THE ROLE OF NUCLEOPORIN NUP58 DURING CELL DIVISION

○Hartono[1], Masaharu Hazawa[1,3], Firli Rahmah Primula Dewi[1], Akiko Kobayashi[1], Mahmoud Shaaban Mohamed[1] and Richard W. Wong[1,2,3].

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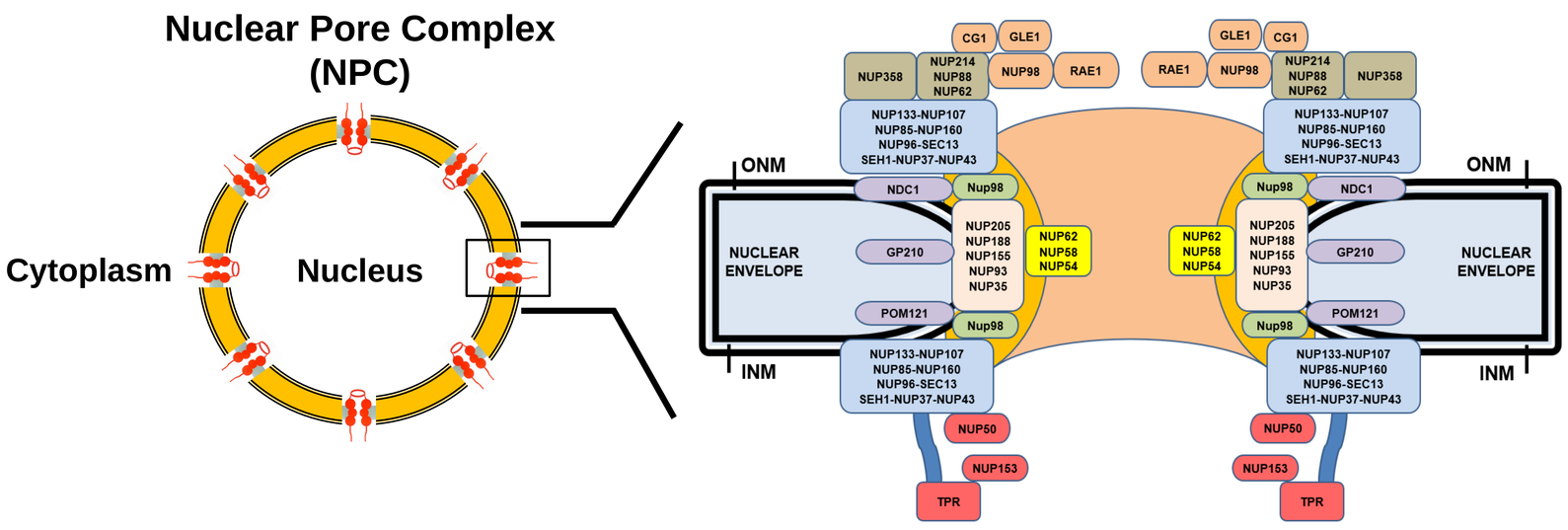
ABSTRACT

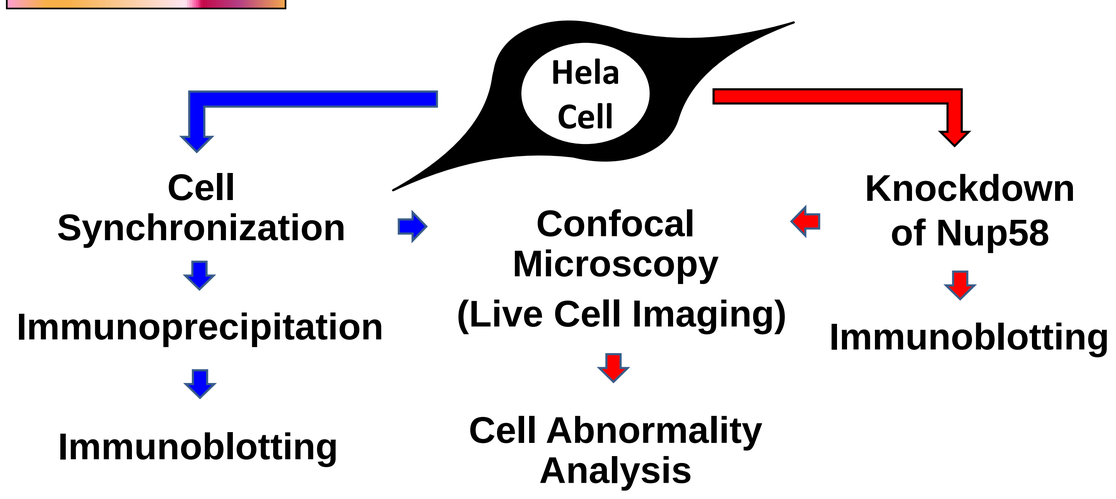
Nuclear pore complexes (NPCs) are transport channels between the nucleus and the cytoplasm. The NPCs are composed by around 30 different proteins, termed nucleoporins (Nups) and each Nup is present in multiple copies. Recently, we and others discovered that several nucleoporins play critical roles during cell division including chromosome condensation, sister chromatid cohesion, kinetochore assembly and spindle formation. Nup58 is a part of the central transport channel of the NPC, which forms a complex protein with other nucleoporins such as Nup62 and Nup54. Recently, we showed that Nup62 plays a novel role in centrosome integrity. Here, we show that Nup62 interacts with Nup58 during cell mitosis. Next, we performed RNA interference-mediated knockdown of Nup58. Currently, we are investigating Nup58 depletion effect in cell cycle.

Keywords: NPC, Nucleoporin, Nup58, mitosis

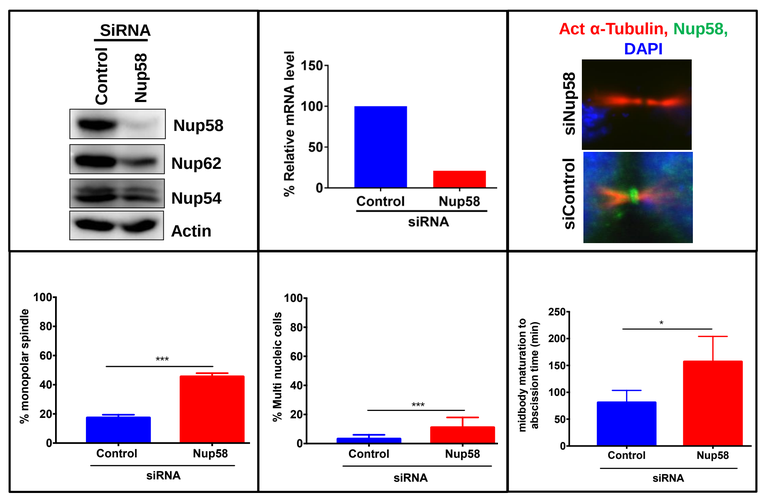
BACKGROUND



METHODS



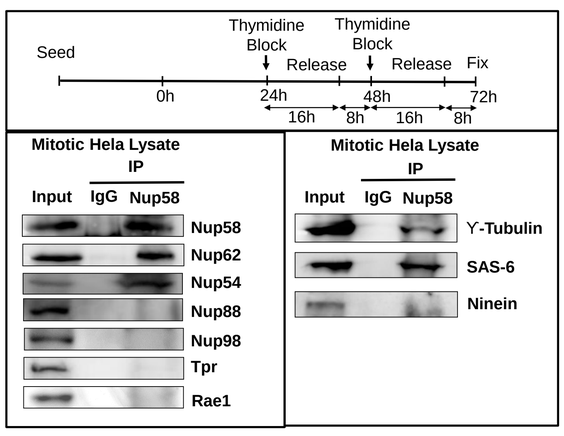
3 Nup58 depletion induced cell abnormality

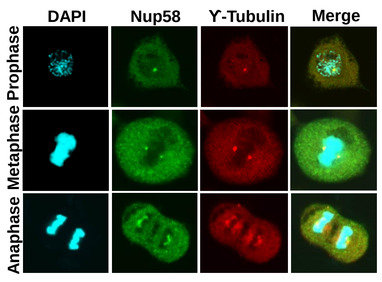


- siRNA-mediated knockdown of Nup58 affected Nup62 and Nup54 protein level
- siRNA-mediated knockdown of Nup58 induced monopolar spindle formation, multi-nuclei cells and delayed cytokinesis

RESULTS

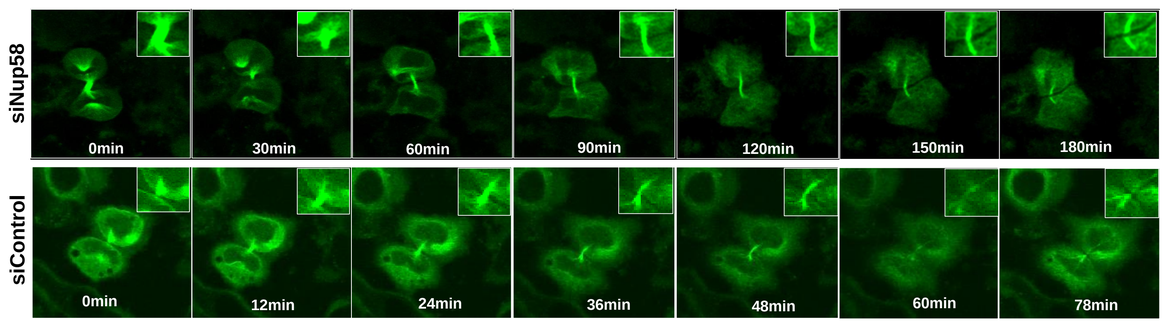
1 Localization and interaction of Nup58 during mitosis





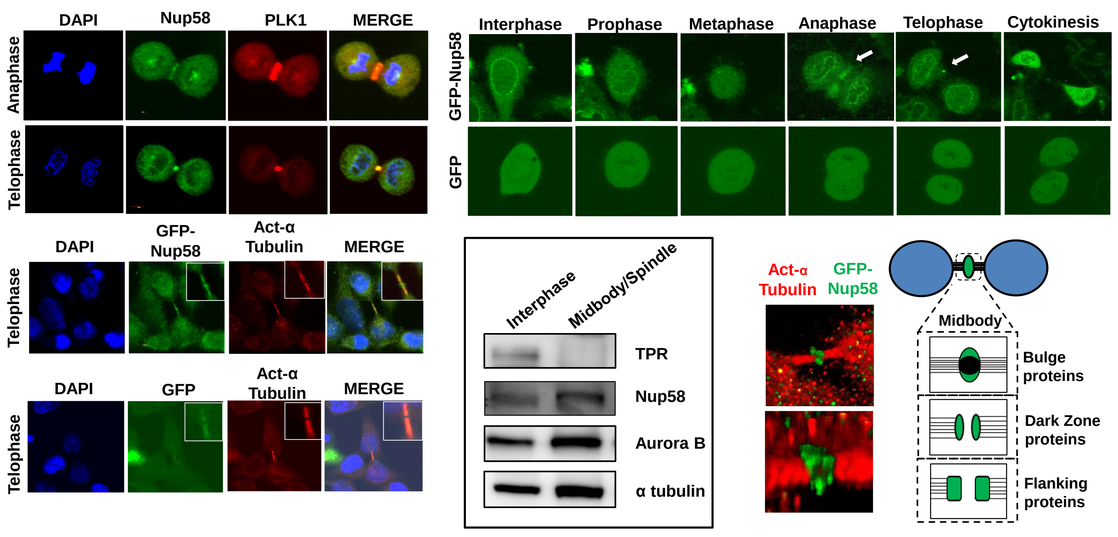
Nup58 localized to the centrosome and interacted with members of Nup62 complex and centrosome markers protein during cell mitosis

4 Nup58 depletion induced cytokinesis delay

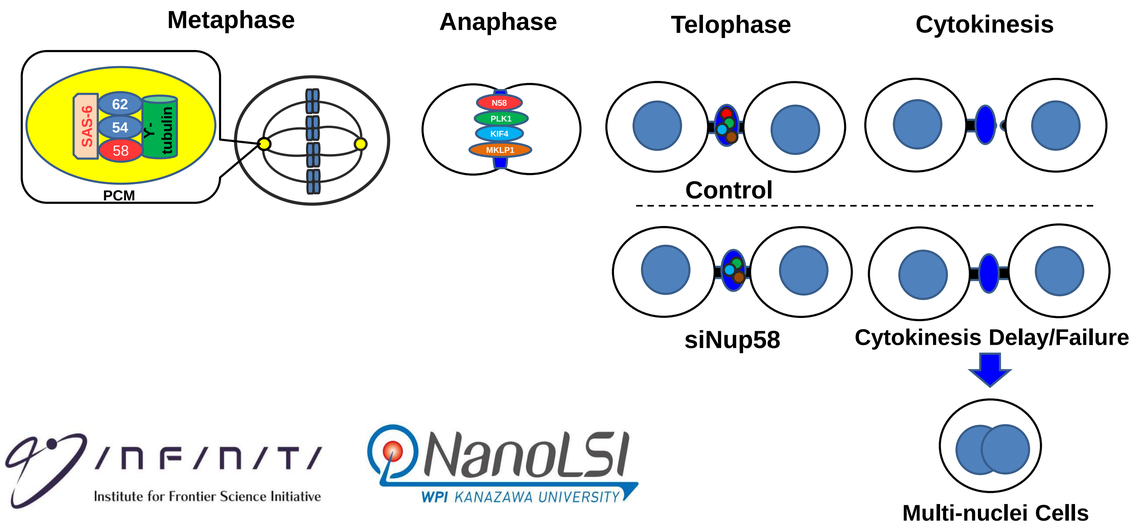


Depletion of Nup58 on HeLa cells expressing stable GFP-α-tubulin leads to prolonged duration between mature midbody formation and final abscission

2 Nup58 localizes at midbody during telophase



5 Conclusion



Tokyo 2018
Cell and Developmental Biology Meeting

第70回 日本細胞生物学会 第51回 日本発生生物学会 合同大会

Joint Annual Meeting of JSDB 51st and JSCB 70th

Cosponsored by the Asia Pacific Developmental Biology Network

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2018. 6. 5 (Tue) ~ 8 (Fri)
Tower Hall Funabori, Tokyo
タワーホール船堀（東京都江戸川区）

Organizers Akihiro Harada (Osaka Univ)
Shigeo Hayashi (RIKEN CDB)

Program Book

Special Lecture

Yoshinori [illegible] (Tokyo Institute of Technology)
2016 Nobel [illegible] in Physiology or Medicine

Plenary Lectures

Pietro De Camilli (Yale University, USA)
Dennis Discher (University of Pennsylvania, USA)
Thomas Lecuit (IBDM, France)
Clifford Tabin (Harvard Medical School, USA)

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Welcome to the Joint Annual Meeting of 70th JSCB and 51st JSDB in Tokyo !

Dear colleagues,

Welcome to the Joint Annual Meeting of 70th JSCB and 51st JSDB co-sponsored by Asia-Pacific Developmental Biology Network to be held on June 5-8 at the Funabori Tower Hall, Tokyo, JAPAN, 2018. This is the fourth joint meeting between these societies and held for the first time in six years since the last joint meeting. Many members of both societies might have been looking forward to attending this joint meeting.

For the Joint Annual Meeting, distinguished speakers have been invited from the United States, Europe, and Asia, and will describe recent exciting developments covering the topics of cell and developmental biology. In particular, Prof. Yoshinori Ohsumi, the Nobel Laureate for his discovery of autophagy in 2016 and a longstanding contributor of JSCB, will give a special lecture for this meeting.

Besides the talks from invited speakers, our program has richer contents than usual meetings, which include Young Scientist Award, Poster Awards, and the joint mixer of young scientists of JSDB and JSCB on June 5. We expect this meeting will provide you with the opportunity to meet and interact with the leading scientists and researchers from different fields, as well as friends, colleagues, and exhibitors.

On behalf of the Organizing Committee, we sincerely hope that this joint meeting will enhance creative interaction among cell biologists and developmental biologists to open the new era of exciting biology.

With best wishes,

Akihiro Harada
Department of Cell Biology,
Graduate School of Medicine,
Osaka University

Shigeo Hayashi
Laboratory for Morphogenetic Signaling,
RIKEN Center for Biosystems Dynamics Research

Conference Chairs of the Joint Annual Meeting

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Jun-An Chen	Institute of Molecular Biology, Academia Sinica, Taiwan

Poster Sessions

P1-001～P1-174 are Poster Award candidate.

Discussion 1: June 6 (Wed) 14:00-15:00 for odd number posters
15:00-16:00 for even number posters

P1-001 *Protogenin* regulates *Homeobox* gene expression in P19 cells through the Wnt signaling

○Yu-Sheng Hung[1], Wei-Chih Kuo[1], Chieh-Yu Chen[2], Wei-Yi Chen[2], Jenn-Yah Yu[1], Ming-Ji Fann[1] (Department of Life Sciences and Institute of Genome Sciences, National Yang-Ming University, Taipei 112, Taiwan[1], Institute of Biochemistry and Molecular Biology, National Yang-Ming University, Taipei 112, Taiwan[2])

P1-002 Analysis of target genomic regions of DNA methyltransferase3aa (Dnmt3aa) in zebrafish

○Masaki Shirai[1], Kazuya Takayama[1], Ikumi Taya[1], Nobuyoshi Shimoda[2], Yutaka Kikuchi[1] (Department of Biological Science, Graduate School of Science, Hiroshima University[1], Department of Regenerative Medicine, National Institute for Longevity Sciences, National Center for Geriatrics and Gerontology[2])

P1-003 Targeted *in vivo* epigenome editing of H3K27me3

○Hiroto S Fukushima, Hiroyuki Takeda, Ryohei Nakamura (University of Tokyo)

P1-004 Regulation of a pan-neural *Sox2* enhancer D1

○Hideaki Iida[1], Masanori Uchikawa[2], Hisato Kondoh[1] (Department of Molecular Biosciences, Faculty of Life Sciences, Kyoto Sangyo University[1], Graduate School of Frontier Biosciences, Osaka University[2])

P1-005 The role of nucleoporin NUP58 during division

○Hartono Hartono[1], Masaharu Hazawa[1,3], Firli Rahmah Primula Dewi[1], Akiko Kobayashi[1], Mahmoud Shaaban Mohamed[1], Richard W. Wong[1,2,3] (Laboratory of Molecular Cell Biology, Division of Natural System, Graduate School of Natural Science and Technology (NST), Kanazawa University, Japan.[1], WPI Nano Life Science Institute (WPI-NanoLSI), Kanazawa University, Kanazawa, Ishikawa, Japan.[2], Cell-Bionomics Research Unit, Innovative Integrated Bio-Research Core, Institute for

Frontier Science Initiative, Kanazawa University, Kanazawa, Ishikawa, Japan.[3])

P1-006 An oncogenic role of Tpr in Ependymoma

○Firli Rahmah Primula Dewi[1], S Jiapaer[2], M Hazawa[3,1,4], H Sabit[2], A Kobayashi[1], H Hartono[1], M Nakada[2], R Wong[1,3,4] (Division of Natural System, Institute of Natural Science and Technology, Kanazawa University, Japan[1], Department of Neurosurgery, Graduate School of Medical Science, Kanazawa University[2], Cell-Bionomics Research Unit, Institute for Frontier Science Initiative, Kanazawa University, Japan.[3], World Premiere Institute (WPI)- NanoLSI, Kanazawa University, Japan.[4])

P1-007 Unique and cooperative limb specific enhancers regulate *Fgf10* expression

○Tomohiro Takenaka[1], Chisa Andoh[1], Yo-ichi Shiraishi[1], Shiori Yamamoto[1], Tatsuya Takemoto[2], Shinichi Hayashi[2], Reiko Ajima[3], Yumiko Saga[3], Atsushi Kuroiwa[1] (Div. of Biol. Sci., Grad. Sch. of Sci., Nagoya Univ[1], IAMS, Tokushima Univ[2], Division of Mammalian Development, National Institute of Genetics[3])

P1-008 A genetic screen of X-chromosomal genes that are required for the left-right asymmetric development of *Drosophila* embryonic gut.

○Chinami Maeda (Student in Osaka University)

P1-009 A genetic screen based on a mirror-image mutant condition in *Drosophila* to identify genes required for the formation of default left-right asymmetry

○Yukako Inoue, Takeshi Sasamura, Mikiko Inaki, Kenji Matsuno (Osaka University)

P1-010 (YSA-10) Octopamine - Matrix metalloproteinase signaling regulates germline stem cell proliferation in female *Drosophila melanogaster*

○Yuto Yoshinari[1], Tomotsune Ameku[1], Shu Kondo[2], Yuko Shimada-Niwa[3], Hiromu Tanimoto[4], Ryusuke Niwa[5,6] (Graduate School of Life and Environmental Sciences, University of Tsukuba, Japan[1], Genetic Strains Research Center, National Institute of Genetics, Japan[2], Life Science Center of Tsukuba Advanced Research Alliance, University of Tsukuba, Japan[3], Graduate School of Life Sciences, Tohoku university, Japan[4], Faculty of Life and Environmental Sciences, University of Tsukuba, Japan[5], PRESTO, Japan Science and Technology Agency, Japan[6])

P1-011 (WS11-07) Impact of temperature conditions on mouse spermatogenesis revealed by testicular organ culture

○Kodai Hirano[1,2], Yuta Nonami[1,2], Yoshiaki Nakamura[1,2], Takuya Sato[3,4], Takehiko Ogawa[3,4], Shosei Yoshida[1,2] (Division of Germ Cell Biology, National Institute for Basic Biology, National Institutes of Natural Sciences[1], Department of Basic Biology, School of Life Science, Graduate University for Advanced Studies (SOKENDAI)[2], Laboratory of Proteomics, Institute of Molecular Medicine and Life Science, Yokohama City University Association of Medical Science[3], Department of Urology, Yokohama City University Graduate School of Medicine[4])

P1-012 CDK-dependent nuclear accumulation of Alp7/TACC promotes the assembly of the radial array of microtubules in meiosis I.

○Yutaka Shirasugi, Masamitsu Sato (Dept. of Life Sci. and Med. Bio-Sci., Sch. of Adv. Sci. & Eng., Waseda Univ.)

P1-013 DRC7 is a conserved component of dynein regulatory complex and required for sperm flagellum formation and male fertility in mice

○Akane Morohoshi[1,2], Haruhiko Miyata[2], Keisuke Shimada[2], Kaori Nozawa[2], Takafumi Matsumura[2,3], Masahito Ikawa[1,2,3] (Graduate School of Medicine, Osaka University, Osaka, Japan[1], Research Institute for Microbial Diseases, Osaka University, Osaka, Japan[2], Graduate School of Pharmaceutical Sciences, Osaka University, Osaka, Japan[3])

P1-014 (SWS-03) Decision mechanism for the second polar body in mouse oocytes

○Takaya Totsuka[1], Miho Ohsugi[1,2] (Department of Biological Sciences, Graduate school of Science, The University of Tokyo[1], Department of Life and Cognitive Sciences, College of Arts and Science, The University of Tokyo[2])

P1-015 Analysis of granulosa cell progenitor differentiation during primordial follicle formation in mice

○Kurumi Fukuda[1], Yuzuru Kato[1,2], Yumiko Saga[1,2] (The Graduate University for Advanced Studies (SOKENDAI), School of Life Science, Department of Genetics, Division of Mammalian Development[1], National Institute of Genetics[2])

P1-016 (WS11-03) To explore the feminizing genes mediated by SMAD4 in germ cell

○Ryuki Shimada, Yumiko Saga (Division of Mammalian Development, NIG)

P1-017 Structural association between mouse NANOS and DND1 RNA binding proteins

○Danelle Wright[1,2], Yumiko Saga[1,2] (SOKENDAI[1], Natl. Inst. of Genetics[2])

P1-018 (YSA-01) Insulin promotes tumorigenesis by abrogating cell competition

○Yuya Sanaki, Daisuke Kizawa, Tatsushi Igaki (Kyoto Univ.)

