### **Poster List**

#### **One-minute poster presentation**

17:15-18:20 Sep. 4 (Thu), main hall, Kumamoto City Medical Association Hall

#### **Poster session**

18:30-21:00 Sep. 4 (Thu), Poster Session Venue, Kumamoto City Medical Association Hall 12:20-14:20 Sep. 5 (Fri), Poster Session Venue, Kumamoto City Medical Association Hall

#### 1

### Analysis of long range chromatin interactions of the *ESR1* locus in breast cancer under estrogen deprivation

<u>Mohamed Osama Abdalla</u>, Noriko Saitoh, Saori Tomita and Mitsuyoshi Nakao Institute of Molecular Embryology and Genetics, Kumamoto University, Kumamoto, Japan

#### 2

#### Analysis of Tsukushi role during chick somitogenesis

<u>Uzzal Kumar Acharjee<sup>1,2</sup></u>, Ryu Gejima<sup>1</sup>, Athary Felemban<sup>1</sup>, M. Ashrafuzzaman Riyadh<sup>1</sup>, Kunimasa Ohta<sup>1</sup> <sup>1</sup>Department of Developmental Neurobiology, Graduate School of Life Sciences, Kumamoto University; <sup>2</sup>HIGO program, Kumamoto University, Japan

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#### Identification of bipotential hemogenic endothelial cells from embryonic stem cell culture

Tanzir Ahmed, Saeka Hirota, Kiyomi Tamura and Minetaro Ogawa

Department of Cell Differentiation, Institute of Molecular Embryology and Genetics, Kumamoto University, Kumamoto, Japan

#### 4

#### Histone demethylase LSD1 regulates metabolism in skeletal muscle cells

Kotaro Anan, Shinjiro Hino, Akihisa Sakamoto, Katsuya Nagaoka, Ryuta Takase, and Mitsuyoshi Nakao

Department of Medical Cell Biology, Institute of Molecular Embryology and Genetics, Kumamoto University, Kumamoto, Japan

#### 5

#### The endoplasmic reticulum-oriented drug development for familial amyloid polyneuropathy

<u>Keisuke Chosa<sup>1</sup></u>, Ruiko Yamakawa<sup>1</sup>, Takashi Sato<sup>1</sup>, Takeshi Yokoyama<sup>2</sup>, Mineyuki Mizuguchi<sup>2</sup>, Mary Ann Suico<sup>1</sup>, Tsuyoshi Shuto<sup>1</sup>, Hirofumi Kai<sup>1</sup>

<sup>1</sup>Department of Molecular Medicine, Faculty of Medical and Pharmaceutical Sciences, Kumamoto University, 5-1 Oe-honmachi, Kumamoto 862-0973, Japan; <sup>2</sup>Faculty of Pharmaceutical Sciences, Toyama Medical and Pharmaceutical University, Toyama 903-0194, Japan.

#### 6

#### Akhirin is involved in the neural stem cell regulation in the mouse spinal cord

<u>Athary Felemban<sup>1,2,3</sup></u>, Rie Kawano<sup>1</sup>, Xiaohong Song<sup>1,2</sup>, Hideaki Tanaka<sup>1,2</sup>, Kunimasa Ohta<sup>1</sup> <sup>1</sup>Dep. Dev. Neurobiol., Grad. Sch. Life Sci., Kumamoto Univ.; <sup>2</sup>GCOE, Kumamoto Univ.; <sup>3</sup>Ministry of H. Edu., Saudi Arabia

#### 7

### New type of Sendai virus vector provides transgene-free iPS cells derived from chimpanzee blood

<u>Yasumitsu Fujie<sup>1</sup></u>, Noemi Fusaki<sup>2,3,7</sup>, Tomohiko Katayama<sup>1</sup>, Makoto Hamasaki<sup>1</sup>, Yumi Soejima<sup>1</sup>, Minami Soga<sup>1</sup>, Hiroshi Ban<sup>2</sup>, Mamoru Hasegawa<sup>2</sup>, Satoshi Yamashita<sup>4</sup>, Shigemi Kimura<sup>5</sup>, Hirofumi Akari<sup>6</sup> and Takumi Era<sup>1</sup>

