

**The 1st Day : Friday, May 27**

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

**The 2nd Day : Saturday, May 28**

Oral Presentation	
8:00	
9:00	8:30~10:05 ▶P.6 <b>Session 5</b> <b>Tissue stem cells</b> O-13~O-17 Chair : Aiko Sada
10:00	10:05~10:20 <b>Coffee Break</b>
11:00	10:20~11:25 ▶P.7 <b>Session 6</b> <b>Microenvironment for stem cells</b> O-18~O-20 Chair : Atsushi Hirao
12:00	11:25~11:40 <b>General Meeting</b>
13:00	11:40~12:50 <b>Lunch Time</b>
14:00	12:50~14:10 ▶P.8 <b>Session 7</b> <b>Pluripotent stem cells/ clinical application of stem cells</b> O-21~O-24 Chair : Koji Eto Takuya Yamamoto
15:00	14:10~14:25 <b>Coffee Break</b>
16:00	14:25~15:30 ▶P.9 <b>Session 8</b> <b>Aging of stem cells</b> O-25~O-27 Chair : Kyoko Miura Daisuke Nanba
17:00	15:30~15:35 <b>Award Announcement / Closing Remarks</b>
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-1 (13:05~13:30)

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

Noriko Goto  
(Cancer Research Institute, Kanazawa University)

Invited Lecture

O-2 (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-3 (13:55~14:10)

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

Takako Yokomizo<sup>1</sup>, Ai Hamashima<sup>1</sup>, Sho Kubota<sup>1</sup>, Mariko Morii<sup>1</sup>, Jie Bai<sup>1</sup>,  
Sun Yuqi<sup>1</sup>, Mihoko Iimori<sup>1</sup>, Atsushi Iwama<sup>2</sup>, Hitoshi Takizawa<sup>1</sup>,  
Hirotaka Matsui<sup>1</sup>, Goro Sashida<sup>1</sup>  
(<sup>1</sup>Kumamoto University, <sup>2</sup>The University of Tokyo)

O-4 (14:10~14:25)

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

Ritsuko Nakai<sup>1</sup>, Takafumi Yokota<sup>1</sup>, Masahiro Tokunaga<sup>2</sup>, Takao Sudo<sup>1</sup>,  
Naoki Hosen<sup>1</sup>, Junji Takeda<sup>3</sup>  
(<sup>1</sup>Department of Hematology and Oncology, Osaka University Graduate School of  
Medicine, <sup>2</sup>Department of Hematology, Suita Municipal Hospital, <sup>3</sup>Research  
Institute for Microbial Diseases, Osaka University)

O-5 (14:25~14:40)

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

Nicole Pui-Yu Ho<sup>1</sup>, Alban Johansson<sup>1</sup>, Roland Huber<sup>2</sup>, Paola Betancur<sup>3</sup>,  
Hitoshi Takizawa<sup>1,4</sup>  
(<sup>1</sup>Laboratory of Stem Cell Stress, International Research Center for Medical  
Sciences (IRCMS), Kumamoto University, <sup>2</sup>A\*STAR Bioinformatics Institute,  
Singapore, <sup>3</sup>University of California San Francisco, USA, <sup>4</sup>Center 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-6 (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-7 (15:20~15:45)**

**Thrombopoietin regulates mitochondria quality in hematopoietic stem cells**

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

**O-8 (15:45~16:00)**

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

Terumasa Umemoto<sup>1</sup>, Alban Johansson<sup>1</sup>, Shah Adil Ishtiyahq Ahmad<sup>1</sup>, Michihiro Hashimoto<sup>2</sup>, Sho Kubota<sup>3</sup>, Kenta Kikuchi<sup>4</sup>, Haruki Odaka<sup>5</sup>, Takumi Era<sup>5</sup>, Daisuke Kurotaki<sup>4</sup>, Goro Sashida<sup>3</sup>, Toshio Suda<sup>2,6</sup>  
(<sup>1</sup>Laboratory of Hematopoietic Stem Cell Engineering, International Research Center for Medical Sciences, Kumamoto University, <sup>2</sup>Laboratory of Stem Cell Regulation, International Research Center for Medical Sciences, Kumamoto University, <sup>3</sup>Laboratory of Transcriptional Regulation in Leukemogenesis, International Research Center for Medical Sciences, Kumamoto University, <sup>4</sup>Laboratory of Chromatin Organization in Immune Cell Development, International Research Center for Medical Sciences, Kumamoto University, <sup>5</sup>Department of Cell Modulation, Institute of Molecular Embryology and Genetics, Kumamoto University, <sup>6</sup>Cancer Science Institute of Singapore, National University of Singapore)

**O-9 (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**

Michinori Saitou<sup>1,2,3</sup>

(<sup>1</sup>Institute for the Advanced Study of Human Biology, Kyoto University,

<sup>2</sup>Department of Anatomy and Cell Biology, Graduate School of Medicine, Kyoto University, <sup>3</sup>Center 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<sup>1,2</sup>

(<sup>1</sup>Institute for Frontier Life and Medical Sciences, Kyoto University, <sup>2</sup>RIKEN 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 Morimoto<sup>1</sup>, Takashi Fujimura<sup>2,3</sup>  
(<sup>1</sup>RIKEN BDR, Lab for Lung Development and Regeneration, <sup>2</sup>RIKEN BDR, <sup>3</sup>Otsuka 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<sup>1,2</sup>, Yoshihiko Kobayashi<sup>1,3</sup>, Mitsuru Morimoto<sup>2</sup>,  
Purushothama Rao Tata<sup>1</sup>  
(<sup>1</sup>Duke University, Department of Cell Biology, <sup>2</sup>RIKEN BDR, Lab. for Lung Development and Regeneration, <sup>3</sup>Kyoto 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<sup>1,2</sup>, Aleksandra Tata<sup>1</sup>, Purushothama Rao Tata<sup>1</sup>  
(<sup>1</sup>Department of Cell Biology, Duke University School of Medicine, <sup>2</sup>Lab. 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<sup>1,2</sup><sup>(1</sup>Division of Mammalian Embryology, Center for Stem Cell Biology and Regenerative Medicine, The Institute for Medical Science The University of Tokyo, <sup>2</sup>Section 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 Paul<sup>1</sup>, Masamitsu Sone<sup>1</sup>, Ashwini Patil<sup>2</sup>, Hisaya Kato<sup>3</sup>, Yoshiro Maezawa<sup>3</sup>, Motohiko Oshima<sup>4</sup>, Masaki Fukuyo<sup>5</sup>, Bahityar Rahmutulla<sup>5</sup>, Yasuo Ouchi<sup>1</sup>, Manami Ohtaka<sup>6</sup>, Mahito Nakanishi<sup>6</sup>, Kyoko Tsujimura<sup>1</sup>, Atsushi Kaneda<sup>5</sup>, Atsushi Iwama<sup>4</sup>, Koutaro Yokote<sup>3</sup>, Koji Eto<sup>1</sup>, Naoya Takayama<sup>1</sup><sup>(1</sup>Department of Regenerative Medicine, Graduate School of Medicine, Chiba University, Chiba, Japan, <sup>2</sup>Combinatics Inc., Japan, <sup>3</sup>Department of Endocrinology, Hematology and Gerontology, Graduate School of Medicine, Chiba University, Chiba, Japan, <sup>4</sup>Division 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, <sup>5</sup>Department of Molecular Oncology, Graduate School of Medicine, Chiba University, Chiba, Japan, <sup>6</sup>TOKIWA-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<sup>1,2</sup>, Norichika Mizuki<sup>3</sup>, Yasuhiro Shiga<sup>3</sup>, Kentaro Kosaka<sup>1</sup>, Naoya Takayama<sup>1</sup>, Seiji Ohtori<sup>3</sup>, Koji Eto<sup>1,4</sup>

<sup>1</sup>Department of Regenerative Medicine, Chiba University Graduate School of Medicine, Chiba, Japan, <sup>2</sup>Department of Orthopaedic Surgery, Chiba University Graduate School of Medicine, Chiba, Japan, <sup>3</sup>Department of Orthopedic Surgery, Graduate School of Medicine, Chiba University, <sup>4</sup>Department 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 Flahou<sup>1</sup>, Mio Iwasaki<sup>1</sup>, Akitsu Hotta<sup>1</sup>, Hitoshi Takizawa<sup>2</sup>, Naoshi Sugimoto<sup>1</sup>, Koji Eto<sup>1</sup>

<sup>1</sup>Department of Clinical Application, Center for iPS Cell Research and Application (CiRA), Kyoto University, Kyoto, Japan, <sup>2</sup>International 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 Nanba<sup>1</sup>, Fujio Toki<sup>1</sup>, Kyosuke Asakawa<sup>1</sup>, Hiroyuki Matsumura<sup>1</sup>, Ken Shiraishi<sup>2</sup>, Koji Sayama<sup>2</sup>, Kyoichi Matsuzaki<sup>3</sup>, Hiroshi Toki<sup>4</sup>, Emi Nishimura<sup>1</sup>  
(<sup>1</sup>Division of Aging and Regeneration, The Institute of Medical Science, The University of Tokyo, <sup>2</sup>Department of Dermatology, Ehime University School of Medicine, <sup>3</sup>Department of Plastic and Reconstructive Surgery, International University of Health and Welfare, School of Medicine, <sup>4</sup>Research 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 Ebisawa<sup>1</sup>, Yosuke Masamoto<sup>1</sup>, Mineo Kurokawa<sup>1,2</sup>

(<sup>1</sup>Department of Hematology & Oncology, Graduate School of Medicine, The University of Tokyo, <sup>2</sup>Department 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 Melig<sup>1</sup>, Ikuro Nobuhisa<sup>1,2</sup>, Kiyoka Saito<sup>1</sup>, Ryota Tsukahara<sup>1</sup>,

Ayumi Itabashi<sup>1</sup>, Yoshiakira Kanai<sup>3</sup>, Masami Kanai-Azuma<sup>4</sup>, Tetsuya Taga<sup>1</sup>

(<sup>1</sup>Department of Stem Cell Regulation, Medical Research Institute, Tokyo Medical and Dental University (TMDU), <sup>2</sup>Department of Nutritional Science, Faculty of Nutritional Sciences, Nakamura Gakuen University, <sup>3</sup>Department of Veterinary Anatomy, Graduate School of Agricultural and Life Science, University of Tokyo, <sup>4</sup>Department 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 Taguchi<sup>1</sup>, Taichi Isobe<sup>2</sup>, Yoshikane Kikushige<sup>3</sup>, Shohei Ueno<sup>1</sup>, Kenji Tsuchihashi<sup>4</sup>, Hiroshi Ariyama<sup>4</sup>, Koichi Akashi<sup>1</sup>, Eishi Baba<sup>2</sup>

(<sup>1</sup>Department of Medicine and Biosystemic Science, Graduate School of Medical Sciences, Kyushu University, <sup>2</sup>Department of Oncology and Social Medicine, Graduate School of Medical Sciences, Kyushu University, <sup>3</sup>Center for Cellular and Molecular Medicine, Kyushu University Hospital, <sup>4</sup>Department 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 Yogo<sup>1</sup>, Hans Jiro Becker<sup>2</sup>, Satoshi Yamazaki<sup>2,3</sup>

(<sup>1</sup>Division of Stem Cell Biology, Center for Stem Cell Biology and Regenerative Medicine, The Institute of Medical Science, The University of Tokyo, Tokyo, Japan, <sup>2</sup>Laboratory of Stem Cell Therapy, Faculty of Medicine, University of Tsukuba, Ibaraki, Japan, <sup>3</sup>Division 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<sup>1,2</sup>, Toshinobu Nakamura<sup>3</sup>, Tetsuya Taga<sup>1</sup>

(<sup>1</sup>Department of Stem Cell Regulation, Medical Research Institute, Tokyo Medical and Dental University (TMDU), Tokyo, Japan, <sup>2</sup>Division of Neurobiology and Anatomy, Graduate School of Medical and Dental Sciences, Niigata University, Niigata, Japan, <sup>3</sup>Laboratory 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 Matsuda<sup>1</sup>, Satoru Miyagi<sup>1</sup>, Kenichi Miyamoto<sup>1</sup>, Hiromi Miyauchi<sup>2</sup>, Takashi Suyama<sup>1,2</sup>, Yuko Kato<sup>1,2</sup>, Takeshi Taketani<sup>3</sup>, Yumi Matsuzaki<sup>1,2</sup>

(<sup>1</sup>Department of Life Science, Faculty of Medicine, Shimane University, Izumo City, Shimane, Japan, <sup>2</sup>PuREC Co., Ltd., Izumo City, Shimane, Japan, <sup>3</sup>Department 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 Imaoka<sup>1</sup>, Kento Nagata<sup>1</sup>, Yuya Hattori<sup>2</sup>, Ritsuko Watanabe<sup>3</sup>,  
 Akinari Yokoya<sup>3</sup>, Ken-ichi Kudo<sup>4</sup>, Mayumi Nishimura<sup>1</sup>, Kazuhiro Daino<sup>1</sup>,  
 Daisuke Iizuka<sup>1</sup>, Yukiko Nishimura<sup>1</sup>  
 (<sup>1</sup>QST National Institute of Radiological Sciences, <sup>2</sup>National Institute of Technology  
 Kure College, <sup>3</sup>QST Institute for Quantum Life Science, <sup>4</sup>Fukushima Medical  
 University)
- P-08 Persistent suppression of the luminal progenitor cell differentiation precedes radiation-induced rat mammary carcinogenesis**  
Kento Nagata<sup>1</sup>, Mayumi Nishimura<sup>1</sup>, Kazuhiro Daino<sup>1</sup>, Daisuke Iizuka<sup>1</sup>,  
 Yukiko Nishimura<sup>1</sup>, Yuya Hattori<sup>2</sup>, Ritsuko Watanabe<sup>3</sup>, Akinari Yokoya<sup>3</sup>,  
 Shizuko Kakinuma<sup>1</sup>, Tatsuhiko Imaoka<sup>1</sup>  
 (<sup>1</sup>Department of Radiation Effects Research, National Institute of Radiological  
 Sciences, National Institutes for Quantum Science and Technology, <sup>2</sup>Department  
 of Electrical Engineering and Information Science, National Institute of  
 Technology Kure College, <sup>3</sup>Institute 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 Ikeda<sup>1</sup>, Maurice Langhinrichs<sup>2,3</sup>, Tamar Nizharadze<sup>2,3</sup>,  
 Hans-Reimer Rodewald<sup>2,3</sup>, Thomas Höfer<sup>2,3</sup>, Shosei Yoshida<sup>1,4</sup>  
 (<sup>1</sup>NIBB, <sup>2</sup>DKFZ, <sup>3</sup>Uni Heidelberg, <sup>4</sup>SOKENDAI)
- 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 Miyagi<sup>1</sup>, Yuko Kato<sup>1,2</sup>, Ayako Watanabe<sup>1</sup>, Kenichi Miyamoto<sup>1</sup>,  
 Rintaro Yoshikawa<sup>1</sup>, Yumi Matsuzaki<sup>1,2</sup>  
 (<sup>1</sup>Department of Life Science, Faculty of Medicine, Shimane University, <sup>2</sup>PuREC  
 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 Taga<sup>1</sup>, Norihisa Bizen<sup>1,2</sup>, Kouichi Tabu<sup>1</sup>, Mei Wu<sup>3</sup>,  
Christian Mangani<sup>3</sup>, Rong Zhang<sup>3</sup>, Mark Bradley<sup>3</sup>  
(<sup>1</sup>Department of Stem Cell Regulation, Medical Research Institute, Tokyo Medical and Dental University (TMDU), <sup>2</sup>Division of Neurobiology and Anatomy, Graduate School of Medical and Dental Sciences, Niigata University, <sup>3</sup>EaStChem, School of Chemistry, University of Edinburgh)
- P-15 Hepatocyte growth factor is an adipokine that enhances breast cancer stem cell properties**  
Behnoush Khaledian<sup>1</sup>, Masahiro Mizuno<sup>1</sup>, Masao Maeda<sup>1</sup>,  
Takanori Hayashi<sup>1</sup>, Seiya Mizuno<sup>2</sup>, Seiji Okada<sup>3</sup>, Motoshi Suzuki<sup>1</sup>,  
Naoya Asai<sup>1</sup>, Fumihiko Sugiyama<sup>2</sup>, Satoru Takahashi<sup>2</sup>, Yohei Shimono<sup>1</sup>  
(<sup>1</sup>Fujita Health University School of Medicine, <sup>2</sup>Faculty of Medicine, University of Tsukuba, <sup>3</sup>Joint Research Center for Human Retrovirus Infection, Kumamoto University)
- P-16 Mesenchymal loss of p53 alters stem cell capacity and models human fibrosarcoma**  
Yuriko Sorimachi<sup>1,2</sup>, Hiroshi Kobayashi<sup>1</sup>, Nobuhito Goda<sup>2</sup>, Keiyo Takubo<sup>1</sup>  
(<sup>1</sup>Department of Stem Cell Biology, Research Institute, National Center for Global Health and Medicine, <sup>2</sup>Department 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<sup>1,2</sup>, Naoya Takayama<sup>1</sup>, Nobuyuki Mitsukawa<sup>2</sup>, Koji Eto<sup>1</sup>  
(<sup>1</sup>Department of Regenerative Medicine, Chiba University Graduate School of Medicine, <sup>2</sup>Department 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 Ohinata<sup>1</sup>, Haruhiko Koseki<sup>2,3</sup>  
(<sup>1</sup>Laboratory for DevelCellular and Molecular Medicine, Graduate School of Medicine, Chiba University, <sup>2</sup>Laboratory for Developmental Genetics, RIKEN Center for Medical Sciences (IMS), <sup>3</sup>Cellular and Molecular Medicine, Graduate School of Medicine, Chiba University)
- P-19 An interferon- $\gamma$ /FLT3 axis positively regulates hemopoietic progenitor cell expansion from human pluripotent stem cells**  
Kenji Kitajima<sup>1</sup>, Minako Shingai<sup>1,2</sup>, Hikaru Ando<sup>1,2</sup>, Takahiko Hara<sup>1,2,3</sup>  
(<sup>1</sup>Stem Cell Project, Tokyo Metropolitan Institute of Medical Science, <sup>2</sup>Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University, <sup>3</sup>Graduate 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 Koide<sup>1</sup>, Motohiko Oshima<sup>1</sup>, Akira Nishiyama<sup>2</sup>, Koichi Murakami<sup>2,3</sup>,  
Naoki Itokawa<sup>1</sup>, Zhiqian Zheng<sup>1</sup>, Yaeko Nakajima-Takagi<sup>1</sup>,  
Tomohiko Tamura<sup>2,3</sup>, Atsushi Iwama<sup>1</sup>  
(<sup>1</sup>Division 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, <sup>2</sup>Department of Immunology, Yokohama City University Graduate School of Medicine, Yokohama, Japan, <sup>3</sup>Advanced 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 Yamamura<sup>1</sup>, Yoshimi Kawamura<sup>1</sup>, Yuki Oiwa<sup>1</sup>, Kaori Oka<sup>1</sup>,  
Nobuyuki Onishi<sup>2</sup>, Hideyuki Saya<sup>2</sup>, Kyoko Miura<sup>1</sup>

(<sup>1</sup>Department of Aging and Longevity Research, Faculty of Life Sciences, Kumamoto University, Japan, <sup>2</sup>Division 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)