

The 1st Day : Friday, May 27

Oral Presentation	
8:00	
9:00	
10:00	9:30~11:30 (予定) 幹細胞若手の会 (つくしの会)
11:00	
12:00	
13:00	13:00~13:05 Opening Remarks
14:00	13:05~14:40 Session 1 ▶P.3 Hematopoietic stem cells/ Hematopoietic malignancy/ Cancer stem cells 1 O-01~O-05 Chair : Issei Kitabayashi
15:00	14:40~14:55 Coffee Break
16:00	14:55~16:30 Session 2 ▶P.4 Hematopoietic stem cells/ Hematopoietic malignancy/ Cancer stem cells 2 O-06~O-10 Chair : Yoshikane Kikushige
17:00	16:30~16:45 Coffee Break
18:00	16:45~17:30 Session 3 ▶P.5 Special Lecture 1 O-11 Chair : Yasuhiro Yamada
19:00	17:30~18:15 Session 4 ▶P.5 Special Lecture 2 O-12 Chair : Atsushi Iwama
20:00	18:30~20:00 Poster Session

The 2nd Day : Saturday, May 28

Oral Presentation	
8:00	
9:00	8:30~10:05 ▶P.6 Session 5 Tissue stem cells O-13~O-17 Chair : Aiko Sada
10:00	10:05~10:20 Coffee Break
11:00	10:20~11:25 ▶P.7 Session 6 Microenvironment for stem cells O-18~O-20 Chair : Atsushi Hirao
12:00	11:25~11:40 General Meeting
13:00	11:40~12:50 Lunch Time
14:00	12:50~14:10 ▶P.8 Session 7 Pluripotent stem cells/ clinical application of stem cells O-21~O-24 Chair : Koji Eto Takuya Yamamoto
15:00	14:10~14:25 Coffee Break
16:00	14:25~15:30 ▶P.9 Session 8 Aging of stem cells O-25~O-27 Chair : Kyoko Miura Daisuke Nanba
17:00	15:30~15:35 Award Announcement / Closing Remarks
18:00	
19:00	
20:00	

Friday, May 27. The 1st Day

Opening Remarks 13:00~13:05

Session 1: Hematopoietic stem cells/ Hematopoietic malignancy/
Cancer stem cells 1 13:05~14:40

Chair Issei Kitabayashi
(National Cancer Center Research Institute)

Invited Lecture

O-01 (13:05~13:30)

FXVD3, a subunit of Na⁺ pump, determines the origin of triple-negative breast cancer stem-like cells, the preeminent driver of drug resistance

Noriko Gotoh
(Cancer Research Institute, Kanazawa University)

Invited Lecture

O-02 (13:30~13:55)

Aberrant splicing events lead to altered cell fate of hematopoietic stem cells

Daichi Inoue
(Foundation for Biomedical Research and Innovation at Kobe)

O-03 (13:55~14:10)

Infection stresses initiate the transformation of pre-MDS stem cells via activation of transcription factor Elf1

Takako Yokomizo¹, Ai Hamashima¹, Sho Kubota¹, Mariko Morii¹, Jie Bai¹,
Sun Yuqi¹, Mihoko Iimori¹, Atsushi Iwama², Hitoshi Takizawa¹,
Hirotaka Matsui¹, Goro Sashida¹
(¹Kumamoto University, ²The University of Tokyo)

O-04 (14:10~14:25)

Screening with Homozygous Mutant Embryonic Stem Cells to Identify a Novel Gene Essential for Hematopoiesis

Ritsuko Nakai¹, Takafumi Yokota¹, Masahiro Tokunaga², Takao Sudo¹,
Naoki Hosen¹, Junji Takeda³
(¹Department of Hematology and Oncology, Osaka University Graduate School of
Medicine, ²Department of Hematology, Suita Municipal Hospital, ³Research
Institute for Microbial Diseases, Osaka University)

O-05 (14:25~14:40)

Formation of microbial signal-induced innate immune memory in hematopoietic stem cells

Nicole Pui-Yu Ho¹, Alban Johansson¹, Roland Huber², Paola Betancur³,
Hitoshi Takizawa^{1,4}
(¹Laboratory of Stem Cell Stress, International Research Center for Medical
Sciences (IRCMS), Kumamoto University, ²A*STAR Bioinformatics Institute,
Singapore, ³University of California San Francisco, USA, ⁴Center for Metabolic
Regulation of Healthy Aging (CMHA), Kumamoto University)

