International Research Center for Medical Sciences (IRCMS), Kumamoto University, Kumamoto, Japan, [4]Graduate School of Medical and Dental Sciences, Niigata University, Japan, [5]Faculty of Medicine, University of Tsukuba, Tsukuba, Japan)

P-05 Biological effect of radiation exposure on clonal proliferation of mammary stem cells using a lineage tracing technology
Daisuke Iizuka, Chizuru Tsuruoka, Mayumi Shinagawa, Masaaki Sunaoshi, Tatsuhiko Imaoka, Shizuko Kakinuma
(Department of Radiation Effects Research, National Institute of Radiological Sciences, QST)

P-06 Fanconi Anemia protein FANCD2 confers with Replication Stress through the Hematopoietic Stem Cell expansion in Fetal Liver
Makiko Mochizuki-Kashio[1], Yoon me Young[2], Theresa Menna[3], Markus Grompe[4], Ayako Nakamura-Ishizu[1], Peter Kurre[3]
([1]Department of Anatomy, Department of Medicine, Tokyo Women's Medical University, Tokyo, [2]Committee on Immunology, Graduate Program in Biosciences, University of Chicago, Chicago, [3]Comprehensive Bone Marrow Failure Center, Children's Hospital of Philadelphia; Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA., [4]Department of Pediatrics, Papé Family Pediatric Research Institute, Pediatric Blood & Cancer Biology Program, Stem Cell Center, Oregon Health & Science University, Portland, OR.)

P-07 The metabolic fitness corresponding to chromatin accessibility patterns is essential for hematopoietic stem cell regulations

Terumasa Umemoto[1], Alban Johansson[1], Shah Adil Ishtiyaq Ahmad[1], Michihiro Hashimoto[2], Sho Kubota[3], Haruki Odaka[4], Takumi Era[4], Goro Sashida[3], Toshio Suda[2,5]

([1]Laboratory of Hematopoietic Stem Cell Engineering, International Research Center for Medical Sciences, Kumamoto University, [2]Laboratory of Stem Cell Regulation, International Research Center for Medical Sciences, Kumamoto University, [3]Laboratory of Transcriptional Regulation in Leukemogenesis, International Research Center for Medical Sciences, Kumamoto University, [4]Department of Cell Modulation, Institute of Molecular Embryology and Genetics, Kumamoto University, [5]Cancer Science Institute of Singapore, National University of Singapore)

P-08 Environmental optimization to maintain the function of hematopoietic stem cells after genome editing

Kohei Shiroshita[1,2], Hiroshi Kobayashi[1], Keiyo Takubo[1]

([1]Department of Stem Cell Biology, Research Institute, National Center for Global Health and Medicine, [2]Division of Hematology, Department of Internal Medicine, Keio University School of Medicine)

P-09 Characterization of Thpo-induced metabolic changes upon HSC induction to quiescence

Ayako Nakamura-Ishizu

(Tokyo Women's Medical University)

P-10 Dynamics of DNA double-strand break repair of stem and mature cells in rat mammary gland

Kento Nagata[1], Yukiko Nishimura[1], Yuya Hattori[2], Ritsuko Watanabe[3], Keiji Suzuki[4], Shizuko Kakinuma[1], Tatsuhiko Imaoka[1]

([1]Department of Radiation Effects Research, National Institute of Radiological Sciences, National Institutes for Quantum and Radiological Science and Technology, [2]Department of Systems and Control Engineering, School of Engineering, Tokyo Institute of Technology, [3]Institute for Quantum Life Science, National Institutes for Quantum and Radiological Science and Technology, [4]Department of Radiation Medical Sciences, Atomic Bomb Disease Institute, Nagasaki University)

P-11 The chromatin remodeling factor BRM maintains the hematopoietic stem cell quiescence via repression of inflammatory stress signaling

Eriko Nitta[1], Hiroki Kiriyama[1], Hiroki Miyachi[1], Nonoko Kawabata[1], Tsuyoshi Imasaki[1], Naoki Itokawa[2], Shuhei Koide[2], Masayuki Yamashita[2], Motohiko Oshima[2], Toshio Suda[3], Atsushi Iwama[2], Ryo Nitta[1]

([1]Kobe University Graduate School of Medicine, [2]Institute of Medical Science, University of Tokyo, [3]Cancer Science Institute of Singapore, National Institute of Singapore)

P-12 Melanocyte stem cell dynamics underlie de novo melanomagenesis

Sally Eshiba[1], Takeshi Namiki[2], Yasuaki Mohri[1], Naotaka Serizawa[1], Takakazu Shibata[3], Hironobu Morinaga[1], Daisuke Nanba[1], Keiko Miura[4], Masaru Tanaka[5], Hisashi Uhara[6], Hiroo Yokozeki[2], Toshiaki Saida[7], Emi K. Nishimura[1]