P1-019 Prox1 controls the timing of cell cycle exit of cerebellar granule cell precursors through the mitosis-dependent suppression of a cell cycle related gene.

○Satoshi Miyashita[1], Yusuke Seto[2], Tomoo Owa[1], Shinichiro Taya[1], Yoshiya Kawaguchi[2], Mikio Hoshino[1] (National Center of Neurology and Psychiatry[1], Univ. of Kyoto[2])

P1-020 Nuclear transport system caused by disease-specific Karyopherin alternation

○Kie Sakai[1], Mazaharu Hazawa[1,2,3], Akiko Kobayashi[2], Richard Wong[1,2,3] (Cell-Bionomics Unit, Innovetive Integrated Bio research Core, Institute for Frontier Science Initiative, Kanazawa University, Ishikawa, Japan[1], Laboratory of Molecular Cell Biology, School of Natural System, Institute of Science and Engineering, Kanazawa University, Ishikawa, Japan[2], WPI Nano Life Science Institute, Kanazawa University, Kakuma-machi, Kanazawa, Japan[3])

P1-021 Effect of the overexpression of connexin isoforms on HeLa cell proliferation

○Toshiki Saito, Mikako Saito (Department of Biotechnology and Life Science, Tokyo University of Agriculture and Technology)

P1-022 (YSA-07) Tumor progression driven by polyploid giant cells in *Drosophila*

○Bojie Cong, Shizue Ohsawa, Tatsushi Igaki (Laboratory of Genetics, Graduate School of Biostudies, Kyoto University)

P1-023 Lineage analysis of roof plate cells during the development of mouse spinal cord

○Yudai Hatakeyama[1,2], Takuma Shinozuka[1,2], Yusuke Mii[1,2], Shinji Takada[1,2] (SOKENDAI[1], NIBB[2])

P1-024 Phosphorylation of Shank3 by Rho-Kinase regulates surface translocation of NMDA and AMPA receptors in PSD.

○Rijwan Uddin Ahammad, Yasuhiro Funahashi, Md. Omar Faruk, Emran

Hossen, Kozo Kaibuchi (Nagoya University, Graduate School of Medicine, Department of Cell Pharmacology)

P1-025 The amplitude of cell enlargement in Class II CCE is regulated by the amount of IBA-derived Auxin

○Hiromitsu Tabeta[1], Mariko Asaoka[1], Kazuki Takahashi[1], Shizuka Gunji[2], Hirokazu Tsukaya[3,4], Ali Ferjani[1] (Dept. of Biol., Tokyo Gakugei Univ.[1], Unit. Grad. Sch. of Edu., Tokyo Gakugei Univ.,[2], Dept. of Biol. Sci., Grad. Sch. of Sci., The Univ. of Tokyo[3], Okazaki Inst. for Integr. Biosci., Natl. Inst. of Nat. Sci.[4])

P1-026 (WS02-02) Ribonucleotide threshold to induce p53 damage pathway during embryonic development in mouse

○Ryo Uehara, Naushaba Hasin, Kiran Sakhuja, Susana M Cerritelli, Robert J Crouch (Division of Intramural Research, Eunice Kennedy Shriver National Institute of Child Health and Human Development, National Institutes of Health)

P1-027 (WS02-08) Caspase drives *Drosophila* wing growth independent of apoptosis to ensure the bilateral symmetry of wing size

○Natsuki Shinoda[1], Takahiro Chihara[2], Akiko Koto[1], Masayuki Miura[1] (The Univ. of Tokyo[1], Hiroshima Univ.[2])

P1-028 (WS14-07) Peroxisomes govern mitochondrial dynamics and the mitochondrial-dependent apoptotic pathway

○Hideaki Tanaka, Yukiko Gotoh, Tomohiko Okazaki (University of Tokyo, Pharmaceutical Science, Molecular Biology)

P1-029 (WS03-10) Ca^{2+} Signaling Response after Mechanical Stimulation of Single Immotile Cilium in Mammalian Node.

○Takanobu A Katoh[1], Katsutoshi Mizuno[2], Hiroshi Hamada[2], Takayuki Nishizaka[1] (Department of Physics, Gakushuin University[1], Center for Developmental Biology, Riken[2])

P1-030 (WS03-09) The conserved Cep57-pericentrin module organizes PCM expansion and centriole engagement

○Koki Watanabe, Daiju Kitagawa (National Institute of Genetics)

P1-031 A BLOC-3 component HPS4 regulates melanogenesis through activation of Rab32/38, but independent of Rab9A.

○Yuta Ohishi, Riko Kinoshita, Soujiro Marubashi, Morié Ishida, Mitsunori

Fukuda (Lab. of Membr. Trafficking Mech., Grad. Sch. of Life Sci., Tohoku Univ.)

P1-032 Optogenetic manipulation of intracellular localization of melanosomes

○Kazuki Kousaka[1], Ryosuke Tadokoro[1], Takanori Akaiwa[1], Yoshiko Takahashi[1,2] (Department of Zoology, Graduate School of Science, Kyoto University[1], AMED Core Research for Evolutional Science and Technology (AMED-CREST), Japan Agency for Medical Research and Development (AMED)[2])

P1-033 Genetic regulation of centriole elongation by microtubules polymerizing- and depolymerizing-factors in *Drosophila* premeiotic spermatocytes

○Tsuyoshi Shoda, Yuki Asano, Yoshihiro H Inoue (Insect Biomedical Research Center, Kyoto Institute of Technology, Kyoto, Japan)

P1-034 Rab7 knockout unveiled regulated autolysosome maturation induced by glutamine starvation

○Yoshihiko Kuchitsu, Yuta Homma, Naonobu Fujita, Mitsunori Fukuda (Lab. of Membr. Trafficking Mech., Grad. Sch. of Life Sci., Tohoku Univ.)

P1-035 (SWS-04) IRE1α-XBP1 pathway regulates oxidative proinsulin folding in pancreatic β cells.

○Yuichi Tsuchiya[1], Michiko Saito[1], Hiroshi Kadokura[2], Jun-ichi Miyazaki[3], Fumi Tashiro[3], Yusuke Imagawa[4], Takao Iwawaki[5], Kenji Kohno[1] (NAIST, Bioscience[1], Tohoku Univ., Institute of Multidisciplinary Research for Advanced Materials[2], Osaka Univ., Division of Stem Cell Regulation Research[3], Osaka International Cancer Institute, Department of Molecular and Cellular Biology[4], Kanazawa Med. Univ., Division of Cell Medicine[5])

P1-036 The specific amino acid sequence of LAMP-1 is responsible for FUT9-dependent Lewis X modification.

○Taiki Saito[1], Hirokazu Yagi[1], Chu-Wei Kuo[2], Kay-Hooi Khoo[2], Koichi Kato[1,3] (Graduate school of Pharmaceutical Sciences, Nagoya City University[1], Institute of Biological Chemistry, Academia Sinica[2], Exploratory Research Center on Life and Living Systems, National Institutes of Natural Sciences[3])

P1-037 The role of an Na,K-ATPase in spatiotemporal regulation of Ras-PI3K signaling and endocytosis

○Sayaka Kashiwagi, Yoichiro Fujioka, Kosui Horiuchi, Aya O Satoh, Prabha Nepal, Aiko Yoshida, Sarad Paudel, Asuka Nanbo, Yusuke Ohba (Department of Cell Physiology, Graduate School of Medicine, Hokkaido University)

P1-038 A mitochondrial outer membrane protein is involved in the regulation of Ras-PI3K signaling-mediated endocytosis

○Aya O Satoh, Yoichiro Fujioka, Kosui Horiuchi, Prabha Nepal, Sayaka Kashiwagi, Aiko Yoshida, Mari Fujioka, Sarad Paudel, Asuka Nanbo, Yusuke Ohba (Dept. Cell Physiol., Fac. Med. and Grad. Sch. Med. Hokkaido Univ.)

P1-039 Two isoforms of Rab11 regulator LMTK1, similar and dissimilar cellular functions of LMTK1A and LMTK1B

○Ran Wei[1], Hironori Nishino[1], Keisuke Komaki[1], Mineko Tomomura[2], Kanae Ando[1], Shin-ichi Hisanaga[1] (Univ. of Tokyo Metropolitan [1], Univ. of Meikai[2])

P1-040 (SWS-05) The small GTPase Rab10 regulates the formation of tubular endosomes through its novel effectors KIF13A/B

○Kan Etoh, Mitsunori Fukuda (Lab. of Membr. Trafficking Mech., Grad. Sch. of Life Sci., Tohoku Univ.)

P1-041 Interaction of WDR60 intermediate chain with TCTEX1D2 light chain of the dynein-2 complex is crucial for ciliary protein trafficking

Yuki Hamada, ○Yuta Tsurumi, Yohei Katoh, Kazuhisa Nakayama (Graduate School of Pharmaceutical Sciences, Kyoto University)

P1-042 (SWS-06) Analysis of lysosomal biogenesis pathway using novel ratiometric probe.

○Shunsuke Ishii[1], Akira Matsuura[2], Eisuke Itakura[2] (Graduate School of Science and Engineering, Chiba University[1], Graduate School of Science, Chiba University[2])

P1-043 Overexpression of MORN2 enhances LC3-associated phagocytosis in macrophages

○Maya Morita, Mayu Kajie, Kiyotaka Hatsuzawa (Division of Molecular Biology, School of Life Sciences, Faculty of Medicine, Tottori University)

P1-044 Analysis of N-myristoylated Rab5b mediated trafficking pathway in *Plasmodium falciparum*

○Izumi Kitazono[1,2], Tomohiro Hirai[1], Kisaburo Nagamune[1,2], Tomoyoshi Nozaki[3], Yumiko Saito-Nakano[1] (Department of Parasitology, National Institute of Infectious Diseases, Tokyo, Japan[1], Department of Biological Sciences, Graduate School of Life and Environmental Sciences, University of Tsukuba, Ibaraki, Japan[2], Department of Biomedical Chemistry, Graduate School of Medicine, The University of Tokyo, Tokyo, Japan[3])

P1-045 4-Phenylbutyrate suppresses the unfolded protein response without restoring protein folding in *Saccharomyces cerevisiae*

○Thanh Chi Mai, Yukio Kimata (Nara Institute of Science and Technology)

P1-046 The Nem1/Spo7–Pah1/lipin axis is required for both macroautophagy and microautophagy induction after TORC1 inactivation

○Muhammad Arifur Rahman, Md. Golam Mostofa, Takashi Ushimaru (Graduate School of Science and Technology, Shizuoka University)

P1-047 (WS03-04) Crag/Rab10/Ehbp1 regulate basolateral transport of Na^+K^+ATPase in *Drosophila* photoreceptors

○Yuka Ochi, Yuri Nakamura, Takunori Satoh, Akiko K. Satoh (Division of Life Science, Graduate School of Integral Arts and Science, Hiroshima University)

P1-048 (WS03-08) Trafficking of ciliary GPCRs mediated by the BBSome depends on its interaction with the IFT-B complex

○Shohei Nozaki, Yohei Katoh, Kazuhisa Nakayama (Graduate School of Pharmaceutical Sciences, Kyoto University)

P1-049 rDNA condensation is required for nucleophagy after TORC1 inactivation in budding yeast

○Md. Golam Mostofa, Muhammad Arifur Rahman, Takashi Ushimaru (Shizuoka University, Shizuoka, Japan)

P1-050 Syntaxin 11 mediates the stimulation-dependent Toll-like receptor 4 trafficking in macrophages

○Daiki Kinoshita, Maya Morita, Masashi Tsunematsu, Chiye Sakurai, Kiyotaka Hatsuzawa (Div. Molecular Biol., Sch. of Life Sci., Faculty of Med., Tottori Univ.)

P1-051 A 3D modeling of Golgi stacks in giantin knockdown cells

○Takuto Shakuno[1], Mitsuko Hayashi-Nishino[2], Kunihiko Nishino[2], Ayano Satoh[1] (Okayama University[1], Institute of Scientific and industrial Research, Osaka University[2])

P1-052 Intra- and extracellular functions of the ER-resident protein VAP in *Drosophila*

○Kosuke Kamemura[1], Chun-an Chen[2], Misako Okumura[1], Sayaka Sekine[3], Daichi Kamiyama[4], Masayuki Miura[2], Takahiro Chihara[1] (Grad Sch of Sci, Hiroshima Univ[1], Grad Sch of Pharm Sci, Univ of Tokyo[2], CDB, RIKEN[3], Dept Cell Biol, Univ of Georgia[4])

P1-053 Ubiquitin-specific protease 8 suppresses collagen secretion by deubiquitnating Sec31

○Kohei Kawaguchi, Akinori Endo, Toshiaki Fukushima, Masayuki Komada (Cell Biology Center, Institute of Innovative Research, Tokyo Institute of Technology)

P1-054 Promoter analysis of GALNT18 and GALNT5 regulated by Golgi stress response of mucin pathway

○Jamaludin Mohamad Ikhwan, Kanae Sasaki, Mai Taniguchi, Hirotada Kawamura, Sadao Wakabayashi, Hiderou Yoshida (University of Hyogo)

P1-055 Rab5-independent vacuolar formation by Rab7 in budding yeast

○Hiroki Shimamura[1], Tie Kawada[1], Makoto Nagano[1], Junko Y. Toshima[2], Jiro Toshima[1] (Department of Biological Science and Technology, Tokyo University of Science[1], School of Health Sciences, Tokyo University of Technology[2])

P1-056 Polarized localization of the phospholipid flippase ATP11C isoform at the plasma membrane

Masahiro Takayama, ○Hiroki Inoue, Kazuhisa Nakayama, Hiroyuki Takatsu, Hye-Won Shin (Graduate School of Pharmaceutical Sciences, Kyoto University)

P1-057 N- or C-terminal cytoplasmic regions of class 5 and class 6 P4-ATPases are responsible for their subcellular localization.

○Sayuri Okamoto, Tomoki Naito, Kazuhisa Nakayama, Hiroyuki Takatsu, Hye-Won Shin (Graduate School of Pharmaceutical Sciences, Kyoto University)

P1-058 (WS03-06) Synapse Elimination Triggered by BMP4 Exocytosis and Presynaptic BMP Receptor Activation

○Takahito Higashi, Shinji Tanaka, Tadatsune Iida, Shigeo Okabe (Tokyo Univ. Schol of Medicine)

P1-059 Analysis of the role of PI4P and organelle contact site in prospore membrane extension during sporulation of budding yeast

○Tsuyoshi S. Nakamura[1], Kenji Muneshige[1], Yasuyuki Suda[2], Hiroyuki Tachikawa[1] (Dep. Appl. Biol. Chem, Grad. Sch. of Agri. and Life Sci., The Univ. of Tokyo[1], Maj. Med. Sci., Grad. Sch. of Comprehensive Human Sci., Univ., of Tsukuba[2])

P1-060 Requirement of PtdIns (4)P metabolism by PI4 kinase and phosphatase during receptor-mediated endocytosis

○Masahiro Suwazono[1], Wataru Yamamoto[1], Kaito Aoshima[1], Hiroshi Shimamura[1], Makoto Nagano[1], Junko Y Toshima[2,1], Jiro Toshima[1] (Department of Biological Science and Technology, Tokyo University of Science[1], School of Health Sciences, Tokyo University of Technology[2])

P1-061 Cooperative function of yeast Rab6/Ypt6 and V-ATPase in the endocytic recycling pathway

○Yuka Noma[1], Haruka Yamashita[1], Takumi Sato[1], Makoto Nagano[1], Junko Y Toshima[2], Jiro Toshima[1] (Department of Biological Science and Technology, Tokyo University of Science[1], School of Health Sciences, Tokyo University of Technology[2])

P1-062 Regulation of transport of endocytic vesicles through actin cytoskeleton by yeast Eps15-like protein Pan1p

○Ippo Ogura[1], Nao Yoshida[1], Hiroki Shimamura[1], Makoto Nagano[1], Junko Y Toshima[2], Jiro Toshima[1] (Department of Biological Science and Technology, Tokyo University of Science[1], School of Health Sciences, Tokyo University of Technology[2])

P1-063 Involvement of COPI-coated vesicle in protein sorting from the endosome to the Golgi in yeast

○Tsuyumi Masuda[1], Haruka Yamashita[1], Hiromu Kobayashi[1], Makoto Nagano[1], Junko Y Toshima[2], Jiro Toshima[1] (Department of Biological Science and Technology, Tokyo University of Science[1], School of Health Sciences, Tokyo University of Technology[2])

P1-064 (WS14-03) Autophagosome-ER contact visualized by a novel ER-phagy receptor

○Haruka Chino[1,2], Tomohisa Hatta[3], Tohru Natsume[3], Noboru Mizushima[1] (epartment of Biochemistry and Molecular Biology, Graduate School and Faculty of Medicine, The University of Tokyo[1], Department of Respiratory Medicine, The University of Tokyo[2], Molecular Profiling Research Center for Drug Discovery, National Institute of Advanced Industrial Science and Technology (AIST)[3])

P1-065 Requirement of Pan1p complex for recruitment of actin filaments to endocytic site

○Mariko Enshoji[1], Nao Yoshida[1], Hiroki Shimamura[1], Makoto Nagano[1], Junko Y Toshima[2], Jiro Toshima[1] (Department of Biological Science and Technology, Tokyo University of Science[1], School of Health Sciences, Tokyo University of Technology[2])

P1-066 Distinct roles for the Rho-family GTPases in yeast actin-mediated endocytosis

○Ikumi Katsumata[1], Eriko Kashimura[1], Ayaka Ozawa[1], Makoto Nagano[1], Junko Y Toshima[2], Jiro Toshima[1] (Department of Biological Science and Technology, Tokyo University of Science[1], School of Health Sciences, Tokyo University of Technology[2])

P1-067 (WS06-06) Exploring the molecular pathways leading to bipolar spindle formation

○Takashi Toda, Masaki Okazaki, Tomoaki Yamauchi, Yusuke Yamada, Tomoki Kawakami, Yasuhiro Teratani, Mitsuki Oishi, Masashi Yukawa (Department of Molecular Biotechnology, Graduate School of Advanced Sciences of Matter, Hiroshima University)

P1-068 (WS06-05) A novel link between ploidy level and centrosome homeostasis in human somatic cells

○Kan Yaguchi, Takahiro Yamamoto, Ryota Uehara (Grad. Sch. of Life Sci., Hokkaido Univ.)

P1-069 Locally extruded Syntaxin4 abrogates E-cadherin function and activates Smad signals, contributing to asymmetric mammary epithelial morphogenesis

○Yuina Hirose, Yohei Hirai (Graduate School of Science and Technology, Kwansei Gakuin University)

P1-070 (WS01-08) Cdc42-FMNL3 mediated constitutive actin regrowth underneath plasma membrane underlies the repetitive nature of membrane blebs

○Kana Aoki[1], Shinsuke Satoi[1], Seiichi Uchida[3], Yoh Iwasa[2], Junichi Ikenouchi[2,4] (Grad. Sch. Systems Life Sciences, Kyushu University[1], Dept. Biol, Kyushu University[2], Dept. Advanced Information technology, Kyushu University[3], AMED-PRIME, Japan Agency for Medical Research and Development[4])

P1-071 Analysis of dynamins function during cytokinesis in *Dictyostelium* cells

○Koushirou Fujimoto[1], Go Itoh[2], Shinya Miyagishima[3], Shigehiko Yumura[1] (Grad. Sch. of Med., Yamaguchi University[1], Grad. Sch. of Med., Akita University[2], Symbio. and cell evol. lab., Natl. inst. of genetics[3])

P1-072 Organization of microtubules in small intestinal crypt cells

○Yuto Mitsuhata[1], Mika Toya[1,2], Masatoshi Takeichi[2], Masamitsu Sato[1] (Department of Life Science and Medical Bioscience, Graduate School of Advanced Science and Engineering, Waseda University[1], RIKEN Center for Developmental Biology[2])

P1-073 Functional linkage between the γ-tubulin ring complex and Alp7/TACC in microtubule nucleation

○Mana Katsuyama, Tomonari Sunaga, Masamitsu Sato (Department of Life Science and Medical Bioscience, Graduate School of Advanced Science and Engineering, Waseda University)

P1-074 Functional analysis of fission yeast CLASP in assembling pre-anaphase spindle

○Hirohisa Ebina[1], Liang Ji[2], Masamitsu Sato[1,2] (Dept. of Life Science and Medical Bioscience, Graduate School of Advanced Science and Engineering, Waseda Univ.[1], Dept. of Biophysics and Biochemistry, Graduate School of Science, Univ. of Tokyo[2])

P1-075 *Drosophila* Dcp2 and moesin mediate the *oskar* mRNA anchoring and transporting complexes

○Yi Mei Lee[1], Ming-Der Lin[2], Chu-Ya Cheng[1], Yi-Lu Tian[1], Chih-Chieh Lu[1], Po-Hsun Chiang[1], Jin-Yu Deng[1], Wei-Hong Shen[1], Jen-Ho Cheng[1], Chao-Han Chen[1], Mei-Ling Wu[1], Ching-Jin Chang[3], Tze-Bin Chou[1] (Institute of Molecular and Cellular Biology, College of Life Sciences, National Taiwan University, Taiwan[1], Department of Molecular Biology and

Human Genetics, Tzu-Chi University, Taiwan[2], Institute of Biological Chemistry, College of Life Sciences, National Taiwan University, Taiwan[3])

P1-076 Prestin, a membrane-based voltage-driven motor, is not the sole member of the SLC26 family that can sense voltage.
○Makoto F Kuwabara[1], Koichiro Wasano[2], Satoe Takahashi[2], Justin Bodner[3], Tomotaka Komori[1], Sotaro Uemura[1], Jing Zheng[2], Tomohiro Shima[1], Kazuaki Homma[2] (Dep. of Biol. Sci., Grad Sch. of Sci., The Univ. of Tokyo[1], Feinberg Sch. of Med., Northwestern Univ.[2], DePaul Univ.[3])

P1-077 Differential function of myosin IIA and IIB in cytokinesis of human immortalized fibroblasts
○Kei Yamamoto[1], Kohei Otomo[2], Tomomi Nemoto[2], Seiichiro Ishihara[3], Hisashi Haga[3], Yota Murakami[1,4], Masayuki Takahashi[1,4] (Grad. Sch. of Chem. Sci. and Eng., Hokkaido Univ.[1], Res. Inst. for Elect. Sci., Hokkaido Univ.[2], Fac. of Adv. Life Sci., Hokkaido Univ.[3], Fac. of Sci., Hokkaido Univ.[4])

P1-078 PCP factors are differentially involved in polarity establishment of ciliary orientation and cell elongation in the mouse oviduct.
○Fumiko Usami[1,2], Dongbo Shi[2,3], Kagayaki Kato[4], Toshihiko Fujimori[1,2] (Dept. of Basic Biol., School of Life Sci., SOKENDAI[1], Div. of Embryology, NIBB[2], COS, Heidelberg Univ[3], Imaging Science, CNSI[4])

P1-079 (WS12-03) The dynamic self-patterning of Plk4 regulates centriole duplication.
○Shohei Yamamoto, Daiju Kitagawa (The University of Tokyo)

P1-080 (WS06-01) Jaw1/LRMP has a role in maintaining nuclear shape via interaction with SUN proteins
○Takuma Kozono[1], Kazuko Tadahira[2], Wataru Okumura[1], Nao Itai[2], Miwa Tamura-Nakano[3], Taeko Dohi[4], Takashi Tonozuka[2], Atsushi Nishikawa[1,2] (Department of Food and Energy Systems Science, Graduate School of Bio-Applications Systems Engineering, Tokyo University of Agriculture and Technology[1], Division of Applied Biological Chemistry, United Graduate School of Agricultural Science, Tokyo University of Agriculture and Technology[2], Communal Laboratory, Research Institute, National Center for Global Health and Medicine[3], Department of Gastroenterology, Research Center for Hepatitis and Immunology, Research Institute, National Center for Global Health and Medicine[4])

P1-081 Functional analysis of a ciliate specific actin-related protein, tArp, localized in cilia of *Tetrahymena thermophila*

○Minori Hagita, Kota Fujito, Osamu Numata, Kentaro Nakano (Univ. of Tsukuba)

P1-082 (WS12-09) Dynamics of the Par complex clusters during the cell-autonomous polarization and asymmetric division in the reconstruction system

○Kalyn Kawamoto[1,2], Shigeki Yoshiura[2], Fumio Matsuzaki[1,2] (Grad. Sch. of Bio., Kyoto University[1], RIKEN CDB[2])

P1-083 (WS06-04) The yeast centriole-less centrosome reveals an ancestral role for the pericentrin in centriole biogenesis and integrity

○Daisuke Ito, Monica Bettencourt-Dias (Instituto Gulbenkian de Ciencia)

P1-084 Establishment of a PCP-dependent apical microtubule network in tracheal MCCs.