Coffee Break

14:40~14:55

**Session 2: Hematopoietic stem cells/ Hematopoietic malignancy/
Cancer stem cells 2**

14:55~16:30

Chair Yoshikane Kikushige
(Kyushu University)

Invited Lecture

O-06 (14:55~15:20)

Expanded Common myeloid progenitor act in concert with the spleen to support hematopoietic stem cell transplantation

Satoshi Yamazaki
(University of Tsukuba)

Invited Lecture

O-07 (15:20~15:45)

Thrombopoietin regulates mitochondria quality in hematopoietic stem cells

Ayako Nakamura-Ishizu
(Tokyo Women's Medical University)

O-08 (15:45~16:00)

ACLY-dependent coupling of metabolic state and chromatin accessibility regulates hematopoietic stem cell functions during bone marrow regeneration

Terumasa Umemoto¹, Alban Johansson¹, Shah Adil Ishtiyahq Ahmad¹, Michihiro Hashimoto², Sho Kubota³, Kenta Kikuchi⁴, Haruki Odaka⁵, Takumi Era⁵, Daisuke Kurotaki⁴, Goro Sashida³, Toshio Suda^{2,6}
(¹Laboratory of Hematopoietic Stem Cell Engineering, International Research Center for Medical Sciences, Kumamoto University, ²Laboratory of Stem Cell Regulation, International Research Center for Medical Sciences, Kumamoto University, ³Laboratory of Transcriptional Regulation in Leukemogenesis, International Research Center for Medical Sciences, Kumamoto University, ⁴Laboratory of Chromatin Organization in Immune Cell Development, International Research Center for Medical Sciences, Kumamoto University, ⁵Department of Cell Modulation, Institute of Molecular Embryology and Genetics, Kumamoto University, ⁶Cancer Science Institute of Singapore, National University of Singapore)

O-09 (16:00~16:15)

Hematopoietic stem cells acquire robust mitochondrial metabolic plasticity by increasing Sdhaf1 protein levels during aging

Shintaro Watanuki, Hiroshi Kobayashi, Keiyo Takubo
(National Center for Global Health and Medicine)

O-10 (16:15~16:30)

Fanconi Anemia-related replication stress increases metabolic activity in fetal liver hematopoietic stem cells

Makiko Mochizuki-Kashio, Ayako Nakamura-Ishizu
(Department of Microanatomy, Department of Medicine, Tokyo Women's Medical University)

Coffee Break

16:30~16:45

Session 3: Special Lecture 1

16:45~17:30

Chair Yasuhiro Yamada

(Institute of Medical Science, University of Tokyo)

O-11

Mechanism and In Vitro Reconstitution of Mammalian Germ-Cell Development

Mitinori Saitou^{1,2,3}

(¹Institute for the Advanced Study of Human Biology, Kyoto University,

²Department of Anatomy and Cell Biology, Graduate School of Medicine, Kyoto University, ³Center for iPS Cell Research and Application, Kyoto University)

Session 4: Special Lecture 2

17:30~18:15

Chair Atsushi Iwama

(Institute of Medical Science, University of Tokyo)

O-12

Functional rejuvenation of aged neural stem cells by Plagl2 and anti-Dyrk1a activity

Ryoichiro Kageyama^{1,2}

(¹Institute for Frontier Life and Medical Sciences, Kyoto University, ²RIKEN Center for Brain Science)

Poster Session

18:30~20:00

Saturday, May 28. The 2nd Day

Session 5: Tissue stem cells

8:30~10:05

Chair **Aiko Sada**
(Kumamoto University)

Invited Lecture

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

Vasculature-dependent epidermal stem cell state organizes tissue scaling in dynamic skin

Fumiko Toyoshima
(Kyoto University)

Invited Lecture

O-14 (8:55~9:20)

The Dll4 – Notch2 axis regulates mechanical unloading- and metabolic overloading-induced muscle atrophy

Yusuke Ono
(Institute of Molecular Embryology and Genetics, Kumamoto University)

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

Identifying a tissue stem cell subpopulation by combining single-cell morphometrics, organoid culture, and transcriptomics

Mitsuru Morimoto¹, Takashi Fujimura^{2,3}
(¹RIKEN BDR, Lab for Lung Development and Regeneration, ²RIKEN BDR, ³Otsuka Pharmaceutical Co., Ltd.)

O-16 (9:35~9:50)

Modular and defined organoid culture conditions for mouse and human lung alveolar stem cell expansion and differentiation

Hiroaki Katsura^{1,2}, Yoshihiko Kobayashi^{1,3}, Mitsuru Morimoto²,
Purushothama Rao Tata¹
(¹Duke University, Department of Cell Biology, ²RIKEN BDR, Lab. for Lung Development and Regeneration, ³Kyoto University, Institute for Frontier Life and Medical Sciences, Lab. of Tissue Homeostasis)

O-17 (9:50~10:05)

Reservoir of tissue-resident stem cells for regeneration of airway epithelium

Yoshihiko Kobayashi^{1,2}, Aleksandra Tata¹, Purushothama Rao Tata¹
(¹Department of Cell Biology, Duke University School of Medicine, ²Lab. of Tissue Homeostasis, Institute for Life and Medical Sciences, Kyoto University)

Coffee Break

10:05~10:20

Session 6: Microenvironment for stem cells**10:20~11:25****Chair Atsushi Hirao**
(Kanazawa University)**Invited Lecture****O-18 (10:20~10:45)****Erebosis, a new cell death mechanism during homeostatic turnover of gut enterocytes**Sa Kan Yoo
(RIKEN)**Invited Lecture****O-19 (10:45~11:10)****Induction of primordial germ cells from pluripotent stem cells in non-mouse mammals**Toshihiro Kobayashi^{1,2}¹Division of Mammalian Embryology, Center for Stem Cell Biology and Regenerative Medicine, The Institute for Medical Science The University of Tokyo, ²Section of Mammalian Transgenesis, Center for Genetic Analysis of Behavior, National Institute for Physiological Sciences)**O-20 (11:10~11:25)****Retrotransposons in macrophages trigger type I interferon dependent inflammation in Werner syndrome**Sudip Kumar Paul¹, Masamitsu Sone¹, Ashwini Patil², Hisaya Kato³, Yoshiro Maezawa³, Motohiko Oshima⁴, Masaki Fukuyo⁵, Bahityar Rahmutulla⁵, Yasuo Ouchi¹, Manami Ohtaka⁶, Mahito Nakanishi⁶, Kyoko Tsujimura¹, Atsushi Kaneda⁵, Atsushi Iwama⁴, Koutaro Yokote³, Koji Eto¹, Naoya Takayama¹¹Department of Regenerative Medicine, Graduate School of Medicine, Chiba University, Chiba, Japan, ²Combinatics Inc., Japan, ³Department of Endocrinology, Hematology and Gerontology, Graduate School of Medicine, Chiba University, Chiba, Japan, ⁴Division 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, ⁵Department of Molecular Oncology, Graduate School of Medicine, Chiba University, Chiba, Japan, ⁶TOKIWA-Bio, Inc., Tsukuba, Japan)**General Meeting****11:25~11:40****Lunch Time****11:40~12:50**

Session 7: Pluripotent stem cells/ clinical application of stem cells
12:50~14:10

Chair Koji Eto
(CiRA, Kyoto University)

Takuya Yamamoto
(CiRA, Kyoto University)

Invited Lecture

O-21 (12:50~13:15)

Modelling peri-implantation development using naïve pluripotent stem cells

Yasuhiro Takashima
(Kyoto University CiRA)

Invited Lecture

O-22 (13:15~13:40)

Regeneration of ocular tissues using human pluripotent stem cell-derived organoids

Ryuhei Hayashi
(Osaka University)

O-23 (13:40~13:55)

The combined bone forming capability of human-induced pluripotent stem cells-derived platelets and human bone morphogenetic proteins-2

Michiaki Mukai^{1,2}, Norichika Mizuki³, Yasuhiro Shiga³, Kentaro Kosaka¹, Naoya Takayama¹, Seiji Ohtori³, Koji Eto^{1,4}

¹Department of Regenerative Medicine, Chiba University Graduate School of Medicine, Chiba, Japan, ²Department of Orthopaedic Surgery, Chiba University Graduate School of Medicine, Chiba, Japan, ³Department of Orthopedic Surgery, Graduate School of Medicine, Chiba University, ⁴Department of Clinical Application, Center for iPS Cell Research and Application (CiRA), Kyoto University, Kyoto, Japan)