([1]Department of Stem Cell Biology, Medical Research Institute, Tokyo Medical and Dental University, Japan, [2]Department of Dermatology, Medical Research Institute, Tokyo Medical and Dental University, Japan, [3]Medical Corporation Shibata Dermatology Clinic, Japan, [4]Department of Pathology, Medical Research Institute, Tokyo Medical and Dental University, Japan, [5]Department of Dermatology, Tokyo Women's Medical University Medical Center East, Tokyo, Japan, [6]Department of Dermatology, Sapporo Medical University School of Medicine, Sapporo, Japan, [7]Shinshu University, Matsumoto, Japan)

P-13 BMP signaling suppresses Gemc1 expression and ependymal differentiation of mouse telencephalic progenitors

Hanae Omiya, Shima Yamaguchi, Tomoyuki Watanabe, Kuniya Takaaki, Yujin Harada, Daichi Kawaguchi, Yukiko Gotoh
(Graduate School of Pharmaceutical Sciences, The University of Tokyo)

P-14 Low dose-rate irradiation preferentially damages mitochondrial function of the more undifferentiated hematopoietic cells

Yoshinori Ohno[1], Kyoko Suzuki-Takedachi[2], Yun Guo[3], Naoto Shirasu[1], Motoaki Ohtsubo[4], Yoshihiro Takihara[2,5], Shin'ichiro Yasunaga[1]
([1]Dept. Biochem., Facul. Med., Fukuoka Univ., [2]Dept. Stem Cell Biol., RIRBM, Hiroshima Univ., [3]Dept. Immunol., Grad. Sch. Biomed. Sci., Hiroshima Univ., [4]Dept. Food and Ferment. Sci., Beppu Univ., [5]Japanese Red Cross Kinki Block Blood Center.)

P-15 Dynamic changes in the chromatin accessibility during neuronal differentiation

Yusuke Kishi, Seishin Sakai, Merve Bilgic, Yukiko Gotoh
(Graduate School of Pharmaceutical Sciences, The University of Tokyo)

Poster Session 2: Multi-/pluri-potent Stem Cell (iPS/ES)

P-16 An investigation of human cardiac pacemaker cells differentiation process using human induced pluripotent stem cells visualizing HCN4/Shox2 gene expression

Takayuki Wakimizu, Motokazu Tsuneto, Yasuaki Shirayoshi, Ichiro Hisatome
(Department of Regenerative Medicine and Theraputics, Graduate School of Medical Science, Tottori University)

P-17 Role of PRC1.6 Polycomb complex for repression of ZGA- and germline-related genes in pluripotent stem cells

Mitsuhiro Endoh[1], Haruhiko Koseki[2], Hitoshi Niwa[1]
([1]IMEG, Kumamoto University, [2]RIKEN IMS)

P-18 PRC1.6-dependent and –independent repression of meiosis-related genes by MGA with its sophisticated use of two distinct DNA binding domains

Kousuke Uranishi, Yuka Kitamura, Ayumu Suzuki, Masataka Hirasaki, Masazumi Nishimoto, Akihiko Okuda
(Saitama Medical University)

P-19 Polycomb repressive complex 2 coordinates total glycome dynamics during the mouse naïve-to-primed pluripotency state transition

Hayato Ota[1], Federico Pecori[1], Ikuko Yokota[2], Hisatoshi Hanamatsu[2], Taichi Miura[3], Chika Ogura[1], Jun-ichi Furukawa[2], Shinya Oki[4], Kazuo Yamamoto[5], Osamu Yoshie[6], Shoko Nishihara[1]
([1]Department of Bioinformatics, Graduate School of Engineering, Soka University, [2]Department of Advanced clinical glycobiology, Faculty of Medicine and Graduate School of Medicine, Hokkaido University, [3]National Institute of Radiological Sciences (NIRS), National Institutes for Quantum and Radiological Science and Technology, [4]Department of Drug Discovery Medicine, Graduate School of Medicine, Kyoto University, [5]Department of Integrated Biosciences, Graduate School of Frontier Sciences, The University of Tokyo, [6]Health and Kampo Institute)

P-20 Mucin-type *O*-glycosylation regulates the pluripotency of mouse embryonic stem cells via Wnt receptor endocytosis