○Shogo Nakayama[1], Elisa Herawati[2], Maki Takagishi[3], Tomoki Nishida[4], Kanako Inoue[5], Takayuki Torisawa[6], Toshinori Namba[7], Shuji Ishihara[7], Hiroo Tanaka[1], Tomoki Yano[1], Atsushi Tamura[1], Kazuhiro Oiwa[6], Masahide Takahashi[7], Sachiko Tsukita[1] (Dept. of Bio Sci., Grad. Sch. of Medicine., Osaka University[1], Faculty of Mathematics and Natural Sciences, Universitas Sebelas Maret[2], Dept. of Pathology., Grad. Sch. of Medicine., Univ. of Nagoya[3], Japan Textile Products Quality and Technology Center[4], Research Center for Ultra-High Voltage Electron Microscopy, Osaka University[5], Nat. Inst. of Information and Communications Technology., Advance ICT Research Institute[6], Dept. of Basic Science., Grad. Sch. of Arts and Sciences., Univ. of Tokyo[7])

P1-085 (WS01-10) Super-resolution live imaging of supercellular circumferential actin cable formation during tracheal tubulogenesis

○Sayaka Sekine, Mustafa Sami, Housei Wada, Shigeo Hayashi (RIKEN Center for Biosystems Dynamics Research)

P1-086 Visualizing multiple inter-organelle contact sites using split-GFP system

○Yuriko Kakimoto[1], Shinya Tashiro[1], Rieko Kojima[1], Toshiya Endo[2], Yasushi Tamura[1] (Department of Material and Biological Chemistry, Faculty of Science, Yamagata University[1], Faculty of Life Sciences, Kyoto Sangyo University[2])

P1-087 Guanylate binding protein-1-mediated epithelial barrier in human

salivary gland duct epithelium

○Takumi Konno[1], Ken-ichi Takano[2], Yakuto Kanoko[2], Takuya Kakuki[2], Kazuaki Nomura[2], Ryoto Yajima[2], Akito Kakiuchi[2], Takayuki Kohno[1], Tetsuo Himi[2], Takashi Kojima[1] (Department of Cell Science, Research Institute for Frontier Medicine, Sapporo Medical University School of Medicine.[1], Department of Otolaryngology, Sapporo Medical University School of Medicine.[2])

P1-088 (WS15-05) Functional roles of Rho-GEF PLEKHG4B in the formation of adherens junctions

○Komaki Ninomiya, Kensaku Mizuno, Kazumasa Ohashi (Laboratory of Molecular and Cellular Biology, Graduate School of Life Sciences, Tohoku University)

P1-089 (WS04-02) Plasma membrane of cell-ECM adhesion region possesses lipid raft-like lipid composition.

○Kodai Minoura[1], Takafumi Ichikawa[1], Tomohiro Ohmachi[1], Yasuhisa Kimura[1], Kazumitu Ueda[1,2], Noriyuki Kioka[1] (Div. of App. Life Sci., Grad. Sch. of Agriculture, Kyoto Univ.[1], iCeMS, Kyoto Univ.[2])

P1-090 Isolation of the focal adhesions using sonication

○Masakazu Shibahara[1], Kodai Minoura[1], Takafumi Ichikawa[1], Yasuhisa Kimura[1], Kazumitu Ueda[1,2], Noriyuki Kioka[1,2] (Div. of App. Life Sci., Grad. Sch. of Agriculture, Kyoto Univ.[1], iCeMS, Kyoto Univ.[2])

P1-091 Effects of dipotassium glycyrrhizate (GK2) on keratinocyte barrier function.

○Fumika Tanaka, Yohei Hirai (Graduate School of Science and Technology, Kwansei Gakuin University)

P1-092 (WS04-05) Iterative relay of epidermal growth factor receptor signaling regulates epithelial invagination via a wave of cellular contractility

○Yosuke Ogura[1], Fu-Lai Wen[2], Mustafa M. Sami[1], Tatsuo Shibata[2], Shigeo Hayashi[1] (Laboratory for Morphogenetic Signaling, RIKEN Center for Biosystems Dynamics Research[1], Laboratory for Physical Biology, RIKEN Center for Biosystems Dynamics Research[2])

P1-093 Cancelled

P1-094 (WS15-06) Functional analysis of alpha-catenin on coordinated epithelial morphogenesis

○Ryosuke Nishimura[1], Masahiro Takeda[2], Hiromi Miyoshi[2,3], Yutaka Yamagata[2], Shigenobu Yonemura[1,4] (Grad. Sch. of Med. Sci., Tokushima Univ.[1], RIKEN CAP[2], Grad. Sch. Sys. Desn., Tokyo Metropolitan Univ.[3], RIKEN CLST[4])

P1-095 (WS04-06) ERK activation waves mediated by intercellular mechanical signaling during collective cell migration

○Naoya Hino[1,2], Michiyuki Matsuda[1,3], Tsuyoshi Hirashima[3] (Lab. of Bioimaging and Cell Signaling, Grad. Sch. of Biostudies, Kyoto Univ.[1], JSPS Research Fellow[2], Dept. of Path. and Biol. of Diseases, Grad. Sch. of Med., Kyoto Univ.[3])

P1-096 HSP47 stabilizes folding intermediates of procollagen which are unstable at body temperature

○Kazunori Fujii[1], Yuki Taga[2], Shinya Ito[3], Shunji Hattori[2], Kazuhiro Nagata[3], Takaki Koide[1] (Graduate School of Advanced Science and Engineering, Waseda University[1], Nippi Research Institute of Biomatrix[2], Institute for Protein Dynamics, Kyoto Sangyo University[3])

P1-097 Dynamic expression analysis of Cx30.3 in ES cell microenvironment

○Naruwa Tokunaga, Mikako Saito (Dept. Biotechnol. and Life Sci., Tokyo Univ. of Agricul. and Technol.)

P1-098 Expression analysis of connexin gene family in mouse hepatic cells

○Ryota Kishi, Haruka Masui, Mikako Saito (Dept. Biotechnol. and Life Sci., Tokyo Univ. of Agricul. and Technol.)

P1-099 Effects of microenvironment on the connexin expression behavior in mouse melanoma cells

○Tomoko Sasai, Mikako Saito (Department of Biotechnology and Life Science, Tokyo University of Agriculture and Technology)

P1-100 Smad signaling and ROS are involved in the “noise-cancelling system” of Wnt/β-catenin signaling.

○Shohei Ogamino[1], Yuki Akieda[1], Jumpei Nogami[2], Yasuyuki Ohkawa[2], Tohru Ishitani[1] (Integrated Signal. Sys., IMCR, Gunma Univ.[1], Div. of Transcriptomics., MIB, Kyushu Univ.[2])

P1-101 (WS15-01) Roles of membrane lipids in the formation of tight junction

○Kenta Shigetomi[1], Junichi Ikenouchi[2,3] (Graduate school of System Life Sciences, Kyushu University[1], Department of Biology, Faculty of Sciences, Kyushu University[2], AMED-PRIME[3])

P1-102 Tight junctional cingulin organizes the apical intermediate filaments.

○Yuki Nakao[1], Hiroo Tanaka[1], Tomohiro Tamura[1], Shogo Nakayama[1], Akira Yamamoto[1], Tomoaki Mizuno[1], Hatsuho Kanoh[1,2], Atsushi Tamura[1], Tomoki Yano[1], Sachiko Tsukita[1] (Laboratory of Biological Science, Graduate School of Frontier Biosciences and Graduate School of Medicine, Osaka University, Osaka, Japan.[1], Graduate School of Biostudies, Kyoto University, Kyoto, Japan.[2])

P1-103 Neural specific kinase promotes early neural development in *Xenopus* embryos

○Regina Putri Virgirinia[1], Nusrat Jahan[1], Maya Okada[1], Kimiko Takebayashi-Suzuki[1], Hitoshi Yoshida[1], Makoto Nakamura[1], Hajime Akao[1], Fatchiyah Fatchiyah[2], Naoto Ueno[3], Atsushi Suzuki[1] (Amphibian Research Center, Grad. Sch. of Sci., Hiroshima Univ., Japan[1], Dept. of Biol., Fac. of Math. and Nat. Sci., Brawijaya Univ., Indonesia[2], Div. of Morphogenesis, NIBB, Japan[3])

P1-104 The mechanism about the growth of collagen crystal involved with fin skeletal development.

○Junpei Kuroda[1], Atsuko H Iwane[2], Shigeru Kondo[1] (Osaka university, FBS[1], Riken, Quantitative Biology Center[2])

P1-105 Functional study of Yin Yang 1 in mouse mid-hindbrain development

○Xiaonan Dong[1], Kin Ming Kwan[1,2,3] (School of Life Sciences, The Chinese University of Hong Kong, Hong Kong, China[1], Centre for Cell and Developmental Biology, The Chinese University of Hong Kong, Hong Kong, China[2], Partner State Key Laboratory of Agrobiotechnology (CUHK), The Chinese University of Hong Kong, Hong Kong, China[3])

P1-106 Development of Left-Right Asymmetric Structure in the *Drosophila* Brain

○So Sakamura[1], Fuyu Hsu[2], Ann-Shyn Chiang[2], Kenji Matsuno[1] (Graduate School of Frontier Biosciences, Osaka University[1], Institute of Biotechnology, National Tsing Hua University[2])

P1-107 Fat2 controls formation of cerebellar neural circuits in zebrafish

○Ryuji Dohaku[1], Miki Takeuchi[2], Takashi Shimizu[1,2], Masahiko Hibi[1,2] (Graduate School of Science, Nagoya university, Nagoya, Japan[1], Bioscience and Biotechnology center, Nagoya University, Nagoya, Japan[2])

P1-108 (WS07-05) Twisting movement of plant leaf: Genetic analysis and 3D observation

○Yuta Otsuka[1], Ken Haga[2], Tatsuya Sakai[3], Hirokazu Tsukaya[1,4] (Grad. Sch. Sci., Univ. Tokyo[1], Dept. Hum. Sci. Com. Edu., NIT[2], Grad. Sch. Sci. Tech., Niigata Univ.[3], OIIB, NINS[4])

P1-109 (WS05-06) 3D Cell behavior in zebrafish somite morphogenesis

○Yue Tong[1], Harunobu Kametani[1], Atsuko Shimada[1], Masakazu Akiyama[2], Yasuhiro Inoue[3], Hiroyuki Takeda[1] (Dept. of Biol. Sci., Univ. of Tokyo[1], RIES, Hokkaido Univ.[2], IFLMS, Kyoto Univ.[3])

P1-110 Zebrafish *pou5f3*, an *Oct4*-type class-V POU gene, is involved in neurogenesis in the caudal neural tube.

○Tatsuya Yuikawa, Masaaki Ikeda, Sachiko Tsuda, Kyo Yamasu (Div. Life Sci., Grad. Sch. Sci. Eng., Saitama Univ.)

P1-111 TGF-β signal regulates gut bending in the sea urchin embryo

○Haruka Suzuki, Shunsuke Yaguchi (University of Tsukuba, Shimoda Marine Research Center)

P1-112 Molecular mechanisms that control development of the inferior olive nucleus neurons in zebrafish

○Tsubasa Itoh[1], Miki Takeuchi[1,2], Marina Sakagami[1], Kazuhide Asakawa[3], Koichi Kawakami[3], Takashi Shimizu[1,2], Masahiko Hibi[1,2] (Grad. School of Science, Nagoya University[1], Bioscience and Biotechnology Center, Nagoya University[2], National Institute of Genetics[3])

P1-113 (SWS-07) Sbno1 is involved in growth of axon and dendrites of the cortical neurons

○Iroha Yamamoto[1], Fuzuki Inoguchi[1], Satoru Yamagishi[2], Kosuke Taki[1], Leanne Delaney[3], Carina Hanashima[4], Hayato Naka-Kaneda[1], Yu Katsuyama[1] (Shiga University of Medical Science[1], Hamamatsu University School of Medicine[2], Dalhousie University[3], Waseda University[4])

P1-114 Setting up a new model system to uncover the molecular mechanisms regulating totipotency in sponges: definition of precise stages

of gemmule formation, an asexual reproduction system
○Masumi Okawa, Risa Murakami, Noriko Funayama (Dept. Biophysics, Graduate School of Science, Kyoto Univ.)

P1-115 (WS07-02) The dynamic epithelial transition of developing trachea unveiled by single cell RNA-seq
○Hirofumi Kiyokawa, Mitsuru Morimoto (Riken CDB)

P1-116 Amniogenic somatopleural cells: a novel origin of cardiovascular development
○Yuka Haneda[1], Rieko Asai[1,2], Yasunobu Uchijima[1], Akashi Taguchi[1], Takahide Kohro[3], Satoshi Ishishita[4], Yoichi Matsuda[4], Youichiro Wada[1], Sachiko Miyagawa-Tomita[1,5], Hiroki Kurihara[1] (Univ. of Tokyo[1], Univ. of California[2], Jichi Med. Univ.[3], Nagoya Univ.[4], Yamazaki Gakuen Univ.[5])

P1-117 (SWS-08) The contribution of parasympathetic Remak ganglia to establish the peristalsis in chicken embryos
○Yuuki Shikaya, Tadayoshi Watanabe, Ryosuke Tadokoro, Yuta Takase, Yoshiko Takahashi (Department of Zoology, Graduate School of Science, Kyoto University)

P1-118 Characterization of *narigoma*, a regulator of anterior gut left-right asymmetry in *Drosophila melanogaster*
○Yi-Ting Lai[1], Tomoki Ishibashi[1], Mitsutoshi Nakamura[1], Katsushi Yamaguchi[2], Shuji Shigenobu[2], Kenji Matsuno[1] (Department of Biological Sciences, Osaka University[1], NIBB Core Research Facilities, National Institute for Basic Biology[2])

P1-119 Hippo-mediated morphogenetic robustness during *Drosophila* wing development
○Yayoi Wada, Shizue Ohsawa, Tatsushi Igaki (Laboratory of Genetics, Graduate School of Biostudies, Kyoto University)

P1-120 Finding a novel structure, amniotic collar, involved in the amnion and the pericardial cavity formation in the chicken embryo.
○Nao Yamaguchi, Kimiko Fukuda (Tokyo Metropolitan University)

P1-121 Development of the horn primordia of *Rhinoceros beetle*
○Haruhiko Adachi[1], Hiroki Gotoh[2], Keisuke Matsuda[3], Shigeru Kondo[1] (Osaka university, FBS[1], Nagoya university, Bioagri. Sci[2], Osaka university, Med[3])

P1-122 Proximity biotin labeling-based identification of proteins interacting with Drosophila MyosinID, which switches the chirality of cells and organs.

○Ryota Mori, Yusuke Kamei, Satoshi Kuwana, Kenji Matsuno (Department of Biological Sciences, Osaka University)

P1-123 (WS05-11) Roles of a transcription factor 19A in the osteoblast development of sternum

○Mao Kuriki[1], Fuminori Sato[1], Kenta Sumiyama[2], Koichi Kawakami[3], Atsuko Sehara-Fujisawa[1] (IFLMS., Univ of Kyoto[1], RIKEN[2], NIG[3])

P1-124 (WS05-04) Involvement of heparan sulfate in the regulation of Nodal signaling range in *Xenopus* for the generation of left-right asymmetry

○Takafumi Ikeda, Takayoshi Yamamoto, Masanori Taira (Dept. of Biol. Scis., Grad. Sch. of Sci., Univ. of Tokyo)

P1-125 A novel role of *Numb* prevents embryo from twisting though the inhibition of Notch signaling

○Elzava Yuslimatin Mujizah[1], Satoshi Kuwana[1], Kenjiroo Matsumoto[3], Takuma Gushiken[1], Martin Baron[2], Kenji Matsuno[1] (Department of Biological Sciences, Graduate School of Science, Osaka University[1], Faculty of Biology, Medicine and Health, University of Manchester[2], Complex Carbohydrate Research Center, University of Georgia[3])

P1-126 Ecdysone-inducible *polished rice* gene is essential for cell fate decision and tubular fusion of dorsal branches in *Drosophila* tracheogenesis.

○Yuki Taira[1], Housei Wada[2], Shigeo Hayashi[2], Yuji Kageyama[1,3] (Department of Biology, Graduate School of Science, Kobe University[1], RIKEN, Center for Developmental Biology[2], Biosignal Research Center, Kobe University[3])

P1-127 NFκB controls dorsal-ventral patterning of vertebrate embryos through negative regulation of Wnt/β-catenin signaling

○Juqi Zou[1,2,3], Satoshi Anai[2,3], Takamasa Masuda[3], Satoshi Ota[3], Tohru Ishitani[1,3] (Division of Integrated Signaling Systems, Department of Molecular Medicine, IMCR, Gunma Univ.[1], Graduate School of Medical Sciences, Faculty of Medical Sciences, Kyushu Univ.[2], MIB, Kyushu Univ.[3])

P1-128 The role of histone demethylase LSD1 in the development of hematopoietic stem cells in zebrafish

○Junya Tamaoki[1], Isao Kobayashi[2], Makoto Kobayashi[1] (University of Tsukuba[1], Kanawaza University[2])

P1-129 Molecular mechanism for the layer and column-specific targeting by controlling filopodial extension in the Drosophila visual system.

○Hiroki Takechi, Satoko Hakeda Suzuki, Takashi Suzuki (Tokyo Institute of Technology)

P1-130 Identification of Hox target genes involved in regulating the region-specific patterning and growth of cartilage

○Shiori Yamamoto[1], Yuji Uchida[1], Tomomi Ohtani[1], Yoichi Shiraishi[1], Nayuta Yakushiji-Kaminatsui[2], Erika Nozaki[1], Atsushi Kuroiwa[1] (Nagoya Univ.[1], EPFL[2])

P1-131 Arrangement of collagen fibers determines the fin bone structure in Zebrafish

○Hibiki Nakagawa, Toshihiro Aramaki, Junpei Kuroda, Shigeru Kondo (Graduate School of Frontier Biosciences, Osaka University)

P1-132 Role of rotational collective cell migration in somite morphogenesis

○Harunobu Kametani, Yue Tong, Atsuko Shimada, Hiroyuki Takeda (The Univ. of Tokyo)

P1-133 Autoregulatory loop of *tbx6* enables the Ripply-dependent posterior shift of the expression domains of *tbx6* transcription and Tbx6 protein in the zebrafish presomitic mesoderm

○Hiroyuki Ban[1], Daisuke Yokota[1], Shiori Otosaka[1], Hirofumi Kinoshita[1], Yuuri Fujino[1], Taijiro Yabe[2], Hiroki Ovara[1], Ayaka Izuka[1], Kagari Akama[1], Daichi Kage[1], Kyo Yamasu[1], Shinji Takada[2], Akinori Kawamura[1] (Div. of Life Sci., Grad. Sch. of Sci. and Eng., Saitama Univ.[1], Okazaki Inst. Integ. Biosci., Nat. Inst. Nat. Sci.[2])

P1-134 (WS05-09) Physical characteristics of epithelium during limb morphogenesis

○Kazuki Kawamura[1], Makoto Ono[1], Atsushi Kuroiwa[1], Yoshihiro Morishita[2], Takayuki Suzuki[1] (Nagoya University[1], Quantitative Biology Center[2])

P1-135 Excess pyrophosphate in plant tissues triggers developmental defects cell-autonomously

○Shizuka Gunji[1], Gorou Horiguchi[2,3], Hirokazu Tsukaya[4,5], Ali Ferjani[1,6] (Unite. Grad. Sch. of Educ., Tokyo Gakugei Univ.[1], Dept. of Life Sci., Coll. of Sci., Rikkyo Univ.[2], Res. Centr. for Life Sci., Coll. of Sci., Rikkyo Univ.[3], Dept. of Biol. Sci., Grad. Sch. of Sci. The Univ. of Tokyo[4], Okazaki Inst. for Integr. Biosci., Natl. Inst. of Nat. Sci.[5], Dept. of Biol., Tokyo Gakugei Univ.[6])

P1-136 Gene knock-out analysis of a segmentation gene *even-skipped* in the cricket *Gryllus bimaculatus*

○Yu-ki Nakamura[1], Ko-hei Kawamoto[1], Sayuri Tomonari[2], Takahito Watanabe[3], Yoshiyasu Ishimaru[3], Taro Mito[3], Sumihare Noji[4] (Graduate School of Advanced Technology and Science, Univ. of Tokushima[1], Center for Technical Support, Univ. of Tokushima[2], Graduate School of Bioscience and Bioindustry, Univ. of Tokushima[3], Univ. of Tokushima[4])

P1-137 (WS08-07) Roles of lysosomes in embryonic neural stem/progenitor cells

○Naoya Yuizumi, Yujin Harada, Daichi Kawaguchi, Shohei Furutachi, Yukiko Gotoh (Lab. of Molecular Biology, Department of Pharmaceutical Sciences, The Univ. of Tokyo)

P1-138 A new method to recapitulate paraxial mesoderm development and model fibrodysplasia ossificans progressiva with iPS cells

○Taiki Nakajima[1], Mitsuaki Shibata[1], Megumi Nishio[2], Sanae Nagata[1], Cantas Alev[1], Hidetoshi Sakurai[1], Junya Toguchida[1,3,2], Makoto Ikeya[1] (Center for iPS Cell Research and Application, Kyoto University, Japan[1], Department of Tissue Regeneration, Institute for Frontier Medical Sciences, Kyoto University, Japan[2], Department of Orthopedic Surgery, Graduate School of Medicine, Kyoto University, Japan[3])

P1-139 Akhirin, a secreted molecule of von Willebrand factor A superfamily, plays role on neurogenic niches in mouse brain

○Mohammad Badrul Anam, Shah Adil Ishtiyaq Ahmad, Naofumi Ito, Kunimasa Ohta (Department of Developmental Neurobiology, Kumamoto University)

P1-140 Prolyl Isomerase Pin1 Is Required Sperm Production by Promoting Mitosis Progression of Spermatogonial Stem Cells

○Atsuko Suzuki[1], Yuki Kamo[1], Chiyoko Uchida[2], Kenshiro Hara[1], Taka-

fumi Uchida[1] (Tohoku Univ.[1], Fukushima Univ.[2])

P1-141 Sphere formation and characterization of mesenchymal and epithelial cells isolated from human hair follicle
○Toshiki Yachi, Hiroaki Kitamura, Tokuro Iwabuchi (Tokyo Univ. of Technol.)