O-24 (13:55~14:10)

Elucidating the immune escape mechanisms of HLA-KO iPSC-platelets from NK cells

Charlotte Flahou¹, Mio Iwasaki¹, Akitsu Hotta¹, Hitoshi Takizawa², Naoshi Sugimoto¹, Koji Eto¹

¹Department of Clinical Application, Center for iPS Cell Research and Application (CiRA), Kyoto University, Kyoto, Japan, ²International Research Center for Medical Sciences (IRCMS), Kumamoto University, Kumamoto, Japan)

Coffee Break

14:10~14:25

Session 8: Aging of stem cells

14:25~15:30

Chair **Kyoko Miura**
(Kumamoto University)

Daisuke Nanba
(Institute of Medical Science, University of Tokyo)

Invited Lecture

O-25 (14:25~14:50)

Investigation of the mechanisms underlying longevity and cancer-resistance in the naked mole-rat

Kyoko Miura
(Faculty of Life Sciences, Kumamoto University)

Invited Lecture

O-26 (14:50~15:15)

EGFR-mediated epidermal stem cell motility drives skin regeneration through COL17A1 proteolysis

Daisuke Nanba¹, Fujio Toki¹, Kyosuke Asakawa¹, Hiroyuki Matsumura¹, Ken Shiraishi², Koji Sayama², Kyoichi Matsuzaki³, Hiroshi Toki⁴, Emi Nishimura¹
(¹Division of Aging and Regeneration, The Institute of Medical Science, The University of Tokyo, ²Department of Dermatology, Ehime University School of Medicine, ³Department of Plastic and Reconstructive Surgery, International University of Health and Welfare, School of Medicine, ⁴Research Center for Nuclear Physics (RCNP), Osaka University)

O-27 (15:15~15:30)

MLKL mediates inflammation-induced attrition and aging-associated functional decline in hematopoietic stem cells

Yuta Yamada, Jingjing Yang, Masayuki Yamashita, Atsushi Iwama
(Division of Stem Cell and Molecular Medicine, Center for Stem Cell Biology and Regenerative Medicine, The Institute of Medical Science, The University of Tokyo)

Award Announcement / Closing Remarks

15:30~15:35

Poster Session

P-01 HMGA1 is upregulated in leukemic stem cell fraction of myelodysplastic syndromes and blocks normal differentiation of hematopoietic cells

Kazutoshi Ebisawa¹, Yosuke Masamoto¹, Mineo Kurokawa^{1,2}

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

P-02 Investigating the function of Rasip1 in HSC-containing IAHCs of midgestation mouse embryos

Gerel Melig¹, Ikuro 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 (TMDU), 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 Animal, Tokyo Medical and Dental University (TMDU))

P-03 DNMT3B contributes to the stemness of left-sided colorectal cancer derived from patients

Ryosuke Taguchi¹, Taichi Isobe², Yoshikane Kikushige³, Shohei Ueno¹, Kenji Tsuchihashi⁴, Hiroshi Ariyama⁴, Koichi Akashi¹, Eishi Baba²

(¹Department of Medicine and Biosystemic Science, Graduate School of Medical Sciences, Kyushu University, ²Department of Oncology and Social Medicine, Graduate School of Medical Sciences, Kyushu University, ³Center for Cellular and Molecular Medicine, Kyushu University Hospital, ⁴Department of Hematology, Oncology and Cardiovascular Medicine, Kyushu University Hospital)

P-04 Expanded CMPs act in concert with the spleen and support early hematopoietic recovery

Takao Yogo¹, Hans Jiro Becker², Satoshi Yamazaki^{2,3}

(¹Division of Stem Cell Biology, Center for Stem Cell Biology and Regenerative Medicine, The Institute of Medical Science, The University of Tokyo, Tokyo, Japan, ²Laboratory of Stem Cell Therapy, Faculty of Medicine, University of Tsukuba, Ibaraki, Japan, ³Division of Stem Cell Biology, Center for Stem Cell Biology and Regenerative Medicine, The Institute of Medical Science, The University of Tokyo, Tokyo, Japan)

P-05 5-methylcytosine hydroxylase Tet3 endows embryonic neural stem/precursor cells with astroglial competence

Norihisa Bizen^{1,2}, Toshinobu Nakamura³, 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, ³Laboratory for Epigenetic Regulation, Department of Bio-Science, Nagahama Institute of Bio-Science and Technology, Shiga, Japan)

P-06 Exogenous serine is required for robust proliferation of human mesenchymal stem cells

Hiroaki Matsuda¹, Satoru Miyagi¹, Kenichi Miyamoto¹, Hiromi Miyauchi², Takashi Suyama^{1,2}, Yuko Kato^{1,2}, Takeshi Taketani³, Yumi Matsuzaki^{1,2}

(¹Department of Life Science, Faculty of Medicine, Shimane University, Izumo City, Shimane, Japan, ²PuREC Co., Ltd., Izumo City, Shimane, Japan, ³Department of Pediatrics, Faculty of Medicine, Shimane University, Izumo City, Shimane, Japan)

- P-07 Understanding the mechanism of radiation dose rate dependence in mammary carcinogenesis: integration of stem cell and mathematical biology**
Tatsuhiko Imaoka¹, Kento Nagata¹, Yuya Hattori², Ritsuko Watanabe³,
 Akinari Yokoya³, Ken-ichi Kudo⁴, Mayumi Nishimura¹, Kazuhiro Daino¹,
 Daisuke Iizuka¹, Yukiko Nishimura¹
 (¹QST National Institute of Radiological Sciences, ²National Institute of Technology
 Kure College, ³QST Institute for Quantum Life Science, ⁴Fukushima Medical
 University)
- P-08 Persistent suppression of the luminal progenitor cell differentiation precedes radiation-induced rat mammary carcinogenesis**
Kento Nagata¹, Mayumi Nishimura¹, Kazuhiro Daino¹, Daisuke Iizuka¹,
 Yukiko Nishimura¹, Yuya Hattori², Ritsuko Watanabe³, Akinari Yokoya³,
 Shizuko Kakinuma¹, Tatsuhiko Imaoka¹
 (¹Department of Radiation Effects Research, National Institute of Radiological
 Sciences, National Institutes for Quantum Science and Technology, ²Department
 of Electrical Engineering and Information Science, National Institute of
 Technology Kure College, ³Institute for Quantum Life Science, National Institutes
 for Quantum Science and Technology)
- P-09 Mechanism of suppression of mammary cell clonal expansion by radiation exposure: possible involvement of cellular senescence**
Daisuke Iizuka, Mayumi Shinagawa, Mari Ogawa, Chizuru Tsuruoka,
 Masaaki Sunaoshi, Tatsuhiko Imaoka, Shizuko Kakinuma
 (Dept. Radiat Effects Res, Nat Inst Radiol Sci, QST)
- P-10 Genomic mutation analysis of precancerous lesions in radiation-induced medulloblastoma**
Chizuru Tsuruoka, Takamitsu Morioka, Mutsumi Kaminishi,
 Mayumi Shinagawa, Shizuko Kakinuma
 (Dept Radiat Effects Res, NIRS, QST)
- P-11 Clonal dynamics in the murine male germline from primordial germ cells to spermatogonial stem cells, and the next generation**
Tatsuro Ikeda¹, Maurice Langhinrichs^{2,3}, Tamar Nizharadze^{2,3},
 Hans-Reimer Rodewald^{2,3}, Thomas Höfer^{2,3}, Shosei Yoshida^{1,4}
 (¹NIBB, ²DKFZ, ³Uni Heidelberg, ⁴SOKENDAI)
- P-12 Generation of novel mouse models regulating KRAS/MAPK/ERK signaling in the spatiotemporal manner in vivo**
Nao Sankoda, Kohei Nagata, Fumie Nakasuka, Takayuki Yasuda,
 Yasuhiro Yamada
 (Institute of Medical Science, University of Tokyo)
- P-13 Generation of a transgenic mouse strain that expresses CreERT and fluorescent protein under the transcriptional control of the Fzd5 locus**
Satoru Miyagi¹, Yuko Kato^{1,2}, Ayako Watanabe¹, Kenichi Miyamoto¹,
 Rintaro Yoshikawa¹, Yumi Matsuzaki^{1,2}
 (¹Department of Life Science, Faculty of Medicine, Shimane University, ²PuREC
 Co., Ltd.)

- P-14 Identification of a niche-mimicking synthetic polymer scaffold that maintains neural stem cells in a growth factor- and serum-free system**
Tetsuya Taga¹, Norihisa Bizen^{1,2}, Kouichi Tabu¹, Mei Wu³,
Christian Mangani³, Rong Zhang³, Mark Bradley³
(¹Department of Stem Cell Regulation, Medical Research Institute, Tokyo Medical and Dental University (TMDU), ²Division of Neurobiology and Anatomy, Graduate School of Medical and Dental Sciences, Niigata University, ³EaStChem, School of Chemistry, University of Edinburgh)
- P-15 Hepatocyte growth factor is an adipokine that enhances breast cancer stem cell properties**
Behnoush Khaledian¹, Masahiro Mizuno¹, Masao Maeda¹,
Takanori Hayashi¹, Seiya Mizuno², Seiji Okada³, Motoshi Suzuki¹,
Naoya Asai¹, Fumihiko Sugiyama², Satoru Takahashi², Yohei Shimono¹
(¹Fujita Health University School of Medicine, ²Faculty of Medicine, University of Tsukuba, ³Joint Research Center for Human Retrovirus Infection, Kumamoto University)
- P-16 Mesenchymal loss of p53 alters stem cell capacity and models human fibrosarcoma**
Yuriko Sorimachi^{1,2}, Hiroshi Kobayashi¹, Nobuhito Goda², Keiyo Takubo¹
(¹Department of Stem Cell Biology, Research Institute, National Center for Global Health and Medicine, ²Department of Life Sciences and Medical BioScience, Waseda University School of Advanced Science and Engineering)
- P-17 Efficacy of iPSC-derived megakaryocytes and platelets for skin wound healing**
Kentaro Kosaka^{1,2}, Naoya Takayama¹, Nobuyuki Mitsukawa², Koji Eto¹
(¹Department of Regenerative Medicine, Chiba University Graduate School of Medicine, ²Department of Plastic and Reconstructive Surgery, Chiba University Graduate School of Medicine)
- P-18 Establishment of mouse stem cells that can recapitulate the developmental potential of primitive endoderm**
Yasuhide Ohinata¹, Haruhiko Koseki^{2,3}
(¹Laboratory for Cellular and Molecular Medicine, Graduate School of Medicine, Chiba University, ²Laboratory for Developmental Genetics, RIKEN Center for Medical Sciences (IMS), ³Cellular and Molecular Medicine, Graduate School of Medicine, Chiba University)
- P-19 An interferon- γ /FLT3 axis positively regulates hemopoietic progenitor cell expansion from human pluripotent stem cells**
Kenji Kitajima¹, Minako Shingai^{1,2}, Hikaru Ando^{1,2}, Takahiko Hara^{1,2,3}
(¹Stem Cell Project, Tokyo Metropolitan Institute of Medical Science, ²Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University, ³Graduate School of Science, Department of Biological Science, Tokyo Metropolitan University)
- P-20 Clu-positive hematopoietic stem cells show decreased stemness and expand the number with aging**
Shuhei Koide¹, Motohiko Oshima¹, Akira Nishiyama², Koichi Murakami^{2,3},
Naoki Itokawa¹, Zhiqian Zheng¹, Yaeko Nakajima-Takagi¹,
Tomohiko Tamura^{2,3}, Atsushi Iwama¹
(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, Kanagawa, Japan)

P-21 Characterization of neural stem/progenitor cells in the subventricular zone of the naked mole-rat brain

Yuki Yamamura¹, Yoshimi Kawamura¹, Yuki Oiwa¹, Kaori Oka¹,
Nobuyuki Onishi², Hideyuki Saya², Kyoko Miura¹

(¹Department of Aging and Longevity Research, Faculty of Life Sciences, Kumamoto University, Japan, ²Division of Gene Regulation, Institute for Advanced Medical Research, Keio University School of Medicine, Japan)

P-22 *MYCL*-mediated reprogramming expands pancreatic insulin-producing cells

Michitada Hirano, Yasuhiro Yamada

(Division of Stem Cell Pathology, Center for Experimental Medicine and Systems Biology, Institute of Medical Science, University of Tokyo)