Miki Mori[1], Federico Pecori[2], Yoshihiro Akimoto[3], Jun-ichi Furukawa[4], Yasuro Shinohara[5], Yuzuru Ikehara[6], Shoko Nishihara[7]
([1]Department of Life Sciences, Graduate School of Science and Engineering, Soka University, [2]Laboratory of Cell Biology, Department of Bioinformatics, Graduate School of Engineering, Soka University, [3]Department of Anatomy, Kyorin University School of Medicine, [4]Department of Advanced clinical glycobiology, Faculty of Medicine and Graduate School of Medicine, Hokkaido University, [5]Department of Pharmacy, Kinjo Gakuin University, [6]Department of Molecular and Tumor Pathology, Graduate School of Medicine, Chiba University, [7]Glycan & Life System Integration Center (GaLSIC), Faculty of Science and Engineering, Soka University)

P-21 Max regulates the transition from mitosis to meiosis in mouse ESCs and PGCs

Ayumu Suzuki[1], Kousuke Uranishi[1], Yuka Kitamura[1], Masazumi Nishimoto[2], Akihiko Okuda[1]
([1]Research Center for Genomic Medicine, Saitama Medical University, [2]Biomedical Research Center, Saitama Medical University)

Poster Session 3: Cancer Stem Cell

P-22 Polymer-based elucidation of molecular basis underlying cancer stem cell-mediated niche reconstruction and glioma recurrence

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

P-23 miR-93 targets WASF3 and functions as a metastasis suppressor in human breast cancer stem cells

Yohei Shimono[1,2], Naoki Shibuya[2], Tatsunori Nishimura[3], Noriko Gotoh[3], Yoshihiro Kakeji[2]
([1]Fujita Health University, [2]Kobe University Graduate School of Medicine, [3]Cancer Research Institute, Kanazawa University)

P-24 Niche-mimicking polymer-based characterization of human pancreatic cancer stem cells

Mariko Nagane[1], Kouichi Tabu[1], Yoshitaka Murota[1], Shinji Tanaka[2], Tetsuya Taga[1]
([1]Department of Stem Cell Regulation, Medical Research Institute, Tokyo Medical and Dental University, [2]Department of Molecular Oncology, Graduate school of Medical and Dental Sciences, Tokyo Medical and Dental University)

P-25 Effect of ionizing radiation on balance between basal and luminal cell populations in rat mammary epithelium

Tatsuhiko Imaoka[1], Ken-ichi Kudo[2], Yukiko Nishimura[1], Keiji Suzuki[3], Kento Nagata[1], Mayumi Nishimura[1], Kazuhiro Daino[1], Shizuko Kakinuma[1]
([1]National Institutes for Quantum and Radiological Science and Technology, [2]Fukushima Medical University, [3]Nagasaki University)

P-26 Age-dependent thymus regeneration by activation of PI3K-AKT-mTOR pathway in B6C3F1 mice during thymic lymphomagenesis after irradiation

Masaaki Sunaoshi[1], Benjamin J. Blyth[2], Yi Shang[1], Chizuru Tsuruoka[1], Takamitsu Morioka[1], Mayumi Shinagawa[1], Mari Ogawa[1], Yoshiya Shimada[3], Akira Tachibana[4], Daisuke Iizuka[1], Shizuko Kakinuma[1]
([1]Radiat. Effects Res., Nat. Inst. Radiol. Sci., QST, [2]Cancer Res. Div., Peter MacCallum Cancer Centre, [3]Inst. Environ. Sci., [4]Grad. Sch. Sci. Eng., Ibaraki Univ.)

P-27 IRAK1/4-NFkB-PD-L1 axis is crucial for imatinib-insensitivity of CML LSCs
Yosuke Tanaka, Susumu Goyama, Toshio Kitamura
(The University of Tokyo, The Institute of Medical Science)

P-28 A mechanism of oncogenic self-renewal mediated by MLL and MOZ complexes
Akihiko Yokoyama
(National Cancer Center Tsuruoka Metabolomics Laboratory)

Poster Session 4: Microenvironment

P-29 A novel YAP/TAZ activator restores bone marrow microenvironment and promotes hematopoietic regeneration
Shun Uemura[1], Masayuki Yamashita[1], Ayako Aihara[2], Taito Nishino[2], Atsushi Iwama[1]
([1]Division of Stem Cell and Molecular Medicine, Center for Stem Cell Biology and Regenerative Medicine, The Institute of Medical Science, The University of Tokyo, [2]Biological Research Laboratories, Nissan Chemical Corporation)

P-30 Non-neuronal acetylcholine in the bone marrow regulates B cell differentiation
Shinya Fujita[1,2], Takayuki Morikawa[1], Yuki Sugiura[3], Takako Hishiki[3], Maiko Sezaki[4], Hitoshi Takizawa[4], Keisuke Kataoka[5], Makoto Suematsu[3], Keiyo Takubo[1]
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P-31 *Akkermansia Muciniphila* induces long-term sustained extramedullary hematopoiesis
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P-32 CD271+CD51+ human mesenchymal stem/stromal cells possess enhanced chondrogenic potential towards humanized ossicle generation
Maiko Sezaki[1], Subinoy Biswas[1], Pui-Yu Ho[1], Shuhei Koide[2], Takeshi Miyamoto[3], Atsushi Iwama[2], Hitoshi Takizawa[1]
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P-33 Nitric oxide-dependent vasodilation maintains physiological hypoxia and local crawling of hematopoietic stem cell in bone marrow
Takayuki Morikawa[1], Shinya Fujita[1,2], Toshitada Yoshihara[3], Reiko Sakaguchi[4], Yasuo Mori[4], Seiji Tobita[3], Keiyo Takubo[1]
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P-34 The membrane-linked adaptor FRS2b fashions a cytokine-rich inflammatory microenvironment that promotes breast cancer carcinogenesis

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Poster Session 5: Organoid

P-35 Epithelial expression of Gata4 and Sox2 regulates specification of the squamous–columnar junction via MAPK/ERK signaling in murine stomach

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P-36 Conceptual basis of lineage shift between intestinal epithelium and hepatocytes

Sakurako Kobayashi[1], Satoshi Watanabe[1], Nobuhiko Ogasawara[1], Yosuke Yoneyama[2], Ryu Nishimura[1], Sayaka Nagata[1], Masami Inoue[3], Kouhei Suzuki[1], Go Ito[4], Hiromichi Shimizu[3], Tomohiro Mizutani[1], Yoshihito Kano[5], Shigeru Oshima[1], Sei Kakinuma[6], Kiichiro Tsuchiya[1], Ryuichi Okamoto[1], Mamoru Watanabe[4], Takanori Takebe[2,7], Shiro Yui[3]

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P-37 Generation of allogenic iPSC-derived three-dimensional retinal sheet for first-in-human clinical research

Atsushi Kuwahara[1], Suguru Yamasaki[1], Kenji Watari[1], Tetsuya Hayama[1], Tatsuya Kamei[1], Aya Nakamura[2], Kazuki Ueyama[2], Keiichi Ono[2], Osamu Ohno[1], Yasuyuki Kita[1], Orie Terai[1], Masayo Fujiwara[1], Yoriko Hori[1], Anna Tanabe[1], Rina Hirai[1], Hidetaka Ohara[3], Keigo Kawabe[3], Atsushi Ikeda[1], Akiyoshi Kishino[1], Michiko Mandai[4], Toru Kimura[1]

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Poster Session 6: Other

P-38 Phospholipid metabolism adaptation induces drug resistance in IDH mutant AML cells

Tatsuya Morishima[1,2], Koichi Takahashi[3], Desmond Chin[4], Kenji Tokunaga[5], Masao Matsuoka[5], Toshio Suda[6,7], Hitoshi Takizawa[1]
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P-39 Taurine Modification of Mitochondrial tRNAs is Indispensable for Fetal Erythroid Differentiation

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P-40 演題取り下げ

P-41 The expansion of pancreatic insulin-producing cells for the amelioration of diabetic mellitus

Michitada Hirano, Yusei So, Yasuhiro Yamada
(Division of Stem Cell Pathology, Center for Experimental Medicine and Systems Biology, Institute of Medical Science, The University of Tokyo)

P-42 Midazolam anesthesia modifies chromatin landscape to promote neural stem cell dormancy

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P-43 Germ cell specific Mga splicing variant might function as a fail-safe in meiotic process

Yuka Kitamura, Kousuke Uranishi, Masataka Hirasaki, Masazumi Nishimoto, Ayumu Suzuki, Akihiko Okuda
(Saitama Medical University)

P-44 Laminin-derived recombinant fragment facilitates isolation and proliferation of skeletal myoblast from various animal species

Yuki Kihara[1,2], Ryo Takagi[2], Satoru Nagata[1], Masayuki Yamato[2]
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P-45 Transcriptional corepressor-mediated regulation in human pluripotent stem cells

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P-46 Blastocyst complementation using *Prdm14*-deficient rats for robust germline transmission

Toshihiro Kobayashi[1,2,3], Teppei Goto[1], Mami Oikawa[1,3], Makoto Sanbo[1], Yasuhiro Kazuki[4,5], Hiromitsu Nakauchi[6,7], Azim M Surani[8,9], Masumi Hirabayashi[1,2]
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