P1-142 (WS15-10) T-SNARE Protein Syntaxin-4 as a Possible Regulator of Human Stem Cell Pluripotency
○Thassya Obata, Yohei Hirai (Department of Biomedical Chemistry, Graduate School of Science and Technology, Kwansei Gakuin University)

P1-143 (WS08-08) Causal link between epimorphin and E-cadherin in regulation of keratinocyte differentiation
○Noriko Tachibana, Yohei Hirai (Department of Biomedical Chemistry, Graduate School of Science and Technology, Kwansei Gakuin University)

P1-144 Transcriptome analysis of lung epithelial cells and fibroblasts during alveologenesis revealed fibroblast-epithelial interactions and key regulators of alveolar epithelial cells type 2
○Kazushige Shiraishi, Shigeyuki Shichino, Satoshi Ueha, Kouji Matsushima (Dept. Mol. Prev. Med., Univ. of Tokyo)

P1-145 Establishing pluripotent stem cell lines from undifferentiated cells in the newborn *Dnd1* mutant testis.
○Yuri An, Yasuhisa Matsui (Cell Resource Center for Biomedical Research, Institute of Development, Aging and Cancer, Tohoku University)

P1-146 Functions of the p57 imprinted allele in mouse neocortical development
○Yui Imaizumi, Tomoyuki Watanabe, Shohei Furutachi, Daichi Kawaguchi, Yukiko Gotoh (Graduate School of Pharmaceutical Sciences, The University of Tokyo)

P1-147 (SWS-09) The Novel G-protein coupled receptor GPR17 is the Negative Feedback Loop component of the Sonic Hedgehog Pathway in the Neural Tube Development
○Atsuki Yatsuzuka, Akiko Hori-Nishi, Minori Kadoya, Noriaki Sasai (Nara Institute of Science and Technology)

P1-148 Tsukushi affects hippocampal neurogenesis in mouse brain

○Shah Adil Ishtiyaq Ahmad, Mohammad Badrul Anam, Naofumi Ito, Kunimasa Ohta (Department of Developmental Neurobiology, Graduate School of Life Sciences, Kumamoto University, 1-1-1 Honjo, Kumamoto, Japan.)

P1-149 High cell density suppresses BMP4-induced differentiation of human pluripotent stem cells to produce macroscopic spatial patterning in a unidirectional perfusion culture chamber

○Minh Nguyen Tuyet Le[1], Shota Tashiro[1], Yuta Kusama[1], Eri Nakatani[1], Mika Suga[2], Miho K Furue[2], Taku Satoh[3], Shinji Sugiura[3], Toshiyuki Kanamori[3], Kiyoshi Ohnuma[1], Yoshikatsu Tobaru[1] (Nagaoka University of Technology[1], Laboratory of Stem Cell Cultures, National Institutes of Biomedical Innovation, Health and Nutrition, 7-6-8 Saito-Asagi, Ibaraki, Osaka 567-0085, Japan[2], Research Center for Stem Cell Engineering, National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba Central 4, 1-1-1 Higashi, Tsukuba, 5 Ibaraki 305-8562, Japan[3])

P1-150 (WS08-01) Intravital imaging reveals a role of ERK activity in migration of myoblasts during muscle regeneration.

○Yumi Konagaya[1], Michiyuki Matsuda[1,2], Kenta Terai[1] (Laboratory of Bioimaging and Cell Signaling Graduate School of Biostudies, Kyoto University, Sakyo-ku, Kyoto 606-8501, Japan[1], Department of Pathology and Biology of Diseases, Graduate School of Medicine, Kyoto University, Sakyo-ku, Kyoto 606-8501, Japan[2])

P1-151 Precise regulation of neuron-specific Notch signal is required for neuronal differentiation and locomotive behavior.

○Shun Fukagawa, Takamasa Mizoguchi, Miku Iihama, Michi Fukada, Xuehui Song, Motoyuki Itoh (Univ. of Chiba)

P1-152 (WS13-10) Elucidation of the expansion-to-neurogenic phase transition in neocortical neural progenitor cells

○Naohiro Kuwayama, Yusuke Kishi, Yurie Nishiumi, Yukiko Gotoh (Faculty of pharmaceutical science, The university of Tokyo)

P1-153 Identification of master regulator genes for hepatocyte differentiation in de-differentiated fat (DFAT) cells

○Reiko Hagiwara, Yoshinao Oki, Koichiro Kano (College of Bioresource Sciences, Nihon University)

P1-154 (WS08-09) Cytological and transcriptomic analyses on adventitious bud formation from the epidermis in cultured stem segments of *Torenia fournieri*.

○Hatsune Morinaka[1], Akihito Mamiya[1], Akitoshi Iwamoto[2], Hiroaki Tamaki[1], Takamasa Suzuki[3], Yoshikatsu Sato[4], Momoko Ikeuchi[5], Akira Iwase[5], Keiko Sugimoto[5], Tetsuya Higashiyama[4], Munetaka Sugiyama[1] (Univ. Tokyo[1], Tokyo Gakugei Univ.[2], Chubu Univ.[3], Nagoya Univ.[4], Riken[5])

P1-155 (WS17-01) Warburg-like metabolism coordinates FGF and Wnt signaling in the vertebrate embryo

○Masayuki Oginuma, Yukiko Harima, Olivier Pourquie (Harvard Medical School,Brigham and Women's Hospital, Gunma University Institute for Molecular and Cellular Regulation)

P1-156 Rubicon negatively regulates adipogenesis in 3T3-L1 cells.

○Junji Fukumori[1,2], Tadashi Yamamuro[2], Shotaro Saita[2], Tsuyoshi Kawabata[3], Tamotsu Yoshimori[2] (Faculty of Medicine, Osaka University[1], Department of Genetics, Graduate School of Medicine, Osaka University[2], Department of Stem Cell Biology, Atomic Bomb Disease Institute, Nagasaki University[3])

P1-157 The analysis of the effect of cell dynamics on Delta-Notch intaraction during retinal angiogenesis

○Toshiki Oguma[1], Tomoyasu Shinoda[2], Shuntaro Ogura[3], Akiyoshi Uemura[3], Takaki Miyata[2], Philip K. Maini[4], Takashi Miura[1] (Kyushu Univ.[1], Nagoya Univ.[2], Nagoya City Univ.[3], WCMB, Univ. of Oxford[4])

P1-158 (WS16-03) Mathematical analysis of orixate phyllotaxis

○Takaaki Yonekura[1], Akitoshi Iwamoto[2], Hironori Fujita[3], Munetaka Sugiyama[1] (Univ. Tokyo[1], Tokyo Gakugei Univ.[2], Natl. Inst. Basic Biol.[3])

P1-159 Pericyte coverage of endothelial cells: in vitro experiments and computational modeling

○Kei Sugihara[1], Saori Sasaki[2], Akiyoshi Uemura[3], Satoru Kidoaki[2], Takashi Miura[1,4] (Univ. of Kyushu Sch. of Med. Sci.[1], Univ. of Kyushu Inst. of Mat. Chem. and Eng.[2], Nagoya City Univ. Sch. of Med. Sci.[3], JST CREST[4])

P1-160 A computational methodology for sptatiotemporal reconstruction of gene expression in early development of zebrafish

○Yasuhiro Kojima, Hisanori Kiryu (Graduate School of Frontier Sciences, The University of Tokyo)

P1-161 Molecular Mechanisms of Phospholipase C δ1 in Colorectal Cancer Cells
○Shiori Kubota, Shinobu Asada, Reiko Satow, Kiyoko Fukami (Tokyo University of Pharmacy and Life Sciences, Laboratory of Genome and Biosignals)

P1-162 Oncogenic Ras and p53 mutations cooperate to prime the initial step of tumorigenesis.
○Yukinari Haraoka[1,2], Yuki Akieda[1], Tohru Ishitani[1,2] (Division of Integrated Signaling Systems, Department of Molecular Medicine, Institute for Molecular and Cellular Regulation, Gunma University[1], Graduate School of Medical Sciences, Faculty of Medical Sciences, Kyushu University[2])

P1-163 Pathology of MAB21L2 R51C in early eye development
○Long Hei Chan, Yanjiang Guo, King Lau Chow (Hong Kong University of Science and Technology)

P1-164 (WS17-06) Subcellular localization and functional analyses of *Drosophila SLC25A46,* mitochondrial diseases causing gene.
○Kojiro Suda, Hideki Yoshida, Masamitsu Yamaguchi (Kyoto Institute of Technology)

P1-165 Temperature preference of cave and surface populations of *Astyanax mexicanus*
○Julius Tabin[1], Ariel Aspiras[1], Brian Martineau[1], Misty Riddle[1], Alex Haro[2], Johanna Kowalko[4], Richard Borowsky[3], Nicolas Rohner[5], Cliff Tabin[1] (Harvard University[1], US Geological Survey[2], New York University[3], Iowa State University[4], Stowers Institue[5])

P1-166 (YSA-02) Morphological novelty in the vertebrate limb created by the water-to-land transition
○Ingrid Rosenburg Cordeiro[1], Kaori Kabashima[1], Haruki Ochi[2], Keijiro Munakata[1], Chika Nishimori[1], Mara Laslo[3], James Hanken[3], Mikiko Tanaka[1] (Tokyo Institute of Technology[1], Yamagata University[2], Harvard University[3])

P1-167 Evolutionary cooperativity between mating position and rotation of

male genitalia in Diptera
○Momoko Inatomi[1], Chisako Sakuma[2], Hirotaka Kanuka[2], Kenji Matsuno[1] (Osaka Univ.[1], The Jikei Univ. Sch. of Med.[2])

P1-168 (SWS-11) The Role of Retinoic Acid Singalling in Starfish Metamorphosis
○Shumpei Yamakawa, Yoshiaki Morino, Masanao Honda, Hiroshi Wada (Graduate School of Life and Environmental Sciences, University of Tsukuba)

P1-169 Increased number of spiralian TALE homeobox genes in bivalve lineage and evolution of cell fate segregation program in the early development
○Supanat Phuangphong, Jumpei Tsunoda, Hiroshi Wada, Yoshiaki Morino (University of Tsukuba)

P1-170 3D cell shape recognition using AI
○Mustafa M. Sami, Takuya Maeda, Shigeo Hayashi (Laboratory for Morphogenetic Signaling, RIKEN Center for Biosystems Dynamics Research, 2-2-3 Minatojima-minamimachi, Chuo-ku, Kobe, Hyogo, Japan)

P1-171 (WS09-04) A novel genome-integrating vector system for cell and developmental biology studies
○Takuma Kumamoto[1], Raphaëlle Barry[1], Samuel Tozer[1], Franck Maurinot[1], Célia Vaslin[2], Mickaël Le[1], Stephane Nedelec[2], Karine Loulier[1], Jean Livet[1] (Sorbonne Université, INSERM, CNRS, Institut de la Vision[1], Sorbonne Université, INSERM, Institut du Fer à Moulin[2])

P1-172 (WS09-10) Non-labeled cancer cell analysis in anhydrous condition using CMOS biosensor integrated circuit (IC) with 20/60/120-GHz oscillator arrays
○Shojiro Kikuchi[1], Mika Sawada[1], Tetsuhito Suzuki[2], Keiichiro Shiraga[3], Takeshi Matsui[3], Takeshi Mitsunaka[4], Masafumi Yamanoue[4], Yuichi Ogawa[2] (Institute for Advanced Medical Science, Hyogo College of Medicine[1], Graduate School of Agriculture, Kyoto University[2], RIKEN Center for Integrative Medical Sciences[3], Sharp Corporation, Electronic Components and Devices BU[4])

P1-173 Rapid clearing and labeling of mouse cochlea by modified Sca/eS enable exhaustive analysis of hair cell
○Shinji Urata, Tadatsune Iida, Yu Mizushima, Chisato Fujimoto, Yu Matsumoto, Tatsuya Yamasoba, Shigeo Okabe (The University of Tokyo)

P1-174 (WS09-06)

Optical measurement of neuronal activity in zebrafish brain by genetically encoded voltage indicators

○Kanoko Okumura[1], Hiroaki Miyazawa[1], Kanae Hiyoshi[1], Kazuhiro Maruyama[1], Hisaya Kakinuma[2], Ryunosuke Amo[2], Hitoshi Okamoto[2], Kyo Yamasu[1], Sachiko Tsuda[1,3] (Graduate School of Science and Engineering, Saitama University[1], Riken Brain Science Institute[2], Research and Development Bureau, Saitama University[3])

Discussion 2: June 7 (Thu) 13:50-14:50 for odd number posters
14:50-15:50 for even number posters

P2-001 Single-Cell Gene Expression Analysis with Vertical Flow Array Chips

○Kiyomi Taniguchi, Tomoyuki Sakai, Masataka Shirai (Hitachi, Ltd. Research & Development Group)

P2-002 (SWS-01) LINC complex component, SUN1 play a role in the Golgi complex organization without nesprins

Taizo Matsumoto[1], Yu Nishioka[2], Mari Isobe[3], Satoshi Kametaka[3], Hiroshi Kimura[4], Nariaki Matsuura[2], ○Miki Hieda[1,2] (Ehime Prefectural Unibersity of Health Sciences[1], Osaka University, Graduate School of Medicine and Health Sciences[2], Nagoya University Graduate School of Medicine[3], Tokyo Institute of Technology, Institute of Innovative Research[4])

P2-003 (WS10-03) Molecular basis of kinetochore recruitment of the RZZ complex and its roles in the establishment of bi-orientation during mitosis in human cells

○Masanori Ikeda, Kozo Tanaka (Department of Molecular Oncology, Institute of Development, Aging and Cancer, Tohoku University)

P2-004 Significance of Hey1 transcription factor in pharyngeal arch artery formation and regulatory mechanisms of its expression during embryonic development

○Yusuke Watanabe[1,2], Toshiharu Fukayama[1], Shuhei Ishii[1,2], Taiki Uemoto[1,2], Masahide Fujita[1], Yoshie Isomoto[3], Yuji Arai[3], Atsushi Kubo[4], Hiroyuki Yamagishi[5], Osamu Nakagawa[1,2] (Department of Molecular Physiology, National Cerebral and Cardiovascular Center Research Institute[1], Nara Medical University Graduate School of Medical Sciences[2], Laboratory of Animal Experiment and Medicine Management, National Cerebral and Cardiovascular Center Research Institute[3], Department of Developmental Neurobiology, Institute of Development Aging and Cancer, Tohoku University[4], Department of Pediatrics, Keio University School of Medicine[5])

P2-005 Requirement for p53 in intra-nuclear dynamics of the K27-trimethylated histone H3 during DNA replication

○Tsukasa Oikawa, Yuki Shino, Suguru Kurosawa, Yasuhito Onodera, Yutaro Otsuka, Ari Hashimoto, Hisataka Sabe (Dept. Molecular Biology,

Grad. Sch. Med. Hokkaido Univ.)

P2-006 Contribution of nuclear pore complex to DNA damage-induced sister chromatid cohesion through promoting SUMOylation of cohesin
○Yukako Oma, Yuki Orihara, Daisuke Takahashi, Tatsunori Konishi, Masahiko Harata (Lab. Mol. Biol., Grad. Sch. Agric. Sci., Tohoku Univ.)

P2-007 The wild-type *Xenopus laevis* is an asymptomatic carrier of aniridia-like *pax6* mutations
○Yui Iwata[1], Mikio Tanouchi[1], Takeshi Igawa[1], Kiyo Sakagami[2], Haruki Ochi[3], Hajime Ogino[1] (Amph. Res. Center, Hiroshima Univ.[1], Dept. Ani-Bio., Nagahama Inst. of Bio-Sci. Tech.[2], Fac. Med., Yamagata Univ.[3])

P2-008 (SWS-02) Nuclear transport system responds in a multistep mechanism depending on temperature rises
○Yutaka Ogawa, Naoko Imamoto (Cellular Dynamics Laboratory, RIKEN)

P2-009 (WS10-01) How to measure absolute quantity of tRNAs.
Akihisa Nagai, Kouhei Mori, Yuma Shiomi, ○Tohru Yoshihisa (Graduate School of Life Science, University of Hyogo)

P2-010 Cytoplasmic Deadenylase Ccr4 is Required for Translational Repression of Puf5 mRNA targets in the Stationary Phase in *Saccharomyces cerevisiae*
○Long-Duy Duong[1], Yasuyuki Suda[1,2], Kenji Irie[1] (Department of Molecular Cell Biology, Graduate School of Comprehensive Human Sciences and Faculty of Medicine, University of Tsukuba, Tsukuba, Japan[1], Live Cell Super-resolution Imaging Research Team, RIKEN Center for Advanced Photonics, Wako, Saitama, Japan[2])

P2-011 Assembly of nuclear envelope-like structures around artificial beads in living cells
○Shouhei Kobayashi[1], Takako Koujin[1], Tomoko Kojidani[1,2], Hiroko Osakada[1], Chie Mori[1], Yasushi Hiraoka[1,3], Tokuko Haraguchi[1,3] (Adv. ICT Res. Inst. Kobe, NICT[1], Japan Women's University[2], Grad. Sch. Frontier BioSciences, Osaka Univ.[3])

P2-012 Wave generation mediated by Hedgehog signaling and its target gene: A key link between axis specification and segmentation
○Yasuko Akiyama-Oda[1,2], Hiroki Oda[2] (Osaka Medical College[1], JT Bio-

history Research Hall[2])

P2-013 Identification of the X-linked germ cell specific miRNAs (XmiRs) and their functions

○Hiromitsu Ota, Yumi Matsuoka, Yasuhisa Matsui (Institute of Development, Aging and Cancer, Tohoku University)

P2-014 Regulatory mechanisms of serotonin-enhanced hyperactivation in hamster sperm

○Masakatsu Fujinoki (Department of Physiology, Dokkyo Medical University)

P2-015 (WS11-06) Regulatory mechanisms and biological significance of metabolic shift in mouse primordial germ cell development

○Yohei Hayashi[1,2,3], Keiko Tanaka[1,4], Kei Otsuka[1], Masayuki Ebina[5,6], Kaori Igarashi[7], Asuka Takehara[1], Mitsuyo Matsumoto[5,8], Akio Kanai[7], Kazuhiko Igarashi[3,5,8], Tomoyoshi Soga[7], Yasuhisa Matsui[1,2,3,8] (Cell Resource Center for Biomedical Research, Institute of Development, Aging and Cancer (IDAC), Tohoku University[1], Graduate School of Life Sciences, Tohoku University[2], The Japan Agency for Medical Research and Development-Core Research for Evolutional Science and Technology (AMED-CREST)[3], Department of Obstetrics and Gynecology, Tohoku University Hospital[4], Department of Biochemistry, Tohoku University School of Medicine[5], Department of Integrative Genomics, Tohoku Medical Megabank Organization (ToMMO), Tohoku University School of Medicine[6], Institute for Advanced Biosciences, Keio University[7], Center for Regulatory Epigenome and Diseases, Tohoku University School of Medicine[8])

P2-016 (WS11-04) RSK-MASTL pathway delays meiotic exit in mouse zygotes to ensure paternal chromosome stability

○Shou Soeda[1,2], Kaori Yamada-Nomoto[3], Miho Ohsugi[2] (Okinawa Institute of Science and Technology[1], Graduate School of Arts and Sciences, The University of Tokyo[2], Faculty of Medicine, Toyama University[3])

P2-017 (WS11-05) Identification of a new maternal factor involved in germ cell formation in the *Drosophila* embryos

Takashi Yoshitani[1,2,4], Hirono Kina[1,2,4], Tsubasa Tanaka[1,2,3], Kazuko Hanyu-Nakamura[1], ○Akira Nakamura[1,2,3] (Institute of Molecular Embryology and Genetics, Kumamoto University[1], School of Pharmacy, Kumamoto Uni-

versity[2], Graduate School of Pharmaceutical Sciences, Kumamoto University[3], Equal contribution[4])

P2-018 Six1 and Six4 regulate the number of germ cell progenitors in mice
Yasuka L Yamaguchi[1], Kiyoshi Kawakami[2], Ryuichi Nishinakamura[3], ○Sato-mi S Tanaka[1] (Kumamoto Health Science Univ.[1], Jichi Med. Univ.[2], Kumamoto Univ.[3])

P2-019 (WS11-02) Blockage of sperm Ca^{2+}-permeable channels involves the maintenance of its quality for fertilization in the newt, *Cynops pyrrhogaster*.
○Akihiko Watanabe[1], Eriko Takayama-Watanabe[2], Nanae Makino[1] (Biol. Div., Fac. of Sci., Yamagata Univ.[1], Inst. of Arts and Sci., Yamagata Univ.[2])

P2-020 Differences in developmental process causing morphological diversity of seminal receptacles among Drosophildae species.
○Tatsuhiko Noguchi (National Defense Medical College)

P2-021 The chromodomain protein MRG-1 is required for global transcriptional repression in the primordial germ cells in *C. elegans*.
○Takashi Miwa[1], Teruaki Takasaki[2], Kunio Inoue[1], Hiroshi Sakamoto[1] (Dept. of Biol., Grad. Sch. of Sci., Kobe Univ.[1], Fac. of Pharm., Kindai Univ.[2])

P2-022 The translocation of avian primordial germ cells into vascular tissue occurs prior to vascular network formation
○Hidetaka Murai, Minami Shibuya, Koji Tamura, Daisuke Saito (Tohoku University)

P2-023 Cadherin-7 enhances Sonic Hedgehog signaling by preventing Gli3 repressor formation during neural tube patterning
○Rie Kawano[1], Kunimasa Ohta[2], Giuseppe Lupo[3] (Department of Medical Oncology and Hematology, Oita University Faculty of Medicine, Oita, Japan[1], Division of Developmental Neurobiology, Graduate School of Life Sciences, Kumamoto University, Kumamoto, Japan[2], Department of Chemistry, Sapienza University of Rome, Rome, Italy[3])

P2-024 Naringenin inhibited migration and invasion of glioblastoma cells via multiple mechanisms
Shih-Ming Chen, Kuan-Yi Wang, ○Li-Sung Hsu (Institute of Biochemistry, Microbiology, and Immunology, Chung Shan Midical University)

P2-025 (WS02-06) Snail interacts with FoxO to modulate JNK-dependent cell death in *Drosophila*

○Chenxi Wu[1,2] (College of Chinese Medicine, North China University of Science and Technology, China[1], School of Life Science and Technology, Tongji University, China[2])

P2-026 Why established cell lines require passage to maintane infinite life span?

