The 11th Stem Cell Research Symposium Program

Friday, May 17. The First Day

Registration • Exhibit posters

9:00~

Opening Remarks Organizer Shigeru Chiba

9:30~9:40

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

Session 1 : Hematopoietic Stem Cell

9:40~10:40

Chair Mineo Kurokawa

(Department of Hematology & Oncology Graduate School of Medicine, The University of Tokyo)

O-1 Hemp, an epigenetic regulator, sustains hematopoietic stem cell quiescence through regulating FoxO3a and downstream CDK inhibitors

<u>Hiroaki Honda</u>¹, Keiyo Takubo², Takeshi Ueda¹, Norimasa Yamasaki¹, Ayako Nakamura-Ishizu², Zen-ichiro Honda³, Fumio Arai², Toshio Suda²

(¹Research Institute of Radiation Biology and Medicine, Hiroshima University, ²The Sakaguchi Laboratory of Developmental Biology, Keio University School of Medicine, ³Institute of Environmental Science for Human Life, Ochanomizu University)

O-2 Visualization and functional analysis of Geminin, a candidate molecule governing self-renewal and cellular differentiation of hematopoietic stem cells

Shin'ichiro Yasunaga¹, Yoshinori Ohno¹, Toshiaki Kurogi¹, Keita Saeki¹, Yoshie Nakashima¹, Motoaki Ohtsubo², Yoshihiro Takihara¹ (¹Dept. Stem Cell Biol., RIRBM, Hiroshima Univ., ²Dept. Food and Ferment. Sci., Beppu Univ.)

O-3 Aspp1 (Apoptosis-stimulating protein of p53, 1) induces hematopoietic stem cell cycling and apoptosis in response to cellular stress

Masayuki Yamashita, Eriko Nitta, Toshio Suda (Department of Cell Differentiation, the Sakaguchi Laboratory of Developmental Biology, Keio University School of Medicine)

Coffee Break 10 : 40∼11 : 00

Special Lecture 1 11 : 00~11 : 30

Chair Toshio Suda

(Keio University School of Medicine)

S-1 Replication stress in aging hematopoietic stem cells Emmanuelle Passegue.PhD

> (The Eli and Edythe Broad Center of Regeneration Medicine and Stem Cell Research, University of California San Francisco)

Lunch Time 11 : 30~13 : 10

Poster Session 13 : 10~14 : 10

Coffee Break 14 : 10~14 : 30

Session 2 : Hematopoietic Stem Cell Regulation 14 : 30~15 : 35

Chair Koichi Akashi

(Dept.of Medicine and Biosystemic Science Faculty of Medicine, Kyushu University)

Topics in Human HSCs

Transcriptional architecture of the human hematopoietic hierarchy: insights into lineage commitment and self-renewal Elisa Laurenti. Ph.D.

(Campbell Family Institute for Cancer Research, Ontario Cancer Institute, University Health Network)

O-4 Adiponectin promotes proliferation of hematopoietic cells in vivo.

<u>Yosuke Masamoto</u>¹, Shunya Arai¹, Tomohiko Sato¹, Akihide Yoshimi¹, Iseki Takamoto², Naoto Kubota², Takashi Kadowaki², Mineo Kurokawa¹

(¹Department of Hematology and Oncology, the University of Tokyo, ²Department of Metabolic Diseases, the University of Tokyo)

O-5 Functional Significance of MPL Expression in the Human Primitive Hematopoietic Stem Cell Compartment

<u>Masaya Takahashi</u>, Yoshikazu Matsuoka, Ryusuke Nakatsuka, Ryuji Iwaki, Hirao Kohno, Tatsuya Fujioka, Yutaka Sasaki, Yoshiaki Sonoda

(Department of Stem Cell Biology and Regenerative Medicine, Graduate School of Medical Science, Kansai Medical University)

Coffee Break 15 : 35~15 : 50

Session 3: iPS/ES Cell (1) 15: 50~16: 50

Chair Takumi Era

(Department of Cell Modulation, IMEG, Kumamoto University)

O-6 Incompletely Reprogrammed Human iPSCs Form Glioma-like Tumors Through Genomic Instability During Neural Differentiation

Yohei Okada¹, Fuyuki Miya², Masato Koike³, Shuta Tomisato¹, Tomoko Tokura¹, Yasuharu Ishihara¹, Daisuke Shimojo¹, Chinatsu Hattori¹, Daisuke Kanematsu⁴, Yonehiro Kanemura⁴, Kazuhisa Kohda¹, Gen Sobue⁵, Shinya Yamanaka⁶, Michisuke Yuzaki¹, Yasuo Uchiyama³, Eiji Ikeda⁷, Tatsuhiko Tsunoda², Hideyuki Okano¹ (¹Department of Physiology, School of Medicine, Keio University, ²Laboratory for Medical Informatics, Center for Genomic Medicine, RIKEN, ³Department of Cell Biology and Neuroscience, Graduate School of Medicine, Juntendo University, ⁴Division of Regenerative Medicine, Institute for Clinical Research, Osaka National Hospital, National Hospital Organization, 5Department of Neurology, Graduate School of Medicine, Nagoya University, 6Center for iPS Cell Research and Application (CiRA), Kyoto University, 7Department of Pathology, Graduate School of Medicine, Yamaguchi University)