<sup>1</sup>Department of Cell Modulation, IMEG, Kumamoto Univ., Kumamoto, Japan; <sup>2</sup>DNAVEC Corporation, Ibaragi, Japan; <sup>3</sup>Precursory Research for Embryonic Science and Technology, JST, Saitama, Japan; <sup>4</sup>Department of Neurology, Graduate School of Medical Sciences, Kumamoto Univ., Kumamoto, Japan; <sup>5</sup>Department of Child Development, Graduate School of Medical Science, Kumamoto, Japan; <sup>6</sup>Section of Comparative Microbiology and Immunology, Center for Human Evolution Modeling Research, Primate Research Institute, Kyoto Univ., Aichi, Japan; <sup>7</sup>Department of Ophthalmology, Keio Univ. School of Medicine, Tokyo, Japan.

# VITAMIN C DEFICIENCY EXACERBATES RESPIRATORY FUNCTION AND EMPHYSEMA IN EPITHELIAL NA<sup>+</sup> CHANNEL-OVEREXPRESSING MICE

<u>Haruka Fujikawa<sup>1</sup></u>, Yuki Sakaguchi<sup>1</sup>, Tsuyoshi Shuto<sup>1</sup>, Hirofumi Nohara<sup>1,2</sup>, Shunsuke Kamei<sup>1,2</sup>, Yoshitaka Kondo<sup>3</sup>, Mary Ann Suico<sup>1</sup>, Akihito Ishigami<sup>3,4</sup>, Hirofumi Kai<sup>1,2</sup>

<sup>1</sup>Department of Molecular Medicine, Graduate School of Pharmaceutical Sciences, Kumamoto University; <sup>2</sup>Program for Leading Graduate Schools "HIGO (Health life science: Interdisciplinary and Glocal Oriented) Program", Kumamoto University; <sup>3</sup>Department of Aging Regulation, Tokyo Metropolitan Institute of Gerontology, Tokyo; <sup>4</sup>Department of Biochemistry, Faculty of Pharmaceutical Sciences, Toho University, Chiba

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### Induction of non-coding RNAs from a chromatin domain including the *ESR1* locus in breast cancer cells under estrogen deprivation

<u>Saori Fujiwara<sup>1,2</sup></u>, Noriko Saitoh<sup>1</sup>, Saori Tomita<sup>1</sup>, Mohamed Osama Abdalla<sup>1</sup>, Hirotaka Iwase<sup>2</sup> and Mitsuyoshi Nakao<sup>1</sup>

<sup>1</sup>Department of Medical Cell Biology, Institute of Molecular Embryology and Genetics, Kumamoto University, Kumamoto, Japan; <sup>2</sup>Department of Breast and Endocrine Surgery, Graduate School of Medical Sciences, Kumamoto University, Kumamoto, Japan

#### 10

Podocyte-specific p53 deletion promotes progression of Alport syndrome by enhancement of podocyte proliferation and migration

<u>Ryosuke Fukuda</u>, Yukari Kai, Kohei Omachi, Keishi Motomura, Tomoaki Koga, Kosuke Koyama, Mary Ann Suico, Tsuyoshi Shuto, and Hirofumi Kai

Department of Molecular Mesicine, Graduate School of Pharmaceutical Science, Kumamoto University, Kumamoto, Japan

#### 11

#### Analysis of reprogramming and iPS cells derived from Fibrodysplasia ossificans progressiva

<u>Makoto Hamasaki<sup>1</sup></u>, Noemi Fusaki<sup>2</sup>, Yasuharu Nakashima<sup>3</sup>, Hirokazu Furuya<sup>4</sup>, Nobuhiko Haga<sup>5</sup> and Takumi Era<sup>1</sup>

<sup>1</sup>Department of Cell Modulation, Institute of Molecular Embryology and Genetics, Kumamoto University; <sup>2</sup>JST PRESTO and Ophthalmology, Keio University; <sup>3</sup>Department of Orthopaedic Surgery, Kyushu University School of Medicine; <sup>4</sup>Department of Aging Science, Cardiology and Neurology, Kochi University School of Medicine; <sup>5</sup>Rehabilitation Medicine, Graduate School of Medicine.

#### 12

### Analysis of the role of angiogenic factors in endothelial cells derived from iPS cells of moyamoya disease patients

<u>Shuji Hamauchi<sup>1</sup></u>, Akihiko Katayama<sup>2</sup>, Ippei Date<sup>2</sup>, Takumi Era<sup>2</sup>, Hideo Shichinohe<sup>1</sup>, Haruto Uchino<sup>1</sup>, Naoki Nakayama<sup>1</sup>, Ken Kazumata<sup>1</sup>, Kiyohiro Houkin<sup>1</sup>

<sup>1</sup>Department of neurosurgery, Hokkaido University, Hokkaido, Japan; <sup>2</sup>Department of Cell Modulation, Institute of Molecular Embryology and Genetics, *Kumamoto* University

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## Glucagon-GFP knock-in mice, a model to analyze development, differentiation and proliferation of islet α-cells and intestinal L-cells

Yoshitaka Hayashi

Research Institute of Environmental Medicine, Nagoya University, Nagoya, Japan

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## SUV420H2 expression suppresses breast cancer cell invasion through expression of the SH2 domain-containing focal adhesion protein tensin-3

Yoshimi Shinchi, Ayaka Matsumoto, Yuhki Yokoyama, Nariki Matsuura, and <u>Miki Hieda</u> School of Medicine and Health Science, Osaka University, Osaka, Japan

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#### The inhibitors for ribosomal RNA synthesis activate the hippo pathway effectors YAP/TAZ Hiroki Hikasa and Akira Suzuki

Medical Institute of Bioregulation, Kyushu University, Fukuoka, Japan

#### Actin regulates cell reprogramming

<u>Takashi Ikeda</u>, Takafusa Hikichi, Koji Kitazawa, Akira Watanabe, Akitsu Hotta and Shinji Masui Center for iPS Cell Research and Application, Kyoto University, Kyoto, Japan

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#### Human Fibroblast Reprogramming by Lactic Acid Bacteria

Naofumi Ito, Rie Kawano and Kunimasa Ohta

Graduate School of Life Sciences, Kumamoto University, Kumamoto, Japan

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#### Generation of human iPS cell lines labeling nephron progenitors

Yusuke Kaku, Atsuhiro Taguchi and Ryuichi Nishinakamura

Institute of Molecular Embryology and Genetics, Kumamoto University, Kumamoto, Japan

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### Aberrant splicing of zinc transporter ZIP2 causes mucus hypersecretory phenotype in CF airway epithelial cells

Shunsuke Kamei<sup>1,2</sup>, Tsuyoshi Shuto<sup>1,2</sup>, Keiko Shuto<sup>3</sup>, Haruka Fujikawa<sup>1</sup>, Hirofumi Nohara<sup>1,2</sup>, Chizuru Matsumoto<sup>1</sup>, Yuki Sakaguchi<sup>1</sup>, Mary Ann Suico<sup>1,2</sup>, Ray A. Caldwell<sup>4</sup>, Dieter C. Gruenert<sup>5,6</sup>, Hirofumi Kai<sup>1,2</sup>

<sup>1</sup>Department of Molecular Medicine, Graduate School of Pharmaceutical Sciences, Kumamoto University, Kumamoto 862-0973, Japan; <sup>2</sup>Program for Leading Graduate Schools "HIGO (Health life science: Interdisciplinary and Glocal Oriented) Program", Kumamoto University, Kumamoto 862-0973, Japan; <sup>3</sup>Laboratory of Pharmacology, Sojo University Pharmacy School, Kumamoto 860-0082, Japan; <sup>4</sup>Cystic Fibrosi/Pulmonary Research & Treatment Center, University of North Carolina, Chapel Hill, NC 27599-7248, USA; <sup>5</sup>Departments of Otolaryngology - Head and Neck Surgery and Laboratory Medicine, University of California, San Francisco, San Francisco, CA 94115, USA; <sup>6</sup>Department of Pediatrics, University of Vermont College of Medicine, Burlington, VT 05405, USA

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### Glomerular Proteome Analysis for Establishment of New Therapeutic Strategy in Chronic Kidney Disease

<u>M. Kamura</u>, K. Koyama, K. Omachi, R. Fukuda, Y. Kai, M A. Suico, T. Shuto, and H. Kai Department of Molecular Medicine, Kumamoto University, Kumamoto, Japan

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## Cadherin-7 joins dorsal-ventral patterning of the chick embryonic spinal cord through sonic hedgehog signaling

Rie Kawano, Kunimasa Ohta, Naofumi Ito

Department of Developmental Neurobiology, Faculty of Life Science, Kumamoto University

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#### The identification of master transcription factors in human corneal epithelial cells

<u>Koji Kitazawa<sup>1,2</sup></u>, Takafusa Hikichi<sup>2</sup>, Takashi Ikeda<sup>2</sup>, Shinji Masui<sup>2</sup>, Takahiro Nakamura<sup>1</sup>, Morio Ueno<sup>1</sup>, Satoshi Kawasaki<sup>1</sup> and Shigeru Kinoshita<sup>1</sup>

<sup>1</sup>Department of Ophthalmology, Kyoto Prefectural University of Medicine, Kyoto, Japan; <sup>2</sup>Center for iPS Cell Research and Application, Kyoto University, Kyoto, Japan

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#### Bacterial c-di-GMP modulates HSCs and their niche through STING

Hiroshi Kobayashi<sup>1,2</sup>, Keiyo Takubo<sup>1,2</sup>, Toshio Suda<sup>1</sup>

<sup>1</sup>Department of Cell Differentiation, the Sakaguchi Laboratory of Developmental Biology, Keio University School of Medicine, Tokyo, Japan; <sup>2</sup>Department of Stem Cell Biology, National Center for Global Health and Medicine, Tokyo, Japan

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#### Systematic profiling of spatiotemporal tissue and cellular stiffness in the developing brain

Misato Iwashita and Yoichi Kosodo

Department of Anatomy, Kawasaki Medical School, Kurashiki, Japan

#### A possible application of IncuCyte on the analysis of life span in C. eleganse

Masataka Moriuchi, Tsuyoshi Shuto, Yoshio Nakano, Mary Ann Suico, Hirofumi Kai Department of Molecular Medicine, Graduate School of Pharmaceutical Sciences, Kumamoto University

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#### GLP-1 RECEPTOR AGONIST EXTENDIN-4 EXACERBATES MUCUS HYPERSECRETORY PHENOTYPE IN EPITHELIAL NA<sup>+</sup> CHANNEL-OVEREXPRESSING CELLS AND MICE

<u>Hirofumi Nohara<sup>1,2</sup></u>, Tsuyoshi Shuto<sup>1</sup>, Shunsuke Kamei<sup>1,2</sup>, Haruka Fujikawa<sup>1</sup>, Mary Ann Suico<sup>1</sup>, Ray A. Caldwell<sup>3</sup>, Dieter C. Gruenert<sup>4,5</sup>, Hirofumi Kai<sup>1,2</sup> <sup>1</sup>Department of Molecular Medicine, Graduate School of Pharmaceutical Sciences, Kumamoto University; <sup>2</sup>Program for

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### Treatment approach for hypophosphatasia via genetically modified patient's iPS cells and iPS-MSCs

<u>Yasuaki Oda</u>, Mika Tadokoro, Shunsuke Yuba, Hajime Ohgushi, Takeshi Taketani, and Takumi Era Institute of Molecular Embryology and Genetics, Kumamoto University, Kumamoto, Japan; Health Research Institute, National Institute of Advanced Industrial Science and Technology, Hyogo, Japan; Division of Blood Transfusion, Shimane University Hospital, Shimane, Japan

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### Influence of chronic glucocorticoid exposure on proliferation and differentiation of rat neural stem cells in vitro

<u>Haruki Odaka</u>, Tadahiro Numakawa, Aya Yoshimura, Naoki Adachi, Shingo Nakajima, Takumi Era, Takafumi Inoue, Hiroshi Kunugi

Department of Mental Disorder Research, National Institute of Neuroscience, National Center of Neurology and Psychiatry, Tokyo, Japan; Department of Life Science and Medical Bioscience, School of Advanced Science and Engineering, Waseda University Tokyo, Japan; Division of Laboratory Animals Resources, National Institute of Neuroscience, National Center of Neurology and Psychiatry Tokyo, Japan; Department of Cell Modulation, Institute of Molecular Embryology and Genetics, Kumamoto University, Kumamoto, Japan.

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#### A cost effective intestinal epithelial differentiation system from human iPS cells

Soichiro Ogaki, Mayu Morooka, Kaito Otera and Shoen Kume

Institute of Molecular Embryology and Genetics, Kumamoto University, Kumamoto, Japan

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Actin cytoskeleton dynamics links Rho signaling with Yap/Taz to support human ES cell survival Masatoshi Ohgushi, Maki Minaguchi and Yoshiki Sasai

Human StemCell Technology, CDB, RIKEN, Japan

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### Tsukushi maintains the growth and undifferentiated properties of neuronal stem/progenitor cells

Kunimasa Ohta, Naofumi Ito, Felemban Athary Abdulhaleem M, Yohei Shinmyo, Hideaki Tanaka, and Ayako Ito

Graduate School of Life Sciences, Kumamoto University, Kumamoto, Japan

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## Intra-Cellular Signaling pathways affected by the Genetic background in mouse embryonic stem cells

Satoshi Ohtsuka and Hitoshi Niwa

Lab. For Pluripotent Stem Cell Studies RIKEN CDB, Kobe, Japan

# The effect of optimized weak current on Alzheimer's Disease pathology <u>Go Okita</u> and Hirofumi Kai

Department of Molecular Medicine, Kumamoto University, Kumamoto, Japan

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#### Structural basis of disulfide bond formation in the mammalian endoplasmic reticulum

<u>Masaki Okumura<sup>1</sup></u>, Kentaro Noi<sup>2,3</sup>, Shoji Masui<sup>1</sup>, Shingo Kanemura<sup>1</sup>, Teru Ogura<sup>2,3</sup>, and Kenji Inaba<sup>1,3</sup> <sup>1</sup>Institute of Multidisciplinary Research for Advanced Materials, Tohoku University, Sendai, Japan; <sup>2</sup>Institute of Molecular Embryology and Genetics, Kumamoto University, Kumamoto, Japan, <sup>3</sup>CREST, JST

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### Visualization of dynamics of the 26S proteasome and protesome-substrate complexes by high-speed AFM

<u>Takashi Okuno<sup>1,5</sup></u>, Kentaro Noi<sup>2,5</sup>, Akiko Okawa<sup>2</sup>, Hikaru Tsuchiya<sup>3</sup>, Yasushi Saeki<sup>3</sup>, Kazunobu Takahashi<sup>4</sup>, Tomonao Inobe<sup>4</sup>, Kunitoshi Yamanaka<sup>2,5</sup> and Teru Ogura<sup>2,5</sup>

<sup>1</sup>Fac. Sci., Yamagata Univ.; <sup>2</sup>Inst. Mol. Embryol. Genet., Kumamoto Univ.; <sup>3</sup>Lab. of Protein Metab., Tokyo Metro. Inst. of Med. Sci.; <sup>4</sup>Frontier Res. Core for Life Sci., Univ. of Toyama; <sup>5</sup>CREST, JST.

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### Characterization of the Intracellular Behavior of COL4A5 and Clarification of Molecular Mechanism of Alport Syndrome

<u>K Omachi</u>, M Kamura, K Teramoto, R Fukuda, Y Kai, M A Suico, T Shuto, and H Kai Department of Molecular Medicine, Kumamoto University, Kumamoto, Japan

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#### Easy purification of human iPSC-derived immature intestinal epithelial cells

Kaito Otera, Soichiro Ogaki, Shoen Kume

Institute of Molecular Embryology and Genetics, Kumamoto University, Kumamoto, Japan

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#### Draxin from neocortical neurons controls thalamocortical projections into the neocortex

<u>M. Asrafuzzaman Riyadh<sup>1</sup></u>, Yohei Shinmyo<sup>1,2</sup>, Giasuddin Ahmed<sup>1</sup>, Iftekhar Bin Naser<sup>1</sup>, Mahmud Hossain<sup>1</sup>, Kunimasa Ohta<sup>1</sup>, Hideaki Tanaka<sup>1</sup>

<sup>1</sup>Dep. Dev. Neurobiol., Grad. Sch. Life Sci., Kumamoto Univ.; <sup>2</sup>Department of Biophysical Genetics, Graduate School of Medical Sciences, Kanazawa University

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#### Determining c-Myb protein levels can isolate functional hematopoietic stem cell subtypes

<u>Hiroshi Sakamoto<sup>1</sup></u>, Naoki Takeda<sup>2</sup>, Fumio Arai<sup>3</sup>, Kentaro Hosokawa<sup>3</sup>, Paloma Garcia<sup>4</sup>, Toshio Suda<sup>3</sup>, Jon Frampton<sup>4</sup>, and Minetaro Ogawa<sup>1</sup>

<sup>1</sup>Dep. Cell Diff., IMEG, Kumamoto Univ., Kumamoto City, Japan; <sup>2</sup>Div. Transgen. Tech., IRDA, Kumamoto Univ., Kumamoto City, Japan; <sup>3</sup>Dep. Cell Diff., School of Medicine, Keio Univ., Tokyo, Japan; <sup>4</sup>Col. Med. Dent. Science, Inst. Biomedical Research, Univ. Birmingham, Birmingham, UK

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#### Monoamine mediating signals control the late-stage pancreatic beta cell differentiation

<u>Daisuke Sakano<sup>1</sup></u>, Nobuaki Shiraki<sup>1</sup>, Kazuhide Kikawa<sup>1,2</sup>, Taiji Yamazoe<sup>1</sup>, Masateru Kataoka<sup>1</sup>, Kahoko Umeda<sup>1,5</sup>, Kimi Araki<sup>3</sup>, Shirou Matsumoto<sup>2</sup>, Naomi Nakagata<sup>4</sup>, Fumio Endo<sup>2</sup>, Kazuhiko Kume<sup>1,6</sup>, Motonari Uesugi<sup>7</sup> and Shoen Kume<sup>1,5</sup>

<sup>1</sup>IMEG, Kumamoto Univ.; <sup>2</sup>Graduate School of Medical Sciences, Kumamoto Univ.; <sup>3</sup>IRDA, Kumamoto Univ.; <sup>4</sup>CARD, Kumamoto Univ.; <sup>5</sup>HIGO Program, Kumamoto Univ.; <sup>6</sup>Graduate School of Pharmaceutical Sciences, Nagoya City Univ.; <sup>7</sup>IWPI-iCeMS, Kyoto Univ.

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## Adipose tissue-derived peptide, CCHamide-2, controls the secretion and synthesis of Insulin in *Drosophila melanogaster*

<u>Hiroko Sano<sup>1</sup></u>, Akira Nakamura<sup>2</sup>, Hiroshi Ishimoto<sup>3</sup>, Azusa Kamikouchi<sup>3</sup>, Michael Texada<sup>4</sup>, Jim Truman<sup>4,5</sup>, and Masayasu Kojima<sup>1</sup>

<sup>1</sup>Department of Molecular Genetics, Institute of Life Sciences, Kurume University, Kurume, Japan; <sup>2</sup>Institute of Molecular Embryology and Genetics, Kumamoto University, Kumamoto, Japan; <sup>3</sup>Graduate School of Science, Nagoya University, Nagoya, Japan; <sup>4</sup>Janelia Farm Research Campos, Ashburn, VA, USA; <sup>5</sup>Howard Hughes Medical Institute, USA.

#### Tead and Myc cooperatively regulate cell competition in mammalian cells

Takashi Sato, Hiroshi Mamada, and Hiroshi Sasaki

Department of Cell Fate Control, Institute of Molecular Embryology and Genetics, Kumamoto University, Kumamoto, Japan

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### PRDM14 accelerates reversion of EpiLCs to ESCs through the TET-BER-dependent active demethylation

Naoki Okashita and Yoshiyuki Seki

Department of Bioscience, School of Science and Technology, Kwansei Gakuin University, Hyogo, Japan

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### Establishment of disease model using induced pluripotent stem cells derived from Niemann-Pick disease type C

<u>Minami Soga<sup>1</sup></u>, Makoto Hamasaki<sup>1</sup>, Kaori Yoneda<sup>2</sup>, Kimitoshi Nakamura<sup>2</sup>, Muneaki Matsuo<sup>3</sup>, Tetsumi Irie<sup>4</sup>, Fumio Endo<sup>2</sup>, and Takumi Era<sup>1</sup>

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### Sexually dimorphic gene, *MafB*, regulates masculinization of the external genitalia

Kentaro Suzuki and Gen Yamada

Department of Developmental Genetics, Institute of Advanced Medicine, Wakayama Medical University (WMU), Kimiidera, Wakayama, Japan

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#### The role of thalamic afferent-derived factors in cortical development

Haruka Sato-Takemoto<sup>1</sup>, Jun Hatakeyama<sup>1</sup>, Nobuhiko Yamamoto<sup>2</sup> and <u>Kenji Shimamura<sup>1</sup></u> <sup>1</sup>Institute of Molecular Embryology and Genetics, Kumamoto University, Kumamoto, Japan; <sup>2</sup>Graduate School of Frontier Biosciences, Osaka University, Suita, Japan

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#### The role of Foxo1 transcription factor in vascular development

Kiyomi Tsuji-Tamura and Minetaro Ogawa

Department of Cell Differentiation, Institute of Molecular Embryology and Genetics, Kumamoto University, Kumamoto, Japan

#### **48**

## Sall4 is essential for mouse primordial germ cell specification by suppressing the somatic cell program genes

Satomi S. Tanaka, Yasuka L. Yamaguchi and Ryuichi Nishinakamura

Department of Kidney Development, Institute of Molecular Embryology and Genetics, Kumamoto University, Kumamoto, Japan

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### Development of culture method for maintenance of rat metanephric mesenchyme progenitor cells

Shunsuke Tanigawa<sup>1,2</sup>, Nirmala Sharma<sup>3</sup>, Terry P. Yamaguchi<sup>3</sup>, Ryuichi Nishinakamura<sup>1,2</sup> and Alan O. Perantoni<sup>3</sup>

<sup>1</sup>Department of Kidney Development, Institute of Molecular Embryology and Genetics, <sup>2</sup>Program for leading graduate schools, HIGO program, Kumamoto University, Kumamoto 860-0811, Japan; <sup>3</sup>Cancer and Developmental Biology Laboratory, Center for Cancer Research, Frederick National Laboratory for Cancer Research, MD, USA.

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#### Possible mechanism of tumor suppression via Chk2-directed mitotic cell death

Yuki Tanoue and Satoshi Tateishi

Institute of Molecular Embryology and Genetics, Kumamoto University, Kumamoto, Japan

# INCREASED IL-17C PRODUCTION BY THE TLR3 LIGAND POLY(I:C) IN PRIMARY CYSTIC FIBROSIS AIRWAY EPITHELIAL CELLS

<u>Yukihiro Tasaki<sup>1</sup></u>, Keiko Ueno-Shuto<sup>2</sup>, Tsuyoshi Shuto<sup>1</sup>, Shunsuke Kamei<sup>1,3</sup>, Onuki Kouhei<sup>1</sup>, Mary Ann Suico<sup>1</sup>, Hirofumi Kai<sup>1,3</sup>

<sup>1</sup>Department of Molecular Medicine, Graduate School of Pharmaceutical Sciences, Kumamoto University; <sup>2</sup>Laboratory of Pharmacology, Sojo University Pharmacy School, Kumamoto 860-0082, Japan; <sup>3</sup>Program for Leading Graduate Schools "HIGO (Health life science: Interdisciplinary and Glocal Oriented) Program", Kumamoto University

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## A subpopulation of EpCAM-positive cancer cells is involved in chemoresistance and prevents platinum anticancer drug-induced apoptosis in epithelial ovarian cancer

Shingo Tayama, Takeshi Motohara, Francisca Tjhay, Dashdemberel Narantuya, Isao Sakaguchi, Hironori Tashiro, Hidetaka Katabuchi

Department of Obstetrics and Gynecology Faculty of Life Sciences, Kumamoto University, Kumamoto, Japan

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## Involvement of CD44 variant, a cancer stem cell marker, in peritoneal metastasis and poor prognosis in patients with epithelial ovarian cancer

<u>Francisca Tjhay</u>, Takeshi Motohara, Shingo Tayama, Dashdemberel Narantuya, Isao Sakaguchi, Hironori Tashiro, Hidetaka Katabuchi

Department of Obstetrics and Gynecology, Faculty of Life Sciences, Kumamoto University, Kumamoto, Japan

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## Low-intensity direct electrical current stress suppresses pro-inflammatory cytokines expression via inhibition of multiple signaling pathways

<u>Yu Tsurekawa</u>, Ihori Shitanda, Shingo Matsuyama, Kazunori Mitsutake, Ryosuke Fukuda, Yukari Kai, Mary Ann Suico, Tsuyoshi Shuto, Hirohumi Kai

Institute of Molecular Medicine, Kumamoto University, Kumamoto, Japan

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#### S-adenosylmethionine is crucial for maintaining human pluripotent stem cells

<u>Tomonori Tsuyama<sup>1,3</sup></u>, Nobuaki Shiraki<sup>1</sup>, Yasuko Shiraki<sup>2</sup>, Fumiaki Obata<sup>4,5</sup>, Masayuki Miura<sup>4,5</sup>, Kazuhiko Kume<sup>1,6</sup>, Fumio Endo<sup>2</sup> and Shoen Kume<sup>1,3</sup>

<sup>1</sup>Department of Stem Cell Biology, Institute of Molecular Embryology and Genetics, Kumamoto Univ., Kumamoto, Japan; <sup>2</sup>Department of Pediatrics, Graduate School of Medical Sciences, Kumamoto Univ., Kumamoto, Japan; <sup>3</sup>Program for Leading Graduate Schools "HIGO," Kumamoto Univ., Kumamoto, Japan; <sup>4</sup>Department of Genetics, Graduate School of Pharmaceutical Sciences, The Univ. of Tokyo, Tokyo, Japan; <sup>5</sup>CREST, Japan Science and Technology Agency, Tokyo, Japan; <sup>6</sup>Department of Neuropharmacology, Graduate School of Pharmaceutical Sciences, Nagoya City Univ., Nagoya, Japan

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#### The role of Non-Specific transcription factor in Pluripotent Network

Hiroki Ura and Hitoshi Niwa

Laboratory for Pluipotent Cell Studies, RIKEN Center for Developmental Biology (CDB)

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#### Smad4 is dispensable for self-renewal of mouse embryonic stem cells

Mariko Yamane and Hitoshi Niwa

Laboratory for Pluripotent Stem Cell Studies, RIKEN CDB, Japan

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## Apoptosis-specific p53 co-activator, Aspp1 induces apoptosis in damaged hematopoietic stem cells and prevents malignant transformation

Masayuki Yamashita, Eriko Nitta and Toshio Suda

Department of Cell Differentiation, the Sakaguchi Laboratory of Developmental Biology, Keio University School of Medicine, Tokyo Japan

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#### The nucleocytoplasmic transport system that regulates the cell fate in stem cells and embryos Noriko Yasuhara

National Institute of Biomedical Innovation, Osaka, Japan

#### Functional Analysis of TGF-b signaling pathway in hepatoblasts during mouse hepatic histogenesis

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#### FAM105A modulates the inflammatory response to lipopolysaccharide

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#### Significance of SOX9 gene for transdifferentiation of hepatocyte in liver

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#### The effect of IL-6 on expression of microRNAs in rat embryonic neural stem cells during their differentiation

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