○Tomoyuki Tajima, Yoshifusa Kondo (Ichikawa-Clinic)

P2-027 (WS02-03) PLEKHN1 promotes apoptosis by enhancing Bax/Bak hetero-oligomerization through the interaction with Bid in human colon cancer

○Sei Kuriyama (Akita University)

P2-028 GRP78 is involved in endothelin B receptor signaling

○Yuichi Mazaki[1], Tsunehito Higashi[1], Takahiro Horinouchi[1], Ari Hashimoto[2], Shigeru Hashimoto[3], Jin-Min Nam[4], Yasuhito Onodera[2] (Dept. Cell. Pharm., Grad. Sch. Med., Hokkaido Univ.[1], Dept. Mol. Biol., Grad. Sch. Med., Hokkaido Univ.[2], Dept. Immnol. Reg., iFRec, Osaka Univ.[3], GSQ, GI-CoRE, Hokkaido Univ.[4])

P2-029 (WS02-11) Crosstalk between JNK and p38 kinase generates cell-to-cell variation in JNK activity dynamics and determines a cell fate decision

○Haruko Miura[1,2], Michiyuki Matsuda[2,3], Kazuhiro Aoki[1,4] (Div. Quant. Biol., OIIB, NIBB, NINS[1], Lab. Bioimaging Cell Signal., Grad. Sch. Biostudies, Kyoto Univ.[2], Dept. Pathol. Biol. Dis., Grad. Sch. Med., Kyoto Univ.[3], Dept. Basic Biol., Sch. Life Sci., SOKENDAI[4])

P2-030 RIPK1 Functions as a pH-Sensing Kinase that Regulates TNF-induced Cell Death

○Kenta Moriwaki (Dept of Cell Biology, Osaka Univ. Grad. Sch. of Med.)

P2-031 Cancelled.

P2-032 Oligomerization-based assembly restricts Wnt protein diffusion

○Ritsuko Takada[1], Yusuke Mii[1], Elena Krayukhina[2], Chan-Gi Pack[3], Yasushi Sako[3], Susumu Uchiyama[2], Shinji Takada[1] (NIBB, NINS[1], Osaka Univ.[2], RIKEN[3])

P2-033 (WS02-07) Multiplexed live cell imaging reveals a distinct role of ERK and Akt activity in cell cycle progression.

○Gembu Maryu[1,3], Michiyuki Matsuda[1,2], Kazuhiro Aoki[3] (Graduate school of Biostudies, Kyoto University[1], Graduate School of Medicine, Kyoto University[2], Division of Quantitative Biology, National Institute of Basic Biology[3])

P2-034 Development of FRET-based biosensors for measuring tyrosine kinase activity in living cells

○Mari Fujioka, Yoichiro Fujioka, Aya O Satoh, Prabha Nepal, Sayaka Kashiwagi, Aiko Yoshida, Sarad Paudel, Asuka Nanbo, Yusuke Ohba (Dept. Cell Physiol., Fac. Med. and Grad. Sch. Med. Hokkaido Univ.)

P2-035 Genetic analysis of cell death-mediated robust coordination of tissue growth in *Drosophila*

○Yukiko Inui, Shizue Ohsawa, Tatsushi Igaki (Graduate School of Biostudies, Kyoto University)

P2-036 (WS02-04) The cell-type specific functions of an ER modulating factor, Pecanex in Notch and Wnt signaling pathways

○Tomoko Yamakawa, Kenji Matsuno (Osaka University)

P2-037 Mechanism that fluid flow establishes left-right asymmetric decay of *Cerl2* mRNA

○Katsura Minegishi, Hiroshi Hamada (RIKEN)

P2-038 PI3,5P_2-dependent localizaiton of Sch9 to vacuolar membranes contributes to selective regulation of TORC1-Sch9 signaling upon stress in *Saccharomyces cerevisiae*

Eigo Takeda, ○Akira Matsuura (Grad. Sch. of Sci., Chiba Univ.)

P2-039 Nanoscale morphological analysis of primary cilia and ciliary pocket using scanning ion-conductance microscopy

○Yuanshu Zhou[1], Masaki Saito[2], Takafumi Miyamoto[1], Takeshi Fukuma[1,3], Yasufumi Takahashi[1,3,4] (Division of Electrical Engineering and Computer Science, Kanazawa University[1], Department of Molecular Pharmacology, Tohoku University Graduate School of Medicine[2], WPI-NanoLSI, Kanazawa University[3], JST-PRESTO[4])

P2-040 (WS02-05) ER-resident BH3-only protein, BNip1, is a safe guard that limits the upper threshold of vesicular transport

○Yuko Nishiwaki, Kimberlie Ward, Ichiro Masai (Okinawa Institute of Science and Technology)

P2-041 p53-dependent apoptosis eliminates surplus and/or less-fit cells from epiblast in embryonic stem cell chimeras.
Yuki Yuri, Masakazu Hashimoto, Yusuke Takenoshita, ○Hiroshi Sasaki (Osaka University, Graduate School of Frontier Biosciences)

P2-042 (WS02-09) Composite regulation of ERK activity dynamics underlying tumor-specific traits in the intestine
○Masamichi Imajo[1], Yu Muta[2,3], Michiyuki Matsuda[1,3] (Lab. Bioimag. Cell Signal., Grad. Sch. of Biostud., Kyoto Univ.[1], Dept. Gastroenterol. Hepatol., Grad. Sch. of Med., Kyoto Univ.[2], Dept. Pathol. Biol. Dis., Grad. Sch. of Med., Kyoto Univ.[3])

P2-043 Crumbs and Xpd regulate mitotic motor kinesin-5 for chromosome segregation in Drosophila
○Jihyun Hwang[1], Linh Thuong Vuong[2], Kwang-Wook Choi[1] (Korea Advanced Institute of Science and Technology[1], Icahn School of Medicine at Mount Sinai, New York, U.S.A.[2])

P2-044 Recruitment of SH3YL1 to mitochondrial membrane during cell death
○Toshiki Itoh, Hikaru Yamamoto (Kobe University, Biosignal Research Center)

P2-045 Function of the Iron-sulfur Cluster Assembly Protein Ciao1 in Growth Regulation in Drosophila
○Jean Jung[1], Eunbyul Yeom[2], Kwang-Wook Choi[1] (Korea Advanced Institute of Science and Technology[1], Korea Research Institute of Bioscience and Biotechnology[2])

P2-046 Adaptor function of a calcium-binding protein ALG-2 in doxorubicin-induced apoptosis
○Kanako Mori, Ryuta Inukai, Terunao Takahara, Masatoshi Maki, Hideki Shibata (Grad. Sch. of Bioagric. Sci., Nagoya Univ.)

P2-047 Uncovering a novel and distinctive mode of atypical cell death that is induced by non-thermal atmospheric pressure plasma
○Kazufumi Nomura[1], Chiaki Ishinada[1], Keiichiro Hyakutake[1], Hiromasa Tanaka[2], Masaru Hori[2], Takuya Suemoto[1], Ko Eto[3] (Dept. of Biol. Sci, Fac. of Sci., Kumamoto univ.[1], Institute of Innovation for Future Society, Nagoya Univ.[2], Dept. of Biol. Sci., Grad. Sch, of Sci. Tech., Kumamoto Univ.[3])

P2-048 Extract from a Philippine Endemic Plant Reverses Cancer Multidrug Resistance

○Regina Joyce E. Ferrer, Sonia D. Jacinto (Institute of Biology, University of the Philippines - Diliman)

P2-049 Isolate from a Philippine Endemic Plant Exhibits Cytotoxic Activity Against Human Colorectal Cancer (HCT-116) Cells

○Jeff Deloso Dela Cruz, Sonia D. Jacinto (Mammalian Cell Culture Laboratory - Institute of Biology, University of the Philippines Diliman)

P2-050 Nuclear envelope localization of PIG-B is essential for GPI-anchor synthesis in *Drosophila*

○Miki Yamamoto-Hino[1], Eri Katsumata[1], Emiko Suzuki[2], Yusuke Maeda[3], Taroh Kinoshita[3], Satoshi Goto[1] (Dept. of Life Sci., Rikkyo Univ.[1], NIG[2], RIMD., Osaka Univ.[3])

P2-051 DENND1A, but not DENND1B or DENND1C, regulates podocalyxin trafficking in epithelial cysts

○Riko Kinoshita, Yuta Homma, Mitsunori Fukuda (Lab. of Membr. Trafficking Mech., Grad. Sch. of Life Sci., Tohoku Univ.)

P2-052 (WS14-06) Physical modeling for mitochondrial shape and size regulation

○Masashi Tachikawa (Riken)

P2-053 Functional analysis of a SNARE protein SNAP23 in mouse brain development.

○Masataka Kunii, Shin-ichiro Yoshimura, Akihiro Harada (Dept. of Cell Biol., Grad. Sch. of Med., Osaka Univ.)

P2-054 The Role of tubulin in the regulation of endocytosis mediated by Ras-PI3K signaling

○Sarad Paudel, Yoichiro Fujioka, Aya O. Satoh, Mari Fujioka, Kosui Horiuchi, Prabha Nepal, Sayaka Kashiwagi, Aiko Yoshida, Asuka Nanbo, Yusuke Ohba (Department of Cell Physiology, Faculty of Medicine and Graduate School of Medicine, Hokkaido University, Sapporo, Japan)

P2-055 Regulation of the expression and function of YIPF proteins at the Golgi apparatus

Shaheena Shaik[2], Shiho Osako[2], Shusuke Ijiri[1], Soonthornsit Jeerawat[2,3], ○Nobuhiro Nakamura[1,2] (Fac Life Sci, Kyoto Sangyo Univ[1], Div Life Sci, Grad Sch, Kyoto Sangyo Univ[2], Dept Preclin Appl Animal Sci, Fac Vet,

Mahidol Univ[3])

P2-056 Essential components of Transamidase complex (TAC) for formation of large assembly

○Tatsuro Sato, Seri Takaki, Miki Yamamoto-Hino, Satoshi Goto (Rikkyo University)

P2-057 (WS03-02) Phosphorylation of TANGO1 regulates localization and function of ER exit sites

○Miharu Maeda[1], Toshiaki Katada[2], Kota Saito[1] (Dept. of Biol. Informatics and Experimental Therapeut., Grad. Sch. of Medicine, Akita Univ.[1], Faculty of Pharmacy, Musashino Univ.[2])

P2-058 Membrane vesiculation by ANKHD1 protein regulates enlargement of the early endosome.

○Manabu Kitamata, Kyoko Hanawa-Suetsugu, Kohei Maruyama, Shiro Suetsugu (Grad. Sch. of Biol. Sci., Nara Inst of Sci. Tech., Japan)

P2-059 (WS03-03) Endosomal Q-SNARE Syntaxin 7 specifies a subpopulation of recycling synaptic vesicles preferentially responsive to high frequency stimulation

○Yasunori Mori[1], Yugo Fukazawa[2], Shigeo Takamori[1] (Doshisha Univ.[1], Fukui Univ.[2])

P2-060 Role of inner mitochondrial membrane proteins in the regulation of endocytosis mediated by Ras-PI3K signaling

○Prabha Nepal, Yoichiro Fujioka, Aya O. Satoh, Kosui Horiuchi, Sarad Paudel, Sayaka Kashiwagi, Aiko Yoshida, Mari Fujioka, Asuka Nanbo, Yusuke Ohba (Department of Cell Biology, Faculty of Medicine and Graduate School of Medicine, Hokkaido University, Sapporo, Japan)

P2-061 Characterization of the novel inhibitor for protein secretion

○Ayano Satoh[1], Hideyuki Suzuki[1], Mitsuko Hayashi-Nishino[2], Kunihiko Nishino[2], Yuta Nishina[1] (Okayama University[1], Institute of Scientific and Industrial Research, Osaka University[2])

P2-062 AGC family kinase 1 participates in trogocytosis but not in phagocytosis in *Entamoeba histolytica*

Som lata[2], ○Kumiko Tsukui[1], Tomoyoshi Nozaki[3] (Natl. Inst. Infect. Dis.[1], Jawajarlal Nehru Univ.[2], Univ. of Tokyo[3])

P2-063 Intracellular transport pathways of lactoferrin-GFP in intestinal epithelial cells

Asuka Nagae[1], Daita Nadano[1], Tsukasa Matsuda[1], Hiroyuki Wakabayashi[2], Koji Yamauchi[2], Fumiaki Abe[2], ○Kenzi Oshima[1] (Nagoya University, Graduate School of Bioagricultural Sciences[1], Morinaga Milk Industry Co., Ltd., Food Ingredients & Technology Institute[2])

P2-064 The nuclear transport factor importin α4 is involved in normal male fertility and brain development in mouse

○Yoichi Miyamoto[1], Taichi Itou[2], Makiko Morita[2], Masahiro Nagai[2], Mitsuho Sasaki[1], Tetsuji Moriyama[3], Kate L Loveland[4], Yoshihiro Yoneda[1], Takatoshi Hikida[2], Masahiro Oka[1] (Natl Inst. of Biomed. Innov., Health and Nutr.[1], Osaka Univ.[2], Univ. of Fukui[3], Hudson Inst. of Med Res.[4])

P2-065 4D imaging of membrane traffic in the neuronal growth cone

○Takuro Tojima, Akihiko Nakano (RIKEN Center for Advanced Photonics)

P2-066 Reconstitution of membrane tethering mediated by human Rab-family small GTPases in a chemically defined system

○Joji Mima (IPR, Osaka Univ.)

P2-067 EHBP1L1 binds CD2AP

○Shin-ichiro Yoshimura, Akihiro Harada (Osaka Univ.)

P2-068 Live-cell imaging of antitrypsin Z-variant polymer inclusion

○Seisuke Arai, Takahisa Suzuki, Ikuo Wada (Dep. Cell Sci., Fukushima Med. Univ.)

P2-069 (WS03-12) Exophilin-8/MyRIP/Slac2C assembles secretory granules for exocytosis in the actin cortex via interaction with RIM-BP2 and myosin-VIIa

○Kohichi Matsunaga[1], Fushun Fan[1], Hao Wang[1], Ray Ishizaki[1], Eri Kobayashi[1], Hiroshi Kiyonari[3], Yoshiko Mukumoto[3], Katsuhide Okunishi[1], Tetsuro Izumi[1,2] (Laboratory of Molecular Endocrinology and Metabolism, Department of Molecular Medicine, Institute for Molecular and Cellular Regulation[1], Research Program for Signal Transduction, Division of Endocrinology, Metabolism and Signal Research, Gunma University Initiative for Advanced Research[2], Animal Resource Development Unit, and Genetic Engineering Team, RIKEN Center for Life Science Technologies[3])

P2-070 Rab11-mediated regulation of cell-surface MHC-II on dendritic cells
○Kazuyuki Furuta, Yuka Satoh, Mahiro Kuroda, Satoshi Tanaka (Okayama Univ. Grad. Sch. Med., Dent., Pharmac. Sci.)

P2-071 Determine which ArfGAPs regulate secretory granule formation of Von Willebrand Factor
○Yoko Shiba, Asano Watanabe (Faculty of Sci. and Eng. Iwate University)

P2-072 Conserved overlapping coding frame regulates two type of XBP1 functions
○Masaaki Koike, Kenji Kohno (Nara Institute of Science and Technology (NAIST))

P2-073 (WS14-09) Lemur kinase 1 (LMTK1) regulates dendritic spine formation negatively through Rab11 GAP
Hironori Nishino[1], Akiko Asada[1], Taro Saito[1], Kanae Ando[1], Mineko Tomomura[2], Mitsunori Fukuda[3], ○Shin-ichi Hisanaga[1] (Tokyo Metropolitan University[1], Meikai University[2], Tohoku University[3])

P2-074 Subcompartmental localization of the Golgi kinase Four-jointed in Drosophila cells
○Hiroyuki O. Ishikawa, Takuya Okada, Atsuya Nakazawa, Yoko Keira (Chiba Univ.)

P2-075 Studies on phagocytic uptake of yeast spores
○Hideki Nakanishi[1], Qin Wang[1], Yang Yan[1], Xiao-Dong Gao[1], Hiroyuki Tachikawa[2] (Jiangnan Univ.[1], Univ. of Tokyo[2])

P2-076 (WS10-08) The CLIP–cohibin system promotes nucleophagy after TORC1 inactivation in yeast
Golam Md. Mostofa, Arifur Muhammad Rahman, ○Takashi Ushimaru (Graduate School of Science and Technology, Shizuoka University)

P2-077 (WS14-04) Elucidating the mechanism of selective mitochondrial fusion by OPA1 and cardiolipin
○Tadato Ban, Naotada Ishihara (Dept. of Protein Biochem., Inst. of Life Science, Kurume Univ.)

P2-078 Phosphorylated SNAP-23 at Ser95 by IκB kinase 2 negatively regulates FcR-mediated phagosome maturation in macrophages
○Chiye Sakurai[1], Ikuo Wada[2], Kiyotaka Hatsuzawa[1] (Div. Molecular Biol.,

Sch. of Life Sci., Faculty of Med., Tottori Univ.[1], Dept. Cell Sci., Inst. Biomed. Sci., Sch. of Med., Fukushima Med. Univ.[2])

P2-079 (WS03-07) Regulation of localization and function of syntaxin 17 by 14-3-3 epsilon

Kengo Yoshinaga[1], Kohei Arasaki[1], Naoshi Dohmae[2], ○Mitsuo Tagaya[1] (Tokyo Univ. of Pharm. & Life Sci.[1], RIKEN CSRS[2])

P2-080 Molecular mechanisms of *Streptococcus pneumoniae*-targeted selective autophagy via Golgi-resident Rab41 and Nedd4-1 mediated K63-linked ubiquitination

○Michinaga Ogawa[1], Naoki Takada[1], Sayaka Shizukuishi[1], Isei Tanida[2], Mitsunori Fukuda[3], Makoto Ohnishi[1] (Department of Bacteriology I, National Institute of Infectious Diseases[1], Department of Cell Biology and Neuroscience, Graduate School of Medicine, Juntendo University[2], Laboratory of Membrane Trafficking Mechanisms, Department of Developmental Biology and Neurosciences, Graduate School of Life Sciences, Tohoku University[3])

P2-081 Visualisation of protein transport between the endoplasmic reticulum and the Golgi complex

○Hitoshi Hashimoto, Seisuke Arai, Ikuo Wada (Fukushima Medical University)

P2-082 GGA2 supports cell growth by sustaining EGFR expression in cancer cells

○Takefumi Uemura, Satoshi Waguri (Fukushima Medical University)

P2-083 Mysterin, the moyamoya disease gene, is a regulator of cellular fat metabolism.

○Daisuke Morito[1], Munechika Sugihara[2], Shiori Ainuki[2], Yoshinobu Hirano[3], Kazutoyo Ogino[3], Akira Kitamura[4], Hiromi Hirata[3], Kazuhiro Nagata[1,2] (Institute for Protein Dynamics, Kyoto Sangyo University[1], Faculty of Life Sciences, Kyoto Sangyo University[2], College of Science and Engineering, Aoyama Gakuin University[3], Faculty of Advanced Life Science, Hokkaido University[4])

P2-084 (WS14-08) Visualization of GPI-anchored proteins sorting in the ER

○Kazuo Kurokawa[1], Atsuko Ikeda[2], Koichi Funato[2], Manuel Muñiz[3], Akihiko Nakano[1] (Riken RAP[1], Hiroshima Univ.[2], Univ. of Seville[3])

P2-085 (WS14-05) Degradation pathway mediated by the two AAA-ATPase Msp1 and Cdc48 for the mistargeted tail-anchored proteins on the mitochondrial outer membrane

○Shunsuke Matsumoto[1], Kunio Nakatsukasa[2], Yasushi Tamura[3], Masatoshi Esaki[4], Toshiya Endo[1] (Kyoto sangyo univ.[1], Nagoya city univ.[2], Yamagata univ.[3], Kumamoto univ.[4])

P2-086 (WS10-09) Analysis of the proteoglycan pathway of the mammalian Golgi stress response that regulates the transcription of glycosylation enzymes for proteoglycans

○Mai Taniguchi, Ryota Komori, Chiho Okuda, Ryuya Tanaka, Kanae Sasaki, Sadao Wakabayashi, Hiderou Yoshida (University of Hyogo)

P2-087 (WS03-01) Regulation mechanism of the phosphatidylserine flippase ATP11C

Hiroyuki Takatsu, Masahiro Takayama, Kazuhisa Nakayama, ○Hye-Won Shin (Graduate School of Pharmaceutical Sciences, Kyoto University)

P2-088 Proteomic mapping of ER-Golgi contact sites identifies the V-ATPase subunit ATP6V0A2 as a potential regulator of cargo processing during CARTS biogenesis

○Yuichi Wakana[1], Mutsumi Tateishi[1], Rei Okuma[1], Chiaki Watanabe[1], Masato Taoka[2], Mitsuo Tagaya[1] (Tokyo Univ. of Pharm. & Life Sci.[1], Tokyo Metropolitan Univ.[2])

P2-089 (WS14-01) Identification of cAMP-dependent protein kinase A as a novel selective substrate for autophagy

○Yoshitaka Kurikawa[1], Koji L. Ode[2], Hiroki R. Ueda[2,3], Noboru Mizushima[1] (Dept. of Mol. Biol., Grad. Sch. of Med, Univ. of Tokyo[1], Dept. of Sys. Pharm., Grad. Sch. of Med, Univ. of Tokyo[2], QBiC, RIKEN[3])

P2-090 Src in endosomal membranes promotes secretion of exosomes and tumor progression

○Chitose Oneyama[1,2], Tomoya Hikita[1], Atsushi Kuwahara[1] (Dept. of Cellular Regulation, Aichi Cancer Ctr. Res. Inst.[1], JST, PRESTO[2])

P2-091 (WS03-11) Involvement of actin dynamics in the endocytic process revealed by fast-scanning atomic force microscopy

○Aiko Yoshida[1], Nobuaki Sakai[3], Yoshitsugu Uekusa[3], Shige H Yoshimura[2], Yusuke Ohba[1] (Univ. of Hokkaido[1], Kyoto Univ.[2], Olympus Co.[3])

P2-092 Endosomal phosphatdylserine is critical for the YAP signalling pathway in proliferating cells

○Kojiro Mukai[1], Tatsuyuki Matsudaira[1], Hiroyuki Arai[1,2], Tomohiko Taguchi[1,3] (Department of Health Chemistry, Graduate School of Pharmaceutical Sciences, the University of Tokyo[1], AMED-CREST[2], AMED-PRIME[3])