O-7 Characterization of dysgerminoma like tumors arisen in the process of generating common marmoset induced pluripotent stem cells

Saori Yamaguchi¹, Tomotosh Marumoto¹, Takenobu Nii¹, Hirotaka Kawano¹, Liao Jiyuan¹, Yoko Nagai¹, Michiyo Okada¹, Atsushi Takahashi¹, Hiroyuki Inoue¹, Erika Sasaki², Shinji Okano³, Yoshie Miura¹, Kenzaburo Tani¹

(¹Division of Molecular and Clinical Genetics, Medical Institute of Bioregulation, Kyushu University, ²Central Institute for Experimental Animals, Keio University, ³Division of Pathophysiological and Experimental Pathology, Department of Pathology, Kyushu University)

O-8 Molecular functions of the LIM-homeobox transcription factor Lhx2 in hematopoietic stem-like cell differentiation from mouse embryonic stem cells <u>Kenji Kitajima</u>¹, Manami Kawaguchi¹, Michelina Iacovino², Michael Kyba², Takahiko Hara¹

(¹Stem Cell Project, Tokyo Metropolitan Institute of Medical Science, ²Lillehei Heart Institute and Department of Pediatrics, University of Minnesota)

Coffee Break 16 : 50~17 : 05

Session 4 : Mesenchymal and Tissue Stem Cell 17 : 05~18 : 05

Chair Noriko Gotoh

(Division of Cancer Cell Biology, Cancer Molecular Target Exploration Program Cancer Research Institute, Kanazawa University)

Keynote Lecture on Mesenchymal Stem Cell

Genetically modified stem cell therapy for neurological diseases <u>Haeyoung Suh-Kim^{1,2}</u> and Sung-Soo Kim³

(¹Department of Anatomy, ²NeuroScience Graduate Program, ³Center for Cell Death Regulating Biodrug, Ajou University, School of Medicine)

O-9 The fate switch of hair follicle stem cells to the epidermis underlies hair follicle aging and baldness

Yasuaki Mohri¹, Nguyen Thanh Binh^{1,2}, Hiroyuki Matsumura¹, Yuko Tadokoro^{2,3}, Mayumi Ito⁴, Jan Hoeijmakers⁵, Emi Nishimura^{1,2} (¹Department of Stem Cell Biology, Medical Research Institute, Tokyo Medical and Dental University, ²Department of Stem Cell Medicine, Cancer Research Institute, Kanazawa University, ³Division of Molecular Genetics, Cancer Research Institute, Kanazawa University, ⁴Departments of Dermatology and Cell Biology, New York University School of Medicine, ⁵Department of Genetics, Cancer Genomics Center)

O-10 Lactic acid bacteria convert human fibroblasts to multipotential cells

<u>Kunimasa Ohta</u>, Rie Kawano, Naofumi Ito

(Kumamoto University)

General Meeting Chief Director Toshio Suda 18:05~18:15

(Department of Cell Differentiation, Keio University School of Medicine)

Reception (Venue for Poster Presentation) 18:15~20:00

Saturday, May 18. The Second Day

Session 5 : iPS/ES Cell (2) 9 : 20~10 : 20

Chair Hideyuki Okano

(Dept. of Physiology, Keio University School of Medicine)

Keynote Lecture on iPS cells

Differentiation and signaling pathways in human pluripotent stem cells

Yong-Mahn Han, Ph.D.

(Department of Biological Sciences and Center for Stem Cell Differentiation, KAIST)

O-11 Demonstration of iPSCs as a disease model for the preclinical assessment of safe and efficacious vector mediated CGD gene therapy

<u>Huan-Ting Lin</u>, Makoto Otsu, Hiromitsu Nakauchi (Division of Stem Cell Therapy, Center for Stem Cell Biology and Regenerative Medicine, IMSUT.)

O-12 Analysis of iPS cells derived from Fibrodysplasia ossificans progressiva.

<u>Makoto Hamasaki</u>¹, Yoshinobu Hashizume², Yoshinori Yamada¹, Tomohiko Katayama¹, Hirohiko Hohjoh³, Noemi Fusaki⁴, Yasuharu Nakashima⁵, Hirokazu Furuya⁶, Nobuhiko Haga¬, Yoichiro Takami¹, Takumi Era¹

(¹Department of Cell Modulation, Institute of Molecular Embryology and Genetics, Kumamoto University, ²RIKEN Program for Drug Discovery and Medical Technology Platforms. ³National Institute of Neuroscience, National Center of Neurology and Psychiatry, ⁴JST PRESTO and Ophthalmology, Keio University, ⁵Department of Orthopaedic Surgery, Kyushu University School of Medicine, ⁶Department of Neurology, Neuro-Muscular Center, National Omuta Hospital, ¬Rehabilitation Medicine, Graduate School of Medicine.)

Coffee Break 10 : 20~10 : 40

Special Lectures on HSC Microenvironmental Regulation 10:40~11:30

Chair Shigeru Chiba

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

S-2 Oncogenesis in the hematopoietic system: A role for the niche?

Marc H.G.P. Raaijmakers, M.D., Ph.D.

(Erasmus University Medical Center, Department of Hematology and Erasmus Stem Cell Institute)

S-3 Microenvironmental Regulation of Normal and Malignant Hematopoietic Stem Cells

Il-Hoan Oh, MD, Ph.D

(Catholic High-Performance Cell Therapy Center, The Catholic University of Korea)

Lunch Time 11 : 30~13 : 10

Poster Session 13 : 10~14 : 10

Coffee Break 14 : 10~14 : 30

Session 6 : Epigeneticsi in Leukemogenesis 14 : 30~15 : 30

Chair Yoshihiro Takihara

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

O-13 A novel approach to identify mutations responsible for leukemogenesis based on epigenetic information

Jun Odawara^{1,2}, Kohta Miyawaki¹, Junichiro Yuda¹, Masayasu Hayashi^{1,2}, Kazumitsu Maehara², Kentaro Kohno¹, Takahiro Shima¹, Masao Nagasaki³, Yasuyuki Ohkawa², Koichi Akashi¹ (¹Department of Medicine and Biosystemic Sciences, Kyushu University Graduate School of Medicine, ²Department of Advanced Medical Initiatives, Faculty of Medical Sciences, Kyushu University, ³Division of Biomedical Information Analysis, Department of Integrative Genomics, Tohoku Medical Megabank Organization, Tohoku University)

O-14 Reduced *Tet2* Function Contributes to Dysregulated Hematopoietic Stem Cells and Subsequent Development of Peripheral T- cell Lymphoma

<u>Hideharu Muto</u>¹, Mamiko Sakata-Yanagimoto¹, Yasuyuki Miyake¹, Terukazu Enami¹, Yuhei Kamada¹, Kazumi Suzukawa¹, Naoya Nakamura², Genta Nagae³, Hiroyuki Aburatani³, Seishi Ogawa⁴, Shigeru Chiba¹

(¹Department of Hematology, Faculty of Medicine, University of Tsukuba, ²Department of Pathology, Tokai University School of Medicine, ³Genome Science Division RCAST The University of Tokyo, ⁴Cancer Genomics Project, Graduate School of Medicine, The University of Tokyo)

O-15 C-terminal-truncating ASXL1 mutations induce MDS via derepression of miR125a and reduced expression of Clec5a/Mdl1

Daichi Inoue, Toshio Kitamura

(Division of Cellular Therapy, Advanced Clinical Research Center, The Institute of Medical Science, The University of Tokyo)

Coffee Break 15 : 30~15 : 50

Session 7 : Cancer Stem Cell 15 : 50~16 : 50

Chair Atsushi Iwama

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

O-16 Leukemogenic function of TIM-3, a leukemia stem cell marker, in acute myelogenous leukemia and myelodysplastic syndromes

<u>Yoshikane Kikushige</u>, Takahiro Shima, Junichiro Yuda, Toshihiro Miyamoto, Koichi Akashi

(Department of Medicine and Biosystemic Sciences, Kyushu University)

O-17 Immunological regulation of leukemia-initiating cells in MLL-rearranged leukemia

Naoki Hosen, Jun Nakata, Kana Hasegawa, Hiroko Kinoshita,
Katsuhiko Nakano, Yoshihiro Oka, Atsushi Kumanogoh, Haruo
Sugiyama
(Osaka University Graduate School of Medicine)

O-18 Innovative microRNA-Based Cellular Reprogramming Medicine for Extermination of Cancer Stem Cells

Masamitsu Konno¹, Hisataka Ogawa^{2,3}, Tsuyoshi Yamamoto⁴, Yuichiro Doki⁵, Nobuhiro Nishiyama^{6,7}, Kazunori Kataoka⁸, Satoshi Obika⁴, Masaki Mori⁵, Hideshi Ishii¹ (¹Department of Frontier Science for Cancer and Chemotherapy, Osaka University, Graduate School of Medicine, ²Department of Frontier Science for Cancer and Chemotherapy, ³Department of Gastroenterological Surgery, Osaka University, Graduate School of Medicine, ⁴Bioorganic Chemistry, Graduate School and School of Pharmaceutical Sciences, Osaka University, ⁵Department of Gastroenterological Surgery, Osaka University, Graduate School of Medicine, ⁴Department of Materials Engineering, University of Tokyo, ¹Department of Chemical Resources Laboratory, Tokyo Institute of Technology, ⁵Department of Materials Engineering, University of Tokyo)

Coffee Break 16 : 50~17 : 05

Session 8 : iPS/HSC 17 : 05~18 : 05

Chair Atsushi Hirao

(Kanazawa University, Cancer Research Institute)

O-19 Analysis of familial platelet disorder with disease-specific iPSCs.

<u>Hitomitsu Iizuka</u>, Shunya Arai, Masashi Miyauchi, Kazuki Taoka, Keisuke Kataoka, Masataka Hosoi, Keiki Kumano, Mineo Kurokawa (Department of Hematology and Oncology, the University of Tokyo)

O-20 A telomere shelterin factor, POT1 supports the maintence of hematopoietic stem cells.

<u>Kentaro Hosokawa</u>, Fumio Arai, Yumiko Gomei, Toshio Suda (Department of Cell Differentiation, The Sakaguchi Laboratory of Developmental Biology, School of Medicine, Keio University)

O-21 The Role of Long Intergenic Non-Coding RNAs in Hematopoietic Stem Cells George Wendt, Atsushi Iwama

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

18:05~18:15

Closing Remarks

Next Organizer Yoshihiro Takihara

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

Friday, May 17

P-01 Sox17 protein-mediated maintenance of cells with stem cell phenotype in the hematopoietic cell clusters in the fetal AGM region

Ikuo Nobuhisa¹, Mitsujiro Osawa², Mami Uemura^{3,4}, Yoko Kishikawa⁵, Maha Anani¹, Kaho Harada¹, Haruna Takagi², Masami Kanai-Azuma⁴, Yoshiakira Kanai³, Atsushi Iwama², Tetsuya Taga¹ (¹Dept. Stem Cell Reg., Med. Res. Inst., Tokyo Med. Dental Univ., ²Dept. Cellular and Mol. Med., Grad. Sch. Med., Chiba Univ., ³Dept. Vet. Ana., Grad. Sch. Agri. and Life Sci., Univ. of Tokyo, ⁴Dept. Exp Ani. Mod. for Hum. Dis., Cent. For Exp. Animal., Tokyo Med. Dent. Univ., ⁵Dept. Cell Fate Mod., IMEG, Kumamoto Univ.)

13:10~14:10

P-02 The Role of Eset in Hematopoietic Stem Cell

<u>Shuhei Koide</u>¹, Satoru Miyagi¹, George Wendt¹, Motohiko Oshima², Atsushi Iwama¹

(¹Department of Cellular and Molecular Medicine, Graduate School of Medicine, Chiba University, ²Department of Cellular and Molecular Medicine, Graduate School of Medicine, Chiba University / JST, CREST)

P-03 TPO/cMpl-dependent differentiation pathway for megakaryocytes at the proximity of hematopoietic stem cells.

Hidekazu Nishikii, Kenji Matsuhita, Yosuke Kanazawa, Terumasa Umemoto, Yu Matsuzaki, Takayasu Kato, Mamiko Sakata-Yanagimoto, Masayuki Yamato and Shigeru Chiba. (Department of Hematology, Faculty of Medicine, Graduate School of Comprehensive Human Sciences, University of Tsukuba)

P-04 Differentiation of mast cells from induced pluripotent stem cells

<u>Tomoko Yamaguchi</u>¹, Katsuhisa Tashiro¹, Satoshi Tanaka², Hiroyuki Mizuguchi³, Kenji Kawabata¹

(¹National Institute of Biomedical Innovation, ²Okayama University Graduate School, ³Osaka University)

P-05 Development of a highly efficient method for isolating bone-derived small stem cells identified in adult mouse bone

Ryusuke Nakatsuka, Ryuji Iwaki, Yoshikazu Matsuoka, Masaya Takahashi, Tatsuya Fujioka, Yutaka Sasaki, Yoshiaki Sonoda (Department of Stem Cell Biology and Regenerative Medicine, Graduate School of Medical Science, Kansai Medical University)

P-06 Functional Restoration of Aged Stem Cells by Regulating Their Competence

<u>Hayato Naka-Kaneda</u>¹, Michiko Ohno-Oishi¹, Yo Mabuchi², Shiho
Nakamura¹

(¹RIKEN, ²Tokyo Medical and Dental University)

P-07 LNGFR+Thy-1+CD106high+ cells reveal functionally distinct subpopulations in mesenchymal stem cells

Yo Mabuchi^{1,2}, Chihiro Akazawa¹, Hideyuki Okano², Yumi Matsuzaki² (¹Department of Biochemistry and Biophysics, Graduate School of Health Care Sciences, Tokyo Medical and Dental University, ²Department of Physiology, Keio University School of Medicine)

P-08 Igf2 accelerates mesenchymal cell activity in the mouse yolk sac <u>Tomoko Inoue</u>^{1,2}, Chiyo Mizuochi¹, Kasem Kulkeaw¹, Keai Sinn Tan¹, Sarinthip Preedagasamzin¹, Yuka Tanaka¹, Daisuke Sugiyama¹ (¹Center for Clinical and Translational Research Kyushu University Hospital, ²Department of Medicine and Biosystemic Science, Kyushu University, Graduate School of Medical Sciences)

P-09 Inhibition of VEGF-C induces the expression of FLT 3 in IL-1-beta-stimulated adult human dermal fibroblasts

<u>Takuji Matsuo</u>, Ryosuke Shirasaki, Yoko Oka, Naoki Shirafuji (Teikyo University School of Medicine)

P-10 A novel 3D imaging technique reveals dynamic behavior of the biliary tree and liver progenitor cells in regenerating mouse livers

<u>Tohru Itoh</u>, Kota Kaneko, Atsushi Miyajima (Institute of Molecular and Cellular Biosciences, The University of Tokyo)

P-11 Immunogenicity of induced pluripotent stem cells assessed in the setting of porcine syngeneic transplantation

Yoshihisa Mizukami¹, Tomoyuki Abe¹, Hiroaki Shibata², Shuh-hei Fujishiro¹, Shuji Hishikawa³, Eiji Kobayashi³, Yutaka Hanazono^{1,4} (¹Division of Regenerative Medicine, Jichi Medical University, ²Tsukuba Primate Research Center, National Institute of Biomedical Innovation, ³CDAMTec, Jichi Medical University, ⁴ JST, CREST)

P-12 Fas signaling via 3-O sulfated heparan sulfate is required for the differentiation of mouse embryonic stem cells

 $\underline{\text{Kazumi Hirano}}^1,$ Norihiko Sasaki 1, Toin van Kuppevelt 2, Shoko Nishihara 1

(¹Faculty of Engineering, Soka University, ²Nijmegen Center for Molecular Life Sciences, Radboud University Nijmegen Medical Centre)

P-13 Identification of The CXCL14 Receptor: CXCL14 is a Natural Inhibitor of The CXCL12/CXCR4 Axis

 $\underline{\text{Kosuke Tanegashima}}^1$, Kenji Suzuki 1 , Takashi Nagasawa 2 , Takahiko Hara 1

(¹Stem cell project group, Tokyo Metropolitan Institute of Medical Science, ²Department of Immunobiology and Hematology, Institute of Frontier Medical Sciences, Kyoto University)

P-14 Molecular Characterization of Human Germ Cell and A Trial toward *In Vitro* Germ Cell Differentiation from Human iPSCs.

Ryusuke Nakajima, Masanori Imamura, Zachary Yu-Ching Lin, Rie Yamadera, Yuji Takehara, and Hideyuki Okano (Department of Physiology, School of Medicine, Keio University)

P-15 Molecular characterization of proliferative germ-like cells and oocyte-like cells derived from pluripotent stem cells in vitro

Masanori Imamura¹, Mai Nitta^{2,3}, Rieko Ikeda⁴, Keiichiro Yogo⁵, Noritaka Fukunaga⁶, Eimei Sato⁶, Tatsuo Takeya², Jun Miyoshi³, Takashi Shinohara⁷, Yasuhisa Matsui⁶, Kuniya Abe⁴, Shinya Yamanaka⁷, Toshiaki Noce¹, and Hideyuki Okano¹ (¹Department of Physiology, School of Medicine, Keio University; ²Nara Institute of Science and Technology; ³Osaka Medical Center for Cancer and Cardiovascular Diseases; ⁴RIKEN BioResource Center; ⁵Shizuoka University; ⁶Tohoku University; ⁷Kyoto University)

P-16 Molecular Characterization and Culture of Testicular Germ Cells in A New-World Monkey Common Marmoset Callithrix Jacchus

Zachary YC Lin¹, Masanori Imamura¹, Takamasa Hirano², Eiji Matsunaga³, Miki Taoka³, Hiroo Imai⁴, Hirotaka James Okano¹, Atsushi Iriki³, Mikiko C Siomi⁵, Haruhiko Siomi², Erika Sasaki⁶, Hideyuki Okano¹

(¹Physiology Department, Keio University, ²Molecular Biology Department, Keio University, ³RIKEN BSI, ⁴Primate research Institute, Kyoto university, ⁵Biochemistry Department, Tokyo university, ⁶CIEA)

P-17 Phylogenic diversity of DNA methylation status in mammalian germline

Orie Hikabe¹, Masanori Imamura¹, Ikuo Tomioka², Zachary Yu-Ching

Lin¹, Ryusuke Nakajima¹, Arata Honda³, Ayako Isotani⁴, Masaru

Okabe⁴, Atsuo Ogura³, Erika Sasaki², Hideyuki Okano¹

(¹Dept. of Physiol., School of Med., ²Keio Univ., CIEA, ³Riken BRC,

⁴Genome Information Research Center, Osaka Univ.)

P-18 5-methylcytosine hydroxylase TET3 endows mid-gestational neural stem cells with the astrogliogenic competence

<u>Norihisa Bizen</u>¹, Tetsushi Kagawa¹, Toshinobu Nakamura², Toru Nakano³, Tetsuya Taga¹

(¹Department of Stem Cell Regulation, Medical Research Institute, Tokyo Medical and Dental University, ²Department of Animal Bio-Science, Nagahama Institute of Bio-Science and Technology, ³Department of Pathology, Graduate School of Medicine and Frontier Biosciences, Osaka University)

P-19 Deficiency of DGCR8 gene, a candidate gene for 22q11.2 deletion-associated schizophrenia, decreases cell proliferation and neurogenesis in the adult mouse dentate gyrus

<u>Yasuo Ouchi</u>¹, Yuya Banno¹, Yuko Shimizu¹, Shouta Ando¹, Koichi Adachi², Takashi Iwamoto¹

(¹Department of Biomedical Sciences, Chubu University, ²Radioisotope Research Center Medical Division, Nagoya University Graduate School of Medicine)

P-20 Notch3 null mutation in mice causes muscle hyperplasia by repetitive muscle regeneration

<u>Takeo Kitamoto</u>, Kazunori Hanaoka (Kitasato University School of Science)

P-21 Anti-apoptotic molecule Anamorsin is crucial for stromal function to support embryonic hematopoiesis

Akira Tanimura, Yuri Hamanaka, Hirohiko Shibayama, Yuzuru Kanakura

(Department of Hematology and Oncology, Osaka University Graduate School of Medicine)

Poster Session

Saturday, May 18

P-22 Analysis of endothelial niche cells in fetal spleen erythropoiesis

<u>Keai Sinn Tan</u>¹, Tomoko Inoue², Wai Feng Lim³, Chiyo Mizuochi⁴, Kasem Kulkeaw⁴, Sarinthip Preedagasamzin⁴, Yuka Tanaka⁴, Mei I Lai⁵, Daisuke Sugiyama⁴

13:10~14:10

(¹Center for Clinical and Translational Research Kyushu University Hospital / Department of Pathology, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia, ²Center for Clinical and Translational Research Kyushu University Hospital / Department of Medicine and Biosytemic Science, Kyushu University, Graduate School of Medical Sciences, ³Center for Clinical and Translational Research Kyushu University Hospita, ⁴Center for Clinical and Translational Research Kyushu University Hospital, ⁵Department of Pathology, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia)

P-23 mTORC1 is essential for propagation of earliest T lineage-committed cell in normal lymphopoiesis and leukemogenesis.

<u>Takayuki Hoshii</u>, Kasada Atsurou, Atsushi Hirao (Cancer Research Institute, Kanazawa University)

P-24 Generation and analysis of a novel model for chronic myelomonocytic leukemia (CMML) with acquired expression of c-CBL Q367P

<u>Yuichiro Nakata</u>¹, Takeshi Ueda¹, Norimasa Yamasaki¹, Akiko Nagamachi², Keiyo Takubo³, Yasuhiro Ebihara⁴, Masashi Sanada⁵, Seishi Ogawa⁵, Koichiro Tsuji⁴, Toshio Suda³, Toshiya Inaba² and Hiroaki Honda¹

(¹Department of Disease Model, Research Institute for Radiation Biology and Medicine, Hiroshima University, ²Department of Molecular Oncology, Research Institute for Radiation Biology and Medicine, Hiroshima University, ³Department of Cell Differentiation, Keio University, ⁴Department of Pediatric Hematology/Oncology, The Institute of Medical Science, The University of Tokyo, ⁵Cancer Genomics Project, The University of Tokyo)

P-25 E2F-mediated transcriptional activation of the Geminin gene is under the regulation of a negative-feedback loop

<u>Yoshinori Ohno</u>¹, Keita Saeki¹, Shin'ichiro Yasunaga¹, Manabu Shirai², Toshiaki Kurogi¹, Yoshie Nakashima¹, Motoki Ohtsubo³, Yoshihiro Takihara¹

(¹Dept. Stem Cell Biol., RIRBM, Hiroshima Univ., ²Dept. Biosci. Genetics., NCVC Res. Inst., ³Dept. Food and Fermentation Science., Beppu Univ.)

P-26Hes1 is responsible for Notch signaling-mediated suppression of acute myeloid leukemia development

<u>Takayasu Kato</u>, Mamiko Sakata-Yanagimoto, Yasuyuki Miyake, Hidekazu Nishikii, Hideharu Muto, Yasuhisa Yokoyama, Naoshi Obara, Kazumi Suzukawa and Shigeru Chiba (Department Hematology, University of Tsukuba)

P-27 The roles of Hes1 in the myeloid leukemogenesis

<u>Tomoyuki Uchida</u>¹, Jiro Kitaura¹, Daichi Inoue¹, Katsuhiro Togami¹, Kimihito Kawabata¹, Toshihiko Oki¹, Fumio Nakahara¹, Akiko Sada², Yoshio Katayama², Toshimitsu Matsui³, Yuka Harada⁴, Hironori Harada⁴, Toshio Kitamura¹

(¹Division of Cellular Therapy, Advanced Clinical Research Center, The Institute of Medical Science, The University of Tokyo, ²Department of Hematology, Kobe University, ³Department of Hematology, Ono Municipal Hospital, ⁴Department of Hematology and Oncology, Resarch Institute for Radiation Biology and Medicine, Hiroshima University)

P-28 Constitutive NF-kB activation maintained by autocrine TNF-a signaling and active proteasome system supports leukemia stem cell capacity

Yuki Kagoya, Akihide Yoshimi, Keisuke Kataoka, Masahiro Nakagawa, Keiki Kumano, Shunya Arai, Mineo Kurokawa (Department of Hematology & Oncology, Graduate School of Medicine, The University of Tokyo)

P-29 Integrin A6 as a special marker of refractory leukemia is important for maintaining of leukemia stem cells.

<u>Kazuko Kaneda</u>, Kazuhiro Morishita (Division of Tumor and Cellular Biochemistry, Department of medical Sciences, Faculty of Medicine, University of Miyazaki)

P-30 Novel Humanized Anti-CD33 Antibody with Enhanced Cytotoxic Functions for the Treatment of Acute Myeloid Leukemia

Takuya Murakami, Tomoaki Nakagawa, Tomonori Tawara, Tsuguo Kubota, Uichi Nishiyama, Masao Asada, Miki Murai, Sayaka Hori-Inada, Yukiko Shimizu, Yoshimasa Inagaki, Mitsuo Satoh, Kenya Shitara, Tomoyuki Tahara, Rinpei Niwa (Research Division, Kyowa Hakko Kirin Company, Limited)

P-31 Induced Pluripotent Stem Cell Reprogramming For Innovative Cell-Modifying Technology in Cancer

<u>Koichi Kawamoto</u>¹, Hideshi Ishii², Masamitsu Konno², Hisataka Ogawa^{1,2}, Hidetoshi Eguchi¹, Masahiro Tanemura^{1,3}, Hiroaki Nagano¹, Yuichiro Doki¹, Masaki Mori¹

(¹Department of Gastrointestinal Surgery, Osaka University Graduate Schoolof Medicine, ²Department of Frontier Science for Cancer and Chemotherapy, OsakaUniversity Graduate School of Medicine, ³ Department of Surgery and Institute for Clinical Research, NationalHospital Organization Kure Medical Center)

P-32 Identification of an ES-specific gene Zfp57 as a novel oncogene

Hiroshi Koide¹, Yuhki Tada¹, Yukari Yamaguchi², Hiroyuki

Takamura², Tadayuki Akagi¹, Tetsuo Ohta², Takashi Yokota¹

(¹Department of Stem Cell Biology, and ²Department of

Gastroenterological Surgery, Graduate School of Medical Sciences,

Kanazawa University)

- P-33 Polymer-based identification of niche elements for C6 glioma cancer stem cells <u>Kouichi Tabu</u>, Norihisa Bizen, Tetsuya Taga (Department of Stem Cell Regulation, Medical Research Institute, Tokyo Medical & Dental University)
- P-34 New treatment target gene focusing on GBM stem cells and stem cell niches

 <u>Takuichiro Hide</u>, Shigeo Anai, Jun-ichiro Kuroda, Naoki Shinojima,
 Keishi Makino, Hideo Nakamura, Shigetoshi Yano, Jun-ichi Kuratsu
 (Department of Neurosurgery, Kumamoto University Medical School)
- P-35 ADAM17 mediates cancer stem cell phenotype in MCF-7 cells

 Naoya Hirata, Shigeru Yamada, Yuko Sekino, Yasunari Kanda
 (Div. Pharmacol., NIHS)

P-36 GDF15 promotes mammosphere formation in breast cancer

Kana Tominaga¹, Kunihiko Hinohara¹, Teppei Shimamura², Satoru Miyano², Arinobu Tojo³, Noriko Gotoh¹ (¹Division of Molecular therapy, Molecular targets laboratory, Institute of Medical Science, University of Tokyo, ²Human Genome Center, Institute of Medical Science, University of Tokyo, ³Division of Molecular Therapy, Advanced Clinical Research Center, Institute of Medical Science, University of Tokyo)

P-37 A PI3K-dependent gene expression program that regulates mammosphere formation of breast cancer cells.

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P-38 Growth factor receptor signaling controls breast cancer stem cells and their niche Yukino Machida¹, Daisuke Iejima¹, Anna Mizutani¹, Reiko Sakamoto², Yusuke Inoue³, Nobutaka Kobayashi⁴, Naoki Itano⁴, Nobuaki Yoshida², Noriko Gotoh¹

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P-39 Amphiregulin/EGFR pathway contributes to mammosphere formation in human breast cancer

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P-40 MTHFD2, an enzyme in a folate-metabolism, is a key molecule in EGF receptor tyrosine kinase and regulates lung cancer cell growth.

DNA Info. Anal., Inst. of Med. Sci., Univ. of Tokyo)

<u>Tatsunori Nishimura</u>, Asuka Nakata, Arinobu Tojo, Noriko Gotoh (University of Tokyo)

P-41 Novel molecular mechanisms of acquired resistance to gefitinib in Non-small cell lung cancer

Asuka Nakata¹, Ryo Yoshida², Rui Yamaguchi¹, Mai Yamauchi¹, Ikuyo Yoshino¹, Yoshinori Tamada¹, Andre Fujita¹, Adi F Gazdar³, Teppei Shimamura¹, Seiya Imoto¹, Tomoyuki Higuchi², Masaharu Nomura⁴, Satoru Miyano¹, Noriko Gotoh¹

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参加者へのご案内とお願い

1. 参加登録について

1-1. 受付場所: 東京大学 伊藤国際学術研究センターB2 伊藤謝恩ホール (〒113-0033 東京都文京区本郷 7-3-1)

1-2. 受付時間:5月17日(金) 9時00分から

1-3. 参加費: 5,000円

2. 発表について

2-1. 発表形式

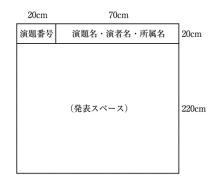
・PowerPoint を用いて作成したデータを、リモートプレゼンシステム(演台上に設置されたマウスまたはキーボードを操作するシステム)を用いての発表となります。(スライドは使用できません。)

2-2. データ受付

- 1) ファイル名は「演題番号演者名.ppt」としてください。必ずバックアップ用のデータも、 お持ちくださるようお願い致します。
- 2) ご講演の一つ前のセッション開始までに、必ず PC 受付にて試写を終えて頂きますようお願い致します。
- 3) PC 受付では、PC 本体 (Windows または Macintosh) あるいは、メディア (CD-R また は USB メモリー) で受付させて頂きます。
- 4) <u>メディア持ち込みの場合</u>、受付したデータは発表用 PC にインストールします。発表用 PC の OS は Windows XP、Vista、Windows 7 で、アプリケーションは PowerPoint 2000 ~2010 です。発表後のデータは、シンポジウム終了後に事務局で削除致します。
- 5) PC 本体持ち込みの場合、Windows、Macintosh 両方共に可能です。
 - ・外部モニター接続端子 (MiniD-sub15 ピン) を確認の上、コネクタを必要とする場合 は必ず持参ください。AC アダプターは忘れないようお願い致します。
 - ・予め、スクリーンセイバーならびに省電力設定は【なし】にしてください。
 - ・PC 本体持込の場合でも、CD-R・USB メモリーに保存したバックアップデータをご用意ください。
- 6) 動画のある方やアニメーション効果を多用される場合は、ご自身の PC をご持参ください。

3. ポスターセッションについて

- 3-1. ポスター会場
 - 多目的スペース
- 3-2. ポスター貼付
 - ・5月17日(金)9時から
 - ・通知されたポスター番号に従い、掲示をお願い致 します。
- 3-3. ポスター発表
 - ・ポスターは2日間同一ポスターの貼付となります。
 - 演題番号 P-1~P-21 は 17 日(金)の発表、P-22
 ~P-41 は 18 日(土)の発表となります。
- 3-4. 貼付パネル
 - ・パネルの大きさは全体で縦 240cm×横 90cm です。



(演題番号は事務局準備)

・演題名・演者名・所属名は縦 20cm×横 70cm、本文は縦 220cm×横 90cm になっております。

3-5. ポスター撤去

- ・5月18日(金)14時30分から17時00分まで
- ・ポスターの撤去は各位の責任で行ってください。時間内に撤去されないポスターは事務局 にて処分させていただきますので、予めご了承ください。

4. 問合せ先

第 11 回幹細胞シンポジウム 事務局 久保田美和子

(筑波大学医学医療系血液内科)

e-mail:m-kubota@md.tsukuba.ac.jp Tel:029-853-3127 Fax:029-853-8079 〒305-8575 茨城県つくば市天王台 1-1-1

幹細胞シンポジウムホームページ

http://www.celldiff.med.keio.ac.jp/simpo.html

Registration Hours and PC/Data Registration

Registration Hours : May 17 (Fri) 9:00am

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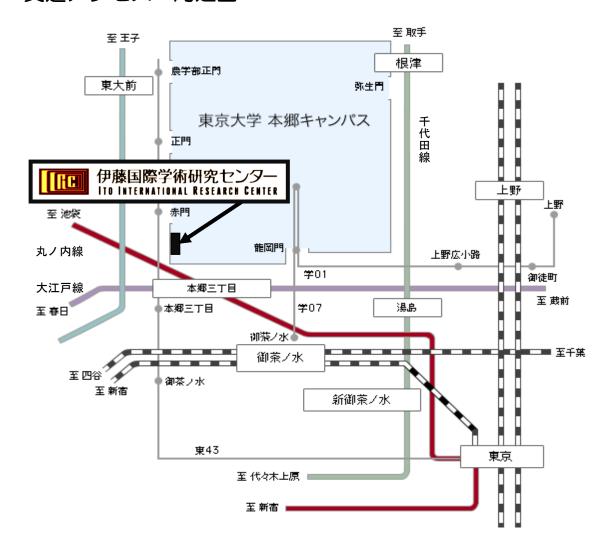
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PC/Data Registration:

- 1. Please check your presentation date and time, and bring your PC/Data to the PC desk next to the registration desk at least one session prior to your scheduled lecture.
- 2. Please bring backup of your presentation data (USB flash memory). Only the software "PowerPoint" is allowed.
- 3. Please check your PC's "MiniDsub-15 pin". If your PC doesn't have pins, please bring a converting adaptor. **
 MiniDsub-15 pin is a junction part of a cable which connects your PC with a projector.
- 4. If you prefer to bring your own PC for the presentation, please do not fail to bring your AC adapter.



交通アクセス・周辺図



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〒113-0033 東京都文京区本郷 7-3-1 03-5841-0779

- ●地下鉄 丸ノ内線 本郷三丁目駅 徒歩8分
- ●地下鉄 大江戸線 本郷三丁目駅 徒歩6分
- ●地下鉄 千代田線 湯島駅または根津駅 徒歩15分
- ●バス 東京駅丸の内北口・・・「東43荒川土手操車所前」行・・・東大赤門前下車
- ●バス 上野駅前・・・「学01東大構内」行・・・東大龍岡門下車
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