P2-093 Functional characterization of SPG12 in C2C12 myoblast

Kazuki Takagaki, Makoto Morinaga, Mari Isobe, ○Satoshi Kametaka (Nagoya University Graduate School of Medicine)

P2-094 Functional characterization of a novel cilia-related gene, *Hoatzin*, unveils the presence of distinct, tissue-specific mechanisms for motile ciliogenesis

○Keishi Narita[1], Hiroaki Nagatomo[2], Sen Takeda[1] (Department of Anatomy and Cell Biology, Faculty of Medicine, University of Yamanashi[1], Center for Life Science Research, University of Yamanashi[2])

P2-095 The molecular mechanism of cell polarity in various cell types

○Akihiro Harada (Osaka University)

P2-096 De novo synthesis of phosphatidylcholine and autophagic membrane formation

○Yuta Ogasawara, Toyoshi Fujimoto (Department of Anatomy and Molecular Cell Biology, Nagoya University Graduate School of Medicine)

P2-097 (WS01-03) Albatross/FBF1 integrates centrosome dynamics

○Akihito Inoko[1], Tomoki Yano[2], Tatsuo Miyamoto[3], Shinya Matsuura[3], Tohru Kiyono[4], Naoki Goshima[5], Masaki Inagaki[1], Yuko Hayashi[1] (Division of Biochemistry, Aichi Cancer Center Research Institute[1], Laboratory of Biological Science, Graduate School of Frontier Biosciences and Graduate School of Medicine, Osaka University[2], Department of Genetics and Cell Biology, Research Institute for Radiation Biology and Medicine, Hiroshima University[3], Division of Carcinogenesis and Cancer Prevention, National Cancer Center Research Institute[4], Molecular Profiling Research Center for Drug Discovery, National Institute of Advanced Industrial Science and Technology[5])

P2-098 The role of cytoplasmic proteins on cell polarity formation of asymmetric cell division

Tomohiro Nakahara[1], ○Sungrim Seirin-Lee[1,2] (Hiroshima University[1], JST

PRESTO[2])

P2-099 (WS01-09) Mechanism of Catalytic Microtubule Depolymerization via KIF2-tubulin Transitional Conformation

○Tadayuki Ogawa[1], Shinya Saijo[2], Nobutaka Shimizu[2], Xuguang Jiang[1], Nobutaka Hirokawa[1] (Department of Cell Biology and Anatomy, University of Tokyo, Graduate School of Medicine[1], Photon Factory, Institute of Materials Structure Science, High Energy Accelerator Research Organization[2])

P2-100 Change in Shape Fluctuation and Migration of Human Gastric Cells Induced by Cancer Progression

○Akihisa Yamamoto[1,2], Yusuke Sakamaki[2], Tatsuaki Tsuruyama[1,3], Motomu Tanaka[2,4,5] (Center for Anatomical, Pathological and Forensic Medical Researches, Graduate School of Medicine, Kyoto University[1], Institute for Integrated Cell-Material Sciences, Kyoto University[2], Department of Drug Discovery Medicine, Graduate School of Medicine, Kyoto University[3], Institute for Physical Chemistry, University of Heidelberg[4], Center for Integrative Medicine and Physics, Institute for Advanced Study, Kyoto University[5])

P2-101 (WS06-07) KIF2A regulates the development of dentate granule cells and postnatal hippocampal wiring

○Noriko Homma[1,2], Ruyun Zhou[2,4], Muhammad Imran Naseer[3], Adeel G Chaudhary[3], Mohammed H Al-Qahtani[3], Nobutaka Hirokawa[2,3] (National College of Nursing[1], Graduate School of Medicine, University of Tokyo[2], Center of Excellence in Genomic Medicine Research, King Abdula University[3], Jichi Medical School[4])

P2-102 Dynamics of Actin and Actin-binding Proteins during Wound Repair in *Dictyostelium* Cells

○Md. Shahabe Uddin Talukder, Shigehiko Yumura (Dep. Life Sci., Grad. Sch. of Sci. Tech. for Innov., Yamaguchi University.)

P2-103 The novel concept of the functional disorders and diseases caused by cell polarity mis-regulation.

○Masa-aki Nakaya (Yokohama City University, Assistant Professor)

P2-104 A new concept of cytokinesis D in *Dictyostelium* cells

○Yuki Tanaka[1], Yusuke Morimoto[2], Masahiro Ueda[3], Shigehiko Yumura[1] (Grad. Sch. of Sci. and Tech. for Innov., Yamaguchi University[1], Grad.

Sch. of Comp. Sci. and Sys. Engr., Kyusyu inst. of Tech[2], Grad. Sch. of Sci., Osaka University[3])

P2-105 A ring and belt-like pattern formation of actin filament by interacting with myosin *in vitro*

○Kentaro Ozawa[1], Hirotaka Taomori[1], Itsuki Kunita[2], Shigeru Sakurazawa[3], Hajime Honda[1] (Dept. Bioeng., Nagaoka Univ. Tech.[1], Univ. Ryukyus[2], Future Univ. Hakodate[3])

P2-106 Dynamics of cell membrane during cell division

○Masahito Tanaka[1,3], Go Itoh[2], Keisuke Okita[1], Shigehiko Yumura[1] (Dep. Life Sci., Grad. Sch. of Sci. Tech. for Innov., Yamaguchi University.[1], Grad. Sch. of Med., Akita University.[2], Research Fellow of Japan Society for the Promotion of Science.[3])

P2-107 Apparent mass of actin filaments decreased upon their interaction with myosin measured by QCM

○Kaho Yokomuro[1], Syouta Takamori[1], Kazuya Soda[1], Takashi Ishiguro[2], Hajime Honda[1] (Dep. of Bioeng., Nagaoka Univ. Tech.[1], Taiyo Yuden Co., Ltd.[2])

P2-108 (WS01-04) Super-resolution imaging of primary cilia by expansion microscopy

○Yohei Katoh[1], Shuhei Chiba[2], Kazuhisa Nakayama[1] (Grad. Sch. of Pharm. Sci., Kyoto Univ.[1], Grad. Sch. of Med., Osaka City Univ.[2])

P2-109 Preprophase band formation and establishment of actin-depleted zone in onion root tip cells under conditions inhibiting nuclear cycle progression

○Yoshiki Otsuka, Tomonori Nakai, Daisuke Yamauchi, Yoshinobu Mineyuki (University of Hyogo)

P2-110 Rif small GTPase mediates Ror1 signaling to induce filopodia formation and invasion of lung adenocarcinoma cells

○Michiru Nishita[1], Ikumi Nishikaku[1], Eri Yoshida[1], Hiroshi Shibuya[2], Kunio Matsumoto[3], Yasuhiro Minami[1] (Grad. Sch. Med., Kobe Univ.[1], Med. Res. Inst., Tokyo Med. and Dent. Univ.[2], Cancer Res. Inst., Kanazawa Univ.[3])

P2-111 Visualization of configurational fluctuation of single actin filaments in solution by FRET

○Ayumu Suzuki[1], Ryota Mashiko[1], Ryusei Ebata[1], Hirotaka Ito[1], Ryoki

Ishikawa[2], Kenji Kamimura[3], Hajime Honda[1] (Nagaoka University of Technology[1], Gunma. Pref. Col. of Health. Sci[2], Dep. of Elec. Cont. Eng., Nat. Ins. of Tech., Nagaoka. Col[3])

P2-112 Does giraffe kinesin move faster than mouse?
○Taketoshi Kambara[1], Yasushi Okada[1,2] (RIKEN[1], Univ. of Tokyo[2])

P2-113 Physical and functional interaction of formin Fhod3 with sarcomeric proteins in the heart
Sho Matsuyama[1,2], Yohko Kage[1], Noriko Fujimoto[2], Tomoki Ushijima[2], Hideki Sumimoto[2], ○Ryu Takeya[1] (Univ. of Miyazaki[1], Kyushu Univ. Grad. Sch. of Med. Sci.[2])

P2-114 Estradiol disrupts epithelial cell integrity through the translocation of LSR from tricellular contacts
○Takayuki Kohno, Takumi Konno, Takashi Kojima (Dept. Cell Sci., Res. Inst. Frontier Med., Sapporo Med. Univ.)

P2-115 Role of the coiled-coil region of MTCL1 for its microtubule-regulating activity
○Natsuki Kobayashi, Atsushi Suzuki (Yokohama City University Graduate School of Medical Life Science)

P2-116 Left-right asymmetric nuclear migration in the visceral muscles breaks lateral symmetry of the embryonic gut in *Drosophila*
○Dongun Shin[1], Yoshitaka Morishita[1], Mototsugu Eiraku[2], Takeshi Sasamura[1], Mikiko Inaki[1], Kenji Matsuno[1] (Department of Biological Science, Osaka University[1], Institute for Frontier Life and Medical Sciences, Kyoto University[2])

P2-117 Uncovering the physiological function of MTCL2 in mouse cerebellar Purkinje cells
○Tomoko Satake, Atsushi Suzuki (Mol. Cell Biol. Labo., Grad. Sch. of Med. Life Sci., Yokohama City Univ.)

P2-118 Visualization of Cargo transport of hippocampal neuron by developing scanning ion conductance microscopy and confocal microscopy hybrid system
○Yasufumi Takahashi[1], Hiroki Higashi[1], Takafumi Miyamoto[1], Yuanshu Zhou[1], Yuri Korchev[1,2], Takashi Fukuma[1] (Kanazawa university[1], Imperial college london[2])

P2-119 Re-verification of the physiological function of TBCD
○Hiroyuki Eguchi, Tomoko Satake, Atsushi Suzuki (Yokohama City University, Graduate School of Medical Science)

P2-120 Relationship between actin dynamics and an aggregate-formation process in *Xenopus* oocyte cytoplasmic droplet
○Naoki Noda, Issei Mabuchi (The University of Tokyo)

P2-121 Nonmuscle myosin II suppresses microtubule growth by supporting actin polymerization
○Yuta Sato[1], Keiju Kamijo[2], Yota Murakami[1,3], Masayuki Takahashi[1,3] (Grad. Sch. of Chem. Sci. and Eng., Hokkaido Univ.[1], Div. of Anat. and Cell Biol., Fac. of Med., Tohoku Med. and Pharm. Univ.[2], Dept. of Chem., Fac. of Sci., Hokkaido Univ.[3])

P2-122 (WS06-09) Cytoplasmic streaming controls organelle positioning during the oocyte-to-embryo transition in the *C. elegans* zygote
○Kenji Kimura[1], Akatsuki Kimura[1,2] (Cell Arch. Lab., Natl. Inst. of Genet.[1], Dept. of Genet., SOKENDAI[2])

P2-123 AGAP1, an Arf GTPase-activating protein, is a novel binding partner of FilGAP.
○Koji Tsutsumi[1], Yoh Nakamura[1], Yusuke Kitagawa[1], Yurina Suzuki[1], Yoshio Shibagaki[2], Seisuke Hattori[2], Yasutaka Ohta[1] (Div. Cell Biol., Dep. of BioSci., Sch. of Sci., Kitasato Univ.[1], Div. Biochem., Sch. of Phrma. Sci., Kitasato Univ.[2])

P2-124 Visualization of ciliary Calcium influx that initiate mouse Left-Right asymmetry
○Katsutoshi Mizuno, Kei Shiozawa, Hiroshi Hamada (RIKEN)

P2-125 (YSA-06) The balance between the mother centrosome associated kinesin KIF-C motor and Eg5 determines the timing of centrosome separation at mitotic onset
○Shoji Hata, Marko Panic, Ana Pastor Peidro, Elmar Schiebel (ZMBH, Universitat Heidelberg)

P2-126 (WS01-05) Single actin filaments observation revealed that Latrunculin A depolymerizes actin filaments in addition to sequestering actin monomers
○Ikuko Fujiwara[1], Mark E. Zweifel[2], Naomi Courtemanche[2], Thomas D. Pollard[3] (Frontier Research Institute for Materials Science, Nagoya Insti-

tute of Technology, Gokiso, Showa-ku, Nagoya, 466-8555, Japan[1], Department of Genetics, Cell Biology and Development, University of Minnesota, Minneapolis, MN 55455, USA[2], Department of Molecular Cellular and Developmental Biology, Yale University, PO Box 208103, New Haven, CT 06520-8103 USA[3])

P2-127 The role of ABCA1 in the regulation of cell migration.
○Shiho Ito[1], Noriyuki Kioka[1], Kazumitsu Ueda[1,2] (Div. Appl. Life Sci., Grad. Sch. of Agric., Kyoto Univ.[1], iCeMS, Kyoto Univ.[2])

P2-128 (YSA-08) Mechanisms of the spindle bipolarity establishment in human acentrosomal cells
○Takumi Chinen, Shohei Yamamoto, Koki Watanabe, Daiju Kitagawa (Department of Molecular Genetics, National institute of genetics)

P2-129 (WS12-05) A cell-size dependent polarity mechanism revealed by high-throughput imaging analysis of migrating cells
○Akihiko Nakajima[1], Motohiko Ishida[2], Ayaka Matsumoto[3], Satoshi Sawai[1,2] (Research Center for Complex Systems Biology, the University of Tokyo[1], Graduate School of Arts and Sciences, the University of Tokyo[2], Faculty of Science, the University of Tokyo[3])

P2-130 (WS06-08) MTCL2 is a new member of microtubule-crosslinking proteins
Masateru Miki, Sonoko Mizuno, Tomoko Satake, ○Atsushi Suzuki (Yokohama City Univ. Graduate school of Medical Life Science)

P2-131 TRIOBP Regulates of the localization of molecules in the inner ear hair cell
○Shin-ichiro Kitajiri[1], Tomoko Kita[2], Raj K Ladher[3], Shin-ichi Usami[1] (Shinshu University School of Medicine, Japan[1], Kyoto University Graduate School of Medicine, Japan[2], TIFR-National Center for Biological Sciences, India[3])

P2-132 MDCK cyst rotation as a model of ductal or acinous cancer cell collective invasion
○Etsuko Kiyokawa, Takehiko Ichikawa, Eishu Hirata (Kanazawa Medical University)

P2-133 A microtubule-dynein tethering complex regulatesthe axonemal inner dynein *f* (I1)
○Tomohiro Kubo[1], Yuqing Hou[2], Deborah Cochran[2], George Witman[2],

Toshiyuki Oda[1] (University of Yamanashi Medical School[1], University of Massachusetts Medical School[2])

P2-134 Single molecule dynamics of Myosin-ID dictating chiral behaviors of *Drosophila* cells

○Sosuke Utsunomiya[1], Takeshi Sasamura[1], Yukihiro Miyanaga[2], Masahiro Ueda[2], Kenji Matsuno[1] (Grad. Sch. Sci., Osaka Univ.[1], Grad. Sci. Front. Biosci., Osaka Univ.[2])

P2-135 Characterization of a novel ciliary protein, TTC18

○Noritoshi Shamoto[1], Keishi Narita[1], Toshiyuki Oda[2], Sen Takeda[1] (Univ. Yamanashi, Facul. Med., Dept. Anat. Cell Biol.[1], Dept Anat. Struct. Biol.[2])

P2-136 (WS12-02) Self-organization of actin filaments of the same polarity by myosin

Kohei Yoshimura[1], Nobuyoshi Koie[1], Yuichi Hiratsuka[2], ○Kohji Ito[1] (Chiba University[1], JAIST[2])

P2-137 ACF7, an actin-microtubule crosslinking protein, stably associates with postsynaptic sites

○Yutaro Kashiwagi[1,2], Shigeo Okabe[1,2] (Grad. Sch. Med., Univ. of Tokyo[1], CREST, JST[2])

P2-138 Different compositions of TRIOBP isoforms on the stereocilia rootlet: one continuously uniform actin cytoskeleton structure.

○Tatsuya Katsuno[1], Keisuke Ohta[2], Makoto Ikeya[3], Kazuya Ono[4,1], Juichi Ito[1,5], Shin-ichiro Kitajiri[1,6] (Dept. of Otolaryngology - Head and Neck Surgery Kyoto University Hospital[1], Div. of Microscopic & Dev. Anatomy, Dep. of Anatomy, Med. Kurume University[2], Dept. of Life Science Frontiers, CiRA, Kyoto University[3], Lab. of Mol. Biol., NIDCD/NIH[4], Shiga Med. CTR. Res. Institute[5], Dep. of Hearing Implant Sciences, Med. Shinshu University[6])

P2-139 Analysis in regulatory mechanism of microtubule structures during ascidian 1st cell cycle

○Toshiyuki Goto[1], Kazumasa Kanda[2], Haruka Yagi[1], Takahito Nishikata[2] (FIRST, Grad. Konan Univ.[1], FIRST, Konan Univ.[2])

P2-140 Spatial relationship between microglia and synapse stability studied by in vivo imaging

○Shinji Tanaka, Tadatsune Iida, Shigeo Okabe (Dept. Cellular Neurobiology, Grad. Sch. Medicine, Univ. of Tokyo)

P2-141 (WS12-07) Gamma-tubulin ring complex-specific components are required for nuclear positioning in the *C. elegans* gonad

○Nami Haruta, Chihiro Uchiyama, Asako Sugimoto (Grad.Sch.Life Sci., Tohoku University)

P2-142 (WS06-02) Shootin1b is involved in chemosensing and mechanosensing of migrating dendritic cells

○Kentarou Baba, Mizuki Sakai, Yasuna Higashiguchi, Naoyuki Inagaki (Graduate School of Biological Sciences, Nara Institute of Science and Technology)

P2-143 Lasp-2 in Focal Complex in Chicken Primary Fibroblasts

○Asako G Terasaki[1], Sayaka Yamamoto[1], Nan Yamagata[1], Ayako Nakayama[1], Satoshi Machida[1], Junko Suzuki[1], Hiroyuki Nakagawa[2] (Chiba University[1], Fukuoka University[2])

P2-144 Temperature dependent accumulation in *Chlamydomonas*

Masaya Sekiguchi, Satoshi Kurosawa, ○Megumi Yoshida, Kenjiro Yoshimura (Shibaura Inst.Tech.)

Discussion 3: June 8 (Fri) 13:45-14:45 for odd number posters
14:45-15:45 for even number posters

P3-001 Immunolocalization of protease-activated receptors in sinus endothelial cells of the spleen
○Kiyoko Uehara (Fukuoka Univ.)

P3-002 (YSA-04) AIP1 and cofilin ensure a resistance to tissue tension and promote directional cell rearrangement in the *Drosophila* wing
○Keisuke Ikawa, Kaoru Sugimura (iCeMS, Kyoto univ.)

P3-003 Contribution of mechanosensor channel Piezo1 to the lymphatic vascular development
○Keiko Nonomura[1,2], Viktor Lukacs[2], Stuart M Cahalan[2], Akemi Kanie[1], Ardem Patapoutian[2], Toshihiko Fujimori[1] (National Institute for Basic Biology[1], The Scripps Research Institute[2])

P3-004 Mutual activation of Claudin-6 and Src family kinases triggers epithelial differentiation via RARγ phosphorylation
○Kotaro Sugimoto, Naoki Ichikawa-Tomikawa, Korehito Kashiwagi, Tomohito Higashi, Hideki Chiba (Basic Pathology, Fukushima Medical University)

P3-005 The role of apical extracellular matrix in force balance during flight muscle development in *Drosophila*
○Wei-Chen Chu, Xiaorei Sai, Shigeo Hayashi (Lab. for Morphogenetic Signaling, RIKEN CDB)

P3-006 (WS04-01) The noise-cancelling system supporting precise Wnt/β-catenin signaling-mediated vertebrate tissue patterning
○Yuki Akieda, Shohei Ogamino, Hironobu Furuie, Shizuka Ishitani, Tohru Ishitani (Lab of Integ Signal Sys, Dept of Mol Med, IMCR, Gunma Univ.)

P3-007 Determination of protein composition at epithelial cell-cell junctions by CRISPR/Cas9-mediated fluorescent protein knockin
○Shusaku Kurisu, Shigenobu Yonemura (Tokushima Univ. Grad. School of Biomedical Sciences)

P3-008 (WS15-03) Regulation of intercellular junction growth by apical tricellular junctions
○Hiroyuki Uechi, Daiki Umetsu, Erina Kuranaga (Laboratory for Histoge-

netic Dynamics, Graduate School of Life Sciences, Tohoku University)

P3-009 Angulin-1 regulates vertical elongation of tricellular tight junction by interacting with ZO-1.
○Taichi Sugawara[1,2], Mikio Furuse[1,2] (Div. Cell Struct., NIPS[1], Dep. Physiol. Sci., Sch. Life Sci., SOKENDAI (The Grad. Univ. for Advanced Studies)[2])

P3-010 Revisiting functions of ZP family proteins in ECM morphogenesis
○Yuki Itakura, Wei-Chen Chu, Aki Hayashi, Xiaorei Sai, Shigeo Hayashi (RIKEN BDR)

P3-011 Traction force microscopy analysis of LEM migration in *Xenopus*
○Raj Rajeshwar Malinda, Naoto Ueno (National Institute for Basic Biology, Japan)

P3-012 Unexpectedly wide-range cell-cell contact via Delta-presenting lamellipodia-like protrusions in the mouse neuroepithelium
○Takumi Kawaue[1], Yugo Fukazawa[2], Takaki Miyata[1] (Univ. of Nagoya[1], Univ. of Fukui[2])

P3-013 (WS15-02) ZO family proteins regulate epithelial polarity independent of Tight Junction strand assembly
○Tetsuhisa Otani[1,2], Mikio Furuse[1,2] (National Institute for Physiological Sciences[1], Graduate University for Advanced Studies (SOKENDAI)[2])

P3-014 (WS15-04) A *Drosophila* Toll-like receptor family protein prevents cell mixing through homophilic adhesion during epithelial morphogenesis
○Daiki Umetsu, Norihiro Iijima, Erina Kuranaga (Tohoku University, Graduate School of Life Sciences)

P3-015 (WS04-07) The role of MAP kinase pathway in response to mechanical force during *Xenopus* embryogenesis
○Noriyuki Kinoshita[1], Yutaka Hashimoto[1,2], Cristea M Ileana[2], Naoto Ueno[1] (Dept. of Dev. Biol., NIBB[1], Dept. of Mol. Biol. Princeton Univ.[2])

P3-016 Bone marrow endothelial cells induce immature and mature B cell egress in response to erythropoietin
○Takeshi Ito[1,2], Nagahiro Minato[2], Yoko Hamazaki[1,2] (Center for iPS Cell Research and Application (CiRA), Laboratory of Immunobiology, Graduate School of Medicine, Kyoto University[1], Department of Immunology

and Cell Biology, Graduate School of Medicine, Kyoto University[2])

P3-017 Grip and slip of L1-CAM on adhesive substrates direct growth cone haptotaxis

○Kouki Abe[1], Hiroko Katsuno[1], Michinori Toriyama[1], Kentarou Baba[1], Tomoyuki Mori[2], Toshio Hakoshima[2], Yonehiro Kanemura[3], Rikiya Watanabe[4], Naoyuki Inagaki[1] (Syst. Neurobiol. Med., Grad. Sch. of Bio. Sci., NAIST[1], Struct. Biol., Grad. Sch. of Bio. Sci., NAIST[2], Regen. Med., Inst. for Clin. Res., Osaka Nat. Hosp., Nat. Hosp. Org.[3], Dept. of App. Chem., Grad. Sch. of Eng., Univ. of Tokyo[4])

P3-018 Myosin-dependent actin stabilization as revealed by single-molecule speckle (SiMS) analysis of actin turnover

○Sawako Yamashiro[1,2], Soichiro Tanaka[3], Laura M McMillen[4], Daisuke Taniguchi[2], Dimitrios Vavylonis[4], Naoki Watanabe[1,2] (Laboratory of Single-Molecule Cell Biology, Kyoto University Graduate School of Biostudies[1], Department of Pharmacology, Kyoto University Graduate School of Medicine[2], Laboratory of Single-Molecule Cell Biology, Tohoku University Graduate School of Life Sciences[3], Department of Physics, Lehigh University, Bethlehem, PA, USA[4])

P3-019 Stiff substrates enhance the nuclear localization of activating transcription factor 5 via calcium ion in pancreatic cancer cells

○Akihiro Nukuda[1], Seiichiro Ishihara[2], Hisashi Haga[2] (Division of Life Science, Graduate School of Life Science, Hokkaido University[1], Department of Advanced Transdisciplinary Sciences, Faculty of Advanced Life Science, Hokkaido University[2])

P3-020 Premigratory neurons mechanically limit interkinetic nuclear migration to secure progenitor cells' apical cytogenesis

Yuto Watanabe, Takumi Kawaue, ○Takaki Miyata (Nagoya University Graduate School of Medicine)

P3-021 The expression pattern of neuronal intermediate filament α-internexin in the chicken developing pineal gland

○Chen Ming Hao, Wei Hao Peng, Chung Liang Chien (Graduate Institute of Anatomy and Cell Biology, College of Medicine, National Taiwan University, Taipei, Taiwan)

P3-022 (WS05-07) Noise-Resistant Developmental Reproducibility in Vertebrate Somite Formation

○Naoki Honda[1], Dini WK Sari[2], Ryutaro Akiyama[2], Shin Ishii[1], Yasumasa Bessho[2], Takaaki Matsui[2] (Kyoto University[1], Nara Institute of Science and Technology[2])

P3-023 Comparison of the 3-D patterns of the parasympathetic nervous system in the lung at late developmental stages between mouse and chicken

○Ryo Nakamura[1], Tadayoshi Watanabe[1], Yuta Takase[1,2], Etsuo A Susaki[3,4,5], Hiroki R Ueda[3,4], Ryosuke Tadokoro[1], Yoshiko Takahashi[1,6] (Department of Zoology, Graduate School of Science, Kyoto University[1], Mathematics-based Creation of Science Program (MACS), Graduate School of Science, Kyoto University[2], Department of Systems Pharmacology, Graduate School of Medicine, The University of Tokyo[3], Laboratory for Synthetic Biology, RIKEN Quantitative Biology Center (QBiC)[4], PRESTO, Japan Science and Technology Agency[5], AMED Core Research for Evolutional Science and Technology (AMED-CREST), Japan Agency for Medical Research and Development (AMED)[6])

P3-024 Appearance of a chiral structue in cardiac looping

○Hisao Honda[1,2], Takaya Abe[3], Toshihiko Fujimori[3,4] (Kobe University Graduate School of Medicine[1], RIKEN CDB[2], RIKEN Center for Life Science Tech[3], NIBB[4])

P3-025 Repression of Dlx1/2 signaling by *Nolz-1/Znf503* is required for parcellation of the striatal complex into dorsal and ventral striatum

Shih-Yun Chen[1], Kuan-Ming Lu[1], Hsin-An Ko[1], Ting-Hao Huang[1], Janice Hsin-Jou Hao[1], Yu-Ting Yan[2], Sunny Li-Yun Chang[3], Sylvia Evans[4], ○Fu-Chin Liu[1] (National Yang-Ming Univ.[1], Academia Sinica[2], China Medical University[3], University of California San Diego[4])

P3-026 (WS07-04) SOX2-dependent determination of tissue identities in the foregut

○Machiko Teramoto[1], Ryo Sugawara[1], Atsushi Kuroiwa[2], Yasuo Ishii[3], Hisato Kondoh[1] (Faculty of Life Sciences, Kyoto Sangyo University[1], Division of Biological Science, Graduate School of Science, Nagoya University[2], Department of Biology, School of Medicine, Tokyo Women's Medical University[3])

P3-027 (WS07-07) Control of whole body shape by a single constituent of the apical ECM in *Drosophila melanogaster*

○Reiko Tajiri, Haruhiko Fujiwara, Tetsuya Kojima (Graduate School of

Frontier Sciences, the University of Tokyo)

P3-028 (WS13-07) A Screening for the new regulatory pathway of the floor plate differentiation
○Minori Kadoya, Noriaki Sasai (Nara Institute of Science and Technology)

P3-029 Branching pattern and morphogenesis of medusa tentacles in the jellyfish, *Cladonema pacificum*
Akiyo Fujiki, Ayaki Nakamoto, ○Gaku Kumano (Asamushi Research Center for Marine Biology, Graduate School of Life Sciences, Tohoku University)

P3-030 (WS05-10) Epidermal regulation of bone patterning through the development and regeneration of osteoblasts in the zebrafish scale
Miki Iwasaki[1], Junpei Kuroda[2], Koichi Kawakami[3], ○Hironori Wada[1] (Kitasato University[1], Osaka University[2], National Institute of Genetics; SOKENDAI[3])

P3-031 Lymphatic vascular development in the craniofacial region of embryonic mice – Migration of lymphatic endothelial cells from cardinal veins into mandibular arches –
○Yuji Taya, Kaori Sato, Youichi Shirako, Yuuichi Soeno (Department of Pathology, The Nippon Dental University School of Life Dentistry at Tokyo)

P3-032 (WS13-06) Differential adhesion of N-cadherin in columnar unit organization in the Drosophila brain
○Makoto Sato, Olena Trush, Chuyan Liu (Kanazawa University)

P3-033 (WS13-03) Quantitative analysis of tissue and cellular dynamics during optic vesicle formation
○Daisuke Ohtsuka, Yoshihiro Morishita (RIKEN Quantitative Biology Center)

P3-034 Morphological and immunohistochemical analysis of the early formation of the avian sternal keel
○Kengo Buma, Yoshiko Takahashi (Department of Zoology, Graduate School of Science, Kyoto University)

P3-035 Verification of nodal flow sensing models in the mouse embryo.

Atsushi Taniguchi, ○Shigenori Nonaka (National Institute for Basic Biology)

P3-036 (WS07-09) Keratan sulfate produces “water bags” in embryos
○Yuuri Yasuoka (Marine Genomics Unit, OIST)

P3-037 (WS13-01) Role of axonal transport of Reelin in layer and neural circuit formation in the cerebellum and the optic tectum
Takayuki Nimura[1], Takuto Hayashi[1], Miki Takeuchi[2], Tsubasa Itoh[1], Vincenzo Di Donata[3], Filippo Del Bene[3], Takashi Shimizu[1,2], ○Masahiko Hibi[1,2] (Graduate School of Science, Nagoya University[1], Bioscience and Biotechnology Center, Nagoya University[2], Institut Curie[3])

P3-038 A long noncoding RNA regulates *Drosophila* axon guidance during embryogenesis
○Sachi Inagaki[1], Ntsuki Nakamura[2], Masanao Sato[3], Mitsutaka Kadota[4], Sean D Keeley[4], Shigehiro Kuraku[4], Yuji Kageyama[1,2] (Biosignal Research Center, Kobe University[1], Department of Biology, Graduate School of Science, Kobe University[2], School of Agriculture, Hokkaido University[3], CLST, RIKEN[4])

P3-039 Transcriptome analysis of the cardiac neural crest reveals a *MAFB* gene regulatory subcircuit
○Saori Tani-Matsuhana[1,2], Kunio Inoue[2], Marianne E. Bronner[1] (Division of Biology and Biological Engineering, California Institute of Technology[1], Department of Biology, Graduate school of Science, Kobe University[2])

P3-040 The N143T mutation in mouse Fibroblast growth factor 9 leads to wider long bones
○Masayo Harada, Keiichi Akita (Tokyo Medical and Dental Univ.)

P3-041 Establishment of assessment system for genitalia-specific enhancer during genital tubercle development
○Shoko Matsushita[1], Kentaro Suzuki[1], Tetsuya Sato[2], Shinjiro Hino[3], Daiki Kajioka[1], Alvin Acebedo[1], Mitsuyoshi Nakao[3], Mikita Suyama[2], Gen Yamada[1] (Wakayama Medical University[1], Kyushu University[2], Kumamoto University[3])

P3-042 Molecular mechanisms for the positioning of somite boundaries in zebrafish

○Taijiro Yabe, Shinji Takada (National Institute for Basic Biology (NIBB))

P3-043 Identification of a type of collagen-expressing cells that probably connect spicules to construct skeleton in freshwater sponge *E. fluviatilis*

○Sota Takagi, Noriko Funayama (Dept. of biophysics, Grad. school of science, Kyoto Univ.)

P3-044 Elasticity-based boosting of neuroepithelial nucleokinesis via indirect energy transfer from mother to daughter

○Tomoyasu Shinoda[1], Arata Nagasaka[1], Yasuhiro Inoue[2], Ryo Higuchi[3], Yoshiaki Minami[3], Kagayaki Kato[4], Makoto Suzuki[5], Takefumi Kondo[6], Takumi Kawaue[1], Kanako Saito[1], Naoto Ueno[5], Yugo Fukazawa[7], Masaharu Nagayama[3], Takashi Miura[8], Taiji Adachi[2], Takaki Miyata[1] (Dept. anatomy and cell biology, Nagoya University Graduate school of Medicine[1], Dept. Biosystem Science, Institute for Frontier Life and Medical Science, Kyoto University[2], Research Institute for Electronic Science, Hokkaido University[3], Dept. Imaging Science, Center for Novel Science Initiatives, National Institute for Basic Biology[4], Div. Morphogenesis, National Institute for Basic Biology[5], Laboratory for Morphogenetic Signaling, RIKEN Center for Developmental Biology[6], Div. Cell Biology and Neuroscience, Faculty of Medical Sciences, University of Fukui[7], Dept. Anatomy and Cell Biology, Graduate School of Medical Sciences, Kyushu University[8])

P3-045 Modulation of Shh signaling is involved in intervertebral disc/vertebral body (IVD/VB) patterning and resegmentation of neural arches in mouse vertebral column formation

○Yu Takahashi[1], Yukuto Yasuhiko[1], Eriko Ikeno[1], Jun Kanno[2], Yoko Hirabayashi[1] (National Institute of Health Sciences[1], Japan Bioassay Research Center[2])

P3-046 (WS13-04) Roof plate cells dramatically elongate and promote the proliferation of neural progenitors by secreting Wnt proteins in the mouse spinal cord

○Takuma Shinozuka[1,2,3], Ritsuko Takada[1,2], Shosei Yoshida[2,3], Shigenobu Yonemura[4,5], Shinji Takada[1,2,3] (OIIB[1], NIBB[2], SOKENDAI[3], RIKEN CLST[4], Tokushima Univ.[5])

P3-047 Collective cell rearrangement in visceral endoderm during the A-P axis formation in a mouse embryo

○Go Shioi[1], Hideharu Hoshino[2], Takaya Abe[1,3], Hiroshi Kiyonari[1,3], Kazuki Nakao[4,1], Yasuhide Furuta[1,3], Toshihiko Fujimori[1,5], Shinichi Aizawa[2] (Genetic Engineering Team, RIKEN CLST[1], Laboratory for Vertebrate Body Plan, RIKEN CDB[2], Animal Resource Development Unit, RIKEN CLST[3], Laboratory of Animal Resources, CDBIM, Univ. of Tokyo[4], Division of Embryology, NIBB[5])

P3-048 A knockout mouse model reveals a critical role of Af10-dependent H3K79 methylation in midfacial development

Honami Ogoh[1], Kazutsune Yamagata[4], Tomomi Nakao[1], Lisa L. Sandell[2], Ayaka Yamamoto[1], Aiko Yamashita[1], Naomi Tanga[1], Mai Suzuki[1], Takaya Abe[3], Issay Kitabayashi[4], Toshio Watanabe[1], ○Daisuke Sakai[5] (Nara Women's University, Graduate School of Humanities and Science[1], University of Louisville, School of Dentistry[2], RIKEN Center for Life Science Technologies[3], National Cancer Center Research Institute[4], Doshisha University, Graduate School of Brain Science[5])

P3-049 miR-9 misexpression causes upregulation of *Robo3* specifically in the branchial and visceral motor neurons in chick embryo

○Katsuki Mukaigasa, Chie Sakuma, Hiroyuki Yaginuma (Fukushima Med. Univ.)

P3-050 Intercellular interaction between the somite cells and the somatic mesoderm cells in vitro: a model of rib formation

○Kaoru Matsutani, Hirohiko Aoyama (Department of Anatomy & Developmental Biology, Graduate School of Biomedical & Health Sciences, Hiroshima University)

P3-051 (WS05-05) Two types of heparan sulfate differently modulates BMP distribution and signalling

○Takayoshi Yamamoto[1,2], Yusuke Mii[3], Yuta Otsuka[1], Masanori Taira[1] (Dept. of Biol. Scis., Grad. Sch. of Sci., Univ. of Tokyo[1], Dept. of Life Scis., Grad. Sch. of Arts and Scis., Univ. of Tokyo[2], National Institute for Basic Biology[3])

P3-052 The preplate stream: neurons generated earliest in the pallium migrate ventrally to mechanically bend radial fibers and expand the neocortex.

○Kanako Saito, Takaki Miyata (Univ. of Nagoya, Medicine. Dept. Anatomy and Cell Biology.)

P3-053 (WS05-08) Resynchronization dynamics of the zebrafish segmentation clock
○Koichiro Uriu (Kanazawa University)

P3-054 *Six1* regulates initial knot formation and lingual-labial asymmetry in developing mouse incisors
○Masanori Takahashi, Kiyoshi Kawakami (Division of Biology Center for Molecular Medicine Jichi Medical University)

P3-055 Atypical leading front cells in the amniotic membrane
○Yuki Sato (Graduate School of Medical Sciences, Kyushu University, Japan)

P3-056 Cell Budding During Endothelial to Hematopoietic Transition is Regulated by Aquaporin Water Channels
○Mugiho Shigematsu, Chie Tamura, Yuki Sato (Graduate School of Medical Sciences, Kyushu University, Japan)

P3-057 Difference in the amount of the atypical cadherin Dachsous between migrating cells coordinates the direction of collective cell migration
○Masaki Arata[1,3], Kaoru Sugimura[2], Toshihiko Fujimori[3,4], Tadashi Uemura[1] (Graduate School of Biostudies, Kyoto University[1], Institute for Integrated Cell-Material Sciences (WPI-iCeMS), Kyoto University[2], Division of Embryology, National Institute for Basic Biology (NIBB)[3], Department of Basic Biology, School of Life Science, SOKENDAI[4])

P3-058 Possible involvement of *ouro* genes in disappearance of brachial sac skin during *Xenopus* metamorphosis
○Izumi Ishimori, Yumi Izutsu (Graduate School of Science and Technology, Niigata University)

P3-059 Identification of Wnt5a downstream targets during early development in mouse
○Rieko Ajima, Yumiko Saga (National Institute of Genetics)

P3-060 Estrogen promotes the fallopian tube epithelial multiciliogenesis through estrogen receptor β
○Maobi Zhu, Tomohiko Iwano, Sen Takeda (Univ. of Yamanashi, Dept. of Anatomy, Lab of Cell biology)

P3-061 Elongation of posterior dorsal tissue prepared from human induced pluripotent stem cells
○Hiromasa Ninomiya (Nagoya Univ)

P3-062 Shootin1b-mediated cell adhesion and actin dynamics for the forebrain separation
○Takunori Minegishi, Saori Fujiwara, Wataru Yoshida, Naoyuki Inagaki (Grad. Sch. Biol. NAIST, Nara)

P3-063 Framework of a gene regulatory network establishing pattern of regional differentiation of the midgut of *Drosophila* embryo
Saki Kamioka, Kenta Fujimoto, Izumi Tanoue, Yuichi Yoshimura, Lily Shimooka, Yumiko Harada, ○Ryutaro Murakami (Dept Biol, Grad Sch Sci Tech for Innov, Yamaguchi University)

P3-064 Developmental mechanisms change for morphological transition from midline single to paired bilateral status in ventral fins
○Gembu Abe[1], Kinya G Ota[2], Koji Tamura[1] (Graduate School of Life Sciences, Tohoku University, Japan[1], Institute of Cellular and Organismic Biology, Academia Sinica, Taiwan[2])

P3-065 Plant flowering stem cracking: A model case towards understanding stem organogenesis and integrity
Mao Ooe[1], ○Mariko Asaoka[1], Shizuka Gunji[2], Gorou Horiguchi[3,4], Hirokazu Tsukaya[5,6], Ali Ferjani[1,2] (Tokyo Gakugei Univ., Dept. of Biol.[1], Tokyo Gakugei Univ., United Grad. Sch. Education[2], Rikkyo Univ., Dept. of Life Sci.[3], Rikkyo Univ., Res. Center for Life Sci.[4], The University of Tokyo, Grad. Sch. of Sci.[5], Okazaki Inst. for Inter. Biosci., NIBB[6])

P3-066 Analysis of intracellular calcium dynamics and its functional implication at leading edge mesoderm during *Xenopus* gastrulation
○Kentaro Hayashi[1,2,3], Takamasa S Yamamoto[1], Naoto Ueno[1,3] (NIBB[1], Univ. of Kyoto[2], Graduate University for Advanced Studies (SOKENDAI)[3])

P3-067 Metabolic control of skeletal muscle regeneration
○Shimpei Hori, Fuminori Sato, Atsuko Sehara-Fujisawa (Department of Growth Regulation, Institute for Frontier Life and Medical Sciences, Kyoto University)

P3-068 Investigation of the mechanism of mesoderm development of human

iPSCs using Single-cell RNA sequence
○Wei Zhao, Minoru Takasato (Riken Center for Developmental Biology)

P3-069 (WS08-10) Coordinated regulation of the dorsal-ventral and anterior-posterior patterning of *Xenopus* embryos by the BTB/POZ zinc finger protein Zbtb14
Kimiko Takebayashi-Suzuki, Misa Uchida, ○Atsushi Suzuki (Amphibian Research Center, Hiroshima University)

P3-070 Direct conversion of mouse somatic cells into neural crest cells.
○Tsutomu Motohashi[1], Norito Kawamura[1], Natsuki Watanabe[1], Naoki Goshima[2], Takahiro Kunisada[1] (Dep. of Tissue & Organ Development, Regeneration & Advanced Med. Sci., Grad. Sch. of Med., Gifu Univ.[1], Molecular Profiling Research Center for Drug Discovery, National Institute of Advanced Industrial Science and Technology[2])

P3-071 (WS08-06) Aberration of the Soluble protein Tsukushi leads alteration of adult neurogenesis resulting lateral ventricule expansion with neuronal disease.
○Naofumi Ito[1,2,3], M. Asrafuzzaman Riyadh[1,3], Ayako Ito[1], Shah Adil Ishtiyaq Ahmad[1,2,3,4], Mohammad Badrul Anam[1,2,3], Yonehiro Kanemura[5,6], Yohei Shinmyo[7], Felemban Athary Abdulhaleem M.[1,9], Jun Hatakeyama[10], Hiroshi Kiyonari[11], Kenji Shimamura[10], Yoshiko Takahashi[12,13], Kazunobu Sawamoto[14,8], Kunimasa Ohta[1,2,3,13] (Department of Developmental Neurobiology, Graduate School of Life Sciences, Kumamoto University[1], Program for Leading Graduate Schools "HIGO Program", Kumamoto University[2], Stem Cell-Based Tissue Regeneration Research and Education Unit, Kumamoto University[3], Department of Biotechnology and Genetic Engineering, Mawlana Bhashani Science and Technology University, Tangail, Bangladesh[4], Division of Regenerative Medicine, Institute for Clinical Research[5], Department of Neurosurgery, Osaka National Hospital, National Hospital Organization[6], Department of Medical Neuroscience, Graduate School of Medical Sciences, Kanazawa University[7], Department of Developmental and Regenerative Biology, Nagoya City University Graduate School of Medical Sciences[8], Department of Biology, Faculty of Applied Science, Umm Al-Qura University, 21955, Makkah, Saudi Arabia.[9], Department of Brain Morphogenesis, Institute of Molecular Embryology and Genetics, Kumamoto University[10], Animal Resource Development Unit and 12Genetic Engineering Team, RIKEN Center for Life

Science Technology[11], Department of Zoology, Graduate School of Science, Kyoto University.[12], AMED Core Research for Evolutional Science and Technology (AMED-CREST), Japan Agency for Medical Research and Development (AMED).[13], Division of Neural Development and Regeneration, National Institute for Physiological Sciences.[14])

P3-072 Serum Replacement and Rho kinase (ROCK) inhibitor, Y-27632 were essential for the monolayer culture of mouse embryonic submandibular gland epithelial cells in serum-free medium.
○Akiko Sekimata[1,2], Yumi Suina[2], Chiaki Homma[2], Yuko Aso[2], Shiho Yagihashi[2], Masayuki Sekimata[3] (Division of Theoretical Nursing and Genetics, Graduate School of Medical Science Yamagata University[1], Division of Theoretical Nursing and Genetics, School of Medicine Yamagata University[2], Radioisotope Research Center, Fukushima Medical University School of Medicine[3])

P3-073 Cell clusters formation by ribosome is reproducible with rabbit cornea cells
○Yuichi Goto, Natsuki Kawano, Yosuke Nishimura, Yushin Nakagawa (Kumamoto Prefectural Uto Junior and Senior High School)

P3-074 (WS13-09) A heat-shock mediated multi-color labeling of the enteric neural crest cells for analyzing the patterns of their migration, division and differentiation in zebrafish gut.
Mai Kuwata[1], ○Masataka Nikaido[1], Koichi Kawakami[2], Kohei Hatta[1] (Grad. Sch. of Life Sciences, Univ. of Hyogo[1], Div. of Molecular and Developmental Biology, National Institute of Genetics[2])

P3-075 Can newts normalize misposition of proximal to distal levels during limb regeneration?
○Takashi Takeuchi, Kazuki Koriyama, Risa Sakagami, Toshinori Hayashi (School of Life Sciences, Faculty of Medicine, Tottori University)

P3-076 Derivation and Characterization of Putative Embryonic Stem Cells Isolated from Taiwan Country Chicken Blastoderms
○Chalothon Amporn, Chien-Kai Wang, Pin-Chi Tang (Department of Animal Science, National Chung Hsing University)

P3-077 (WS15-08) Twinning: Embryonic Regeneration by Relocalization of the Spemann Organizer in *Xenopus*
○Yuki Moriyama[1], Edward M. De Robertis[2,3], Akimasa Fukui[1] (Chuo Uni-

versity[1], Howard Hughes Medical Institute[2], University of California, Los Angeles[3])

P3-078 Redundant functions of Mitf/Tfec family transcription factors regulate melanocyte development in medaka

○Hisashi Hashimoto[1], Tetsuaki Kimura[2], Motohiro Miyadai[1], Yusuke Nagao[3], Robert N Kelsh[3], Kiyoshi Naruse[2], Masahiko Hibi[1] (Biol Biotech Ctr, Nagoya Univ.[1], NIBB[2], Univ. of Bath[3])

P3-079 (WS11-09) Tead-Yap activity in inner cell mass promotes naïve pluripotency and its variation triggers cell competition to establish high quality epiblast

○Masakazu Hashimoto, Yusuke Takenoshita, Yuki Yuri, Hiroshi Sasaki (Osaka University)

P3-080 (WS08-04) Positional information DOES exit within cells of a single fin ray during zebrafish regeneration

○Atsushi Kawakami, Eri Shibata (Tokyo Inst. Technology)

P3-081 (WS11-10) Making chimera with non-rodent PSCs by overexpressing *BCL2*

○Hideki Masaki[1], Tomoyuki Yamaguchi[1], Hiromitsu Nakauchi[1,2] (Institute of Medical Science, University of Tokyo[1], Institute for Stem Cell Biology and Regenerative Medicine, Department of Genetics, Stanford University School of Medicine, Stanford[2])

P3-082 Innate immunity signaling pathways promote leg regeneration in the cricket

○Tetsuya Bando[1], Misa Okumura[1], Mayuko Hagiwara[1], Yoshimasa Hamada[1], Taro Mito[2], Sumihare Noji[2], Hideyo Ohuchi[1] (Department of Cytology and Histology, Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama University[1], Division of Bioscience and Bioindustry, Graduate School of Technology, Industrial and Social Sciences, Tokushima University[2])

P3-083 The transplantation of the retinal precursor cells into the adult *Drosophila* retina

○Satoko Hakeda-Suzuki, Takahisa Suzuki, Keita Oochi, Takashi Suzuki (School of Life Science and Technology, Tokyo Institute of Technology)

P3-084 Control of beta cell heterogeneity and identity by Wnt4

○Keiichi Katsumoto[1], Siham Yennek[1], Dror Sever[1], Ajuna Azad[1], Jingdong

Shan[2], Seppo Vainio[2], Anne Botton[1] (Novo Nordisk Foundation Center for Stem Cell Biology, The Center for Stem Cell Biology (Danstem), University of Copenhagen, Denmark[1], Department of Medical Biochemistry and Molecular Biology, University of Oulu, Finland[2])

P3-085 Migration of Endoderm and Mesoderm Derived from Human Induced Pluripotent Stem Cells during Human Gastrulation Stage
○Kenshiro Maruyama, Shota Miyazaki, Kiyoshi Ohnuma (Nagaoka University of Technology)

P3-086 Axial stem cell regulation during mouse axis formation
○Shinichi Hayashi, Tatsuya Takemoto (Embryology, Institute of Advanced Medical Sciences, Tokushima University)

P3-087 Loss-of-function and rescue analyses revealed that the immune T cells are necessary for degeneration of *Xenopus* tail tissues
○Haruka Kobayashi, Yumi Izutsu (Graduate School of Science and Technology, Niigata University, Japan)

P3-088 Transdifferentiation of cells during rapid regeneration of amputated multicellular bodies of social amoebae
○Kurato Mohri, Ryodai Tanaka, Seido Nagano (Department of Bioinformatics, College of Life Sciences, Ritsumeikan University)

P3-089 Involvement of systemic signaling in size regulation of regenerating fin
○Toshiaki Uemoto, Gembu Abe, Koji Tamura (Graduate School of Life Sciences, Tohoku University)

P3-090 (WS13-08) Region-specific requirement of floor plate-derived sonic hedgehog regulating specification of the ventral cell fates
○Jun Motoyama (Doshisha University)

P3-091 Role of islet-1-expressing cells during heart regeneration in *Xenopus laevis*
Saki Umezawa, ○May Kanagawa, Tsutomu Kinoshita (Rikkyo University)

P3-092 Srf destabilizes cell identity
○Takashi Ikeda[1], Takuya Yamamoto[1], Akitsu Hotta[1], Yasuhiro Yamada[1,2], Shinji Masui[1], Keisuke Okita[1] (Kyoto Univ.[1], The Univ. of Tokyo[2])

P3-093 N-cadherin supports FGFR1 stability and subsequent activation of

MEK/ERK dependent pluripotency on mouse epiblast stem cell
○Toshiyuki Takehara, Takeshi Teramura, Yuta Onodera, Kanji Fukuda (Kindai University Faculty of Medicine)

P3-094 (WS08-05) TRAF6-mediated NF-kB is essential for the differentiation of intestinal M cells
○Takashi Kanaya[1], Sayuri Sakakibara[1], Toshiro Sato[2], Takashi Kobayashi[3], Hiroshi Ohno[1] (Laboratory for Intestinal ecosystem, RIKEN-IMS[1], Department of Gastroenterology, Keio Univ.[2], Department of Infectious Diseases Control, Faculty of Medicine, Oita Univ.[3])

P3-095 Meis1 Coordinates Cerebellar Granule Cell Development by Regulating Pax6 Transcription, BMP Signaling and Atoh1 Degradation.
○Tomoo Owa[1], Shinichiro Taya[1], Satoshi Miyashita[1], Tomoki Nishioka[2], Ryo Goitsuka[4], Takuro Nakamura[3], Kozo Kaibuchi[2], Mikio Hoshino[1] (Dept of Biochemistry andCellularBiology National Institute of Neurosucience NCNP[1], Dept. of Cell Pharmacology, School of Medicine, Nagoya Univ[2], Department of Carcinogenesis, Japanese Foundation for Cancer Research[3], Division of Development & Aging, Research Institute for Biological Sciences, Tokyo University of Science[4])

P3-096 (WS15-09) Developmental origin and induction processes of hair follicle stem cells
○Ritsuko Morita[1], Noriko Sanzen[1], Tetsutaro Hayashi[2], Mana Umeda[2], Mika Yoshimura[2], Itoshi Nikaido[2], Takaya Abe[3], Hiroshi Kiyonari[3,4], Yasuhide Furuta[3,4], Hironobu Fujiwara[1] (Laboratory for Tissue Microenvironment, RIKEN CDB[1], Bioinformatics Research Unit, RIKEN ACCC[2], Animal Resource Development Unit, Division of Bio-Function Dynamics Imaging, RIKEN CLST[3], Genetic Engineering Team, Division of Bio-Function Dynamics Imaging, RIKEN CLST[4])

P3-097 A novel cell-based assay system for monitoring the cell-cell fusion process during myotube formation
○Mari Isobe[1], Mitsunori Fukuda[2], Kenshin Komata[1], Satoshi Kametaka[1] (Nagoya University Graduate School of Medicine[1], Tohoku University Graduate School of Life Sciences[2])

P3-098 Differential gene expressions between joint and non-joint blastemas/stumps in frog
○Haruka Matsubara, Takeshi Inoue, Ei Kakuta, Kiyokazu Agata (Depart-

ment of Life Science, Gakushuin University)

P3-099 Hypothermic signal is involved in the induction of cell differentiation via the cold-shock protein RBM3

○Daiki Hamasuna[1], Ryota Nogami[1], Ko Eto[2] (Dept. of Biol. Sci, Fac. of Sci., Kumamoto univ.[1], Dept. of Biol. Sci., Grad. Sch, of Sci. Tech., Kumamoto Univ.[2])

P3-100 The development of non-FRET ratiometric ATP indicator "QUEEN-37C" for measurement of absolute ATP concentration in single cells

○Hideyuki Yaginuma[1], Yasushi Okada[1,2] (QBiC, RIKEN[1], Dept of Phys, Grad Sch Sci, The Univ of Tokyo[2])

P3-101 Lifespan extension and ECM remodeling by dual oxidase-mediated ROS signaling

○Hiroyuki Sasakura[1], Hiroki Moribe[2], Kazuto Ikemoto[3], Ikue Mori[4], Kosei Takeuchi[1] (Department of Medical Biology, Aichi Medical University[1], Department of Biology, Kurume University School of Medicine[2], Niigata Research Laboratory, Mitsubishi Gas Chemical Company Inc.[3], Neuroscience Institute and Group of Molecular Neurobiology, Graduate School of Science, Nagoya University[4])

P3-102 Effects of nutritional signal in the timer system to determine prepupal period in *Drosophila melanogaster*

○Hitoshi Ueda, Haruka Nishida, Mayu Nakanishi (Okayama University)

P3-103 (WS17-04) Fluorescence temperature imaging reveals a potential role of mitochondrial pH changes in initiating brown adipocytes activation

○Madoka Suzuki[1,2], Yoshie Harada[1] (Inst. for Protein Res., Osaka Univ.[1], PRESTO, JST[2])

P3-104 A Novel Probe for Measuring the Activity of Non-Selecetive Autophagy

○Wataru Mori, Hideaki Morishita, Ikuko Koyama-Honda, Noboru Mizushima (Dept. of Mol. Biol., Grad. Sch. of Med., Univ. of Tokyo)

P3-105 Notch signaling regulates expression of glycolytic genes during development

○Misato Yamaki, Shuhei Kuwabara, Huiqing Yu, Motoyuki Itoh (Graduate School of Pharmaceutical Sciences, Chiba University)

P3-106 Tissue elongation and pattern formation of cells induced by isotropic expansion of a field

○Hiroshi Koyama[1,2], Toshihiko Fujimori[1,2] (Division of Embryology, National Institute for Basic Biology, Japan[1], SOKENDAI (The Graduate University for Advanced Studies), Japan[2])

P3-107 (WS16-04) Information transmission of insulin signal transduction based on live-cell sensing and information theoretic approach

○Katsuyuki Kunida[1,2], Shinsuke Uda[3], Takumi Wada[2], Haruki Inoue[4], Shinya Kuroda[2,4] (Laboratory of Computational Biology Graduate School of Biological Sciences, Nara Institute of Science and Technology[1], Department of Biological Sciences, Graduate School of Science, University of Tokyo[2], Division of Integrated Omics, Research Center for Transomics Medicine, Medical Institute of Bioregulation, Kyushu University[3], Department of Computational Biology and Medical Sciences, Graduate school of Frontier Sciences, University of Tokyo[4])

P3-108 Competition for space controlled by apoptosis-induced change of local epithelial topology

○Alice Tsuboi[1], Daiki Umetsu[2], Shizue Ohsawa[3], Yukari Sando[3], Erina Kuranaga[2], Tatsushi Igaki[3], Koichi Fujimoto[1] (Osaka univ.[1], Tohoku univ.[2], Kyoto univ.[3])

P3-109 Elucidating pathogenesis of congenital myopathy caused by defective membrane remodeling

Kenshiro Fujise, Kaho Seyama, Yasuka Yamashita, Hiroshi Yamada, Kohji Takei, ○Tetsuya Takeda (Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama University)

P3-110 (SWS-10) A PI3K-derived peptide inhibits clathrin-independent endocytosis and influenza virus infection

○Yoichiro Fujioka, Aya O Satoh, Kosui Horiuchi, Mari Fujioka, Sarad Paudel, Asuka Nanbo, Yusuke Ohba (Dept. Cell Physiol., Fac. Med. and Grad. Sch. Med. Hokkaido Univ.)

P3-111 (WS17-05) Early-life exposure to low-dose oxidants canincrease longevity via microbiome remodelling in Drosophila

○Fumiaki Obata[1,2], Clara O. Fons[2], Alex P. Gould[2] (The University of Tokyo[1], The Francis Crick Institute[2])

P3-112 Reactivation of *polr1c* restores the ethmoid plate structure in zebraf-

ish Type 3 Treacher Collins Syndrome model
○Ka Fai William Tse (Kyushu University)

P3-113 The role of F-actin binding protein *COTL1* in mitochondrial fission
○Gijeong Kim[1,2], Jeonghyun Kim[1,2], Eun-Hee Ko[1,2], Seon-Yong Jeong[1,2], Eunkuk Park[1] (Ajou University School of Medicine, Department of Medical Genetics[1], Department of Biomedical Sciences, Ajou University Graduate School of Medicine, Suwon, Republic of Korea.[2])

P3-114 Identification of *MKRN3* variants in Korean girls with central precocious puberty
○Eun-Hee Ko[1,2], Hae Sang Lee[3], Hyun-Seok Jin[4], Jeonghyun Kim[1,2], Gijeong Kim[1,2], Seulbi Park[1,2], Mi Ran Jo[1,2], Dowan Kim[1,2], Eun Young Kim[2,5], Seon-Yong Jeong[1,2], Jin Soon Hwang[3] (Ajou University School of Medicine, Department of Medical Genetics[1], Department of Biomedical Sciences, Ajou University Graduate School of Medicine, Suwon, Korea[2], Department of Pediatrics, Ajou University School of Medicine, Suwon, Korea[3], Department of Biomedical Laboratory Science, College of Life and Health Sciences, Hoseo University, Asan, Korea[4], Department of Brain Science, Ajou University School of Medicine, Suwon, Korea[5])

P3-115 Effects of Kukoamine B on bone formation and resorption in ovariectomized mice
○Seulbi Park[1,2], Jeonghyun Kim[1,2], Moon-Chang Kim[1], Subin Yeo[3], Yoonjoong Yong[3], Jung-a Yang[3], Gijeong Kim[1,2], Eun-Hee Ko[1,2], Eunkuk Park[1,3], Seon-Yong Jeong[1,2,3] (Ajou University School of Medicine, Department of Medical Genetics[1], Department of Biomedical Sciences, Ajou University Graduate School of Medicine, Suwon 16499, Republic of Korea[2], Nine B Company, Daejeon 34121, Republic of Korea[3])

P3-116 Identification of *UBAP2* as a novel susceptibility gene for postmenopausal osteoporosis
○Mi Ran Jo[1,2], Jeonghyun Kim[1,2], Bo-Young Kim[3], Eunkuk Park[1], Mun-Chang Kim[1], Yong-Jun Choi[4], Bom-Taeck Kim[5], Hyung-Min Ji[6], Ye-Yeon Won[6], Yoon-Sok Chung[4], Hyun-Seok Jin[7], Seon-Yong Jeong[1,2] (Ajou University School of Medicine, Department of Medical Genetics[1], Department of Biomedical Sciences, Ajou University Graduate School of Medicine, Suwon, Republic of Korea[2], Division of Intractable Disease, Center for Biomedical Sciences, National Institute of Health, Korea Centers for Disease Control & Prevention, Cheongju, Republic of Korea[3], Department

of Endocrinology and Metabolism, Ajou University School of Medicine, Suwon, Republic of Korea[4], Department of Family Practice and Community Health, Ajou University School of Medicine, Suwon, Republic of Korea[5], Department of Orthopaedic Surgery, Ajou University School of Medicine, Suwon, Republic of Korea[6], Department of Biomedical Laboratory Science, College of Life and Health Sciences, Hoseo University, Asan, Republic Korea[7])

P3-117 (WS17-07) Molecular commonalities between auditory hair cells and neurons in the study of age-related neuronal disorder

○Leo Tsuda, Ryunosuke Minami, Young-Mi Lim (National Center for Gariatrics and Gerontology)

P3-118 Safety Assessment of Lentiviral Gene Delivery in Intravesical Therapy

Pei-Fung Wu[1], Ching-Wen Liu[2], Yu-Fen Hung[3], Tsan-Jung Yu[4], ○Li-Ching Chang[5,6] (Dept. of Kinesiology, Health and Leisure Studies, National Univ. of Kaohsiung[1], School of Pharmacy, Kaohsiung Medical Univ.[2], Dept. of Occupational Therapy, I-Shou Univ.[3], Dept.of Urology, E-Da Hospital and I-Shou Univ.[4], School of Medicine, I-Shou Univ.[5], Dept. of Pharmacy, E-Da Hospital and I-Shou Univ.[6])

P3-119 Study on the relationship between neural gene expression and dedifferentiation in early stage of carcinogenesis

○Shunya Hozumi, Hiroya Katayama, Jia Zeyuan, Yutaka Kikuchi (Dept. of Biol. Sci., Grad. Sch. of Sci., Hiroshima Univ.)

P3-120 Analysis of severe fibrosis in submandibular gland tissue of patients with IgG4-related disease

○Ryoto Yajima[1], Kenichi Takano[1], Akito Kakiuchi[1], Takumi Konno[2], Takayuki Kohno[2], Tetsuo Himi[1], Takashi Kojima[2] (Department of Otolaryngology, Sapporo Medical University School of Medicine[1], Department of Cell Science, Research Institute for Frontier Medicine, Sapporo Medical University School of Medicine[2])

P3-121 (WS17-08) HNRNPLL is a novel metastasis suppressor of colorectal cancer, and modulates alternative splicing of *CD44* during epithelial-mesenchymal transition

○Masahiro Aoki, Keiichiro Sakuma (Aichi Cancer Center Research Institute)

P3-122 (WS17-09) Dynamin 2 mutation in Charcot-Marie-Tooth disease disturbs reorganization of actin cytoskeleton in glomerular podocyte

○Kohji Takei[1], Natsuki Wakita[1], The Mon La[1], Kento Sumida[1], Moin Saleem[2], Tetsuya Takeda[1], Hiroshi Yamada[1] (Okayama University[1], Bristol University[2])

P3-123 CD2AP, a risk factor of late-onset Alzheimer's disease, regulates the endosomal trafficking and degradation of APP

○Kotaro Furusawa[1], Mitsunori Fukuda[2], Shin-ichi Hisanaga[1] (Department of Biological Sciences, Graduate School of Science, Tokyo Metropolitan University[1], Department of Developmental Biology and Neurosciences, Graduate School of Life Sciences, Tohoku University[2])

P3-124 Intracellular localization of glycolipid-anchoerd protein sorting receptor in the early secretory pathway of protozoan parasite.

○Coh-ichi Nihei[1], Masayuki Nakanishi[2], Masakatsu Shibasaki[1] (BIKAKEN[1], Matsuyama Univ.[2])

P3-125 Metabolomics of colorectal cancer using ambient ionization-mass spectrometry

○Kentaro Yoshimura[1], Tomohiko Iwano[1], Hisashi Johno[1], Takahiro Domoto[2], Toshinari Minamoto[2], Sen Takeda[1] (University of Yamanashi[1], Kanazawa University[2])

P3-126 ILC2s in the stomach are induced by commensal bacteria and protect from pathogenic infection

○Naoko Satoh[1], Yasutaka Motomura[2], Kazuyo Moro[2], James Di Santo[3], Hitomi Mimuro[4], Hiroshi Ohno[1] (RIKEN IMS Intestinal Ecosystem[1], RIKEN IMS Innate Immune Systems[2], Unit of Innate Immunity, Institut Pasteur[3], Division of Bacteriology, Department of Infectious Diseases Control, Institute of Medical Science, The University of Tokyo[4])

P3-127 (WS16-05) Inhibitory signal on FGF-mediated *Msx1* induction in the mandibular arch may contribute to the diversification of heterodont dentition among mammals.

○Yoshio Wakamatsu[1], Shiro Egawa[2], Yukari Terashita[3], Noriko Osumi[1], Hiroshi Kawasaki[3], Koji Tamura[2], Kunihiro Suzuki[4] (Tohoku Univ., Grad. Sch. Med.[1], Tohoku Univ., Grad. Sch. Life Sci.[2], Kanazawa Univ., Grad. Sch. Med.[3], Nihon Univ. Sch. Dent. Matsudo[4])

P3-128 The neural tube formed by secondary neurulation provides innerva-

tions to the organs that were acquired after the aquatic-to-terrestrial changes during vertebrate evolution
○Eisuke Shimokita[1], Yoshiko Takahashi[2] (Department of Anatomy and Cell Biology Institute of Biomedical Sciences Tokushima University Graduate School[1], Department of Zoology Graduate School of Science Kyoto University[2])

P3-129 (WS16-08) Constrained variation of floral organ arrangement in basal eudicots: a correlation with species diversity of the organ number.
○Koichi Fujimoto, Miho S. Kitazawa (Osaka University)

P3-130 Developmental compartments within the autopod.
Yuki Sugiura, Ayumi Tadokoro, Keiichi Kitajima, Gembu Abe, ○Koji Tamura (Graduate School of Life Sciences, Tohoku University)

P3-131 (WS16-06) Heterochrony in initiation of *Gdf11* expression specifies unique hindlimb positioning through coordination of *Hox* gene expression in tetrapods
○Takayuki Suzuki[1], Yoshiyuki Matsubara[1], Hikaru Kasahara[1], Tatsuya Hirasawa[2], Shiro Egawa[3], Ayumi Hattori[4], Takaya Suganuma[1], Yuhei Kohara[1], Tatsuya Nagai[1], Koji Tamura[3], Shigeru Kuratani[2], Atsushi Kuroiwa[1] (Nagoya Univ.[1], RIKEN[2], Tohoku Univ.[3], IDAC[4])

P3-132 (WS16-09) Tissue-specific regulation of *yellow* gene expression in *Bombyx mori*
○Takao K Suzuki[1], Shigeyuki Koshikawa[2], Isao Kobayashi[1], Keiro Uchino[1], Hideki Sezutsu[1] (National Agriculture and Food Research Organization (NARO)[1], Hokkaido University[2])

P3-133 The hypomorphic mutations hidden in the allotetraploid genome of *Xenopus laevis*
○Mikio Tanouchi[1], Haruki Ochi[2], Akane Kawaguchi[3], Takeshi Igawa[1], Yui Iwata[1], Kiyo Sakagami[4], Hagime Ogino[1] (Amph. Res. Center, Hiroshima Univ.[1], Fac. Med., Yamagata Univ.[2], Res. Inst. Mol. Path., Vienna Biocenter[3], Dept. Ani-Bio., Nagahama Inst. of Bio-Sci. Tech.[4])

P3-134 (WS16-10) Evolution of larval skeletogenic mechanism: developmental system drift in echinoderm
○Atsuko Yamazaki, Yoshiaki Morino, Hiroshi Wada (University of Tsukuba)

P3-135 Expression and functional analysis of type X collagen during osteo-

genesis in amniotes
Norisuke Yokoyama, ○Masaki Takechi, Sachiko Iseki (Tokyo Medical and Dental University)

P3-136 Quantitative analysis for cellular dynamics in *C. elegans* embryogenesis
○Yusuke Azuma, Shuichi Onami (RIKEN)

P3-137 Probing the local membrane environment of the human insulin receptor
○Miwa Umebayashi[1], Luc Reymond[2], Satoko Takemoto[4], Hideo Yokota[4], Mayya Sundokova[5], Kai Johnsson[3], Howard Riezman[1] (University of Geneva[1], EPFL[2], Max Planck Institute for Medical Research Heidelberg[3], RIKEN[4], EMBL Monterotondo[5])

P3-138 (WS09-08) Optical control of cell signaling by the genetically-encoded PhyB-PIF system
○Youichi Uda[1,2], Michiyuki Matsuda[1,3], Kazuhiro Aoki[2] (Department of Pathology and Biology of Diseases, Graduate School of Medicine, Kyoto University[1], Division of Quantitative Biology, Okazaki Institute for Integrative Bioschence, National Institute for Basic Biology, National Institutes of Natural Sciences[2], Laboratory of Bioimaging and Cell Signaling, Graduate School of Biostudies, Kyoto University[3])

P3-139 (WS09-03) Quantitative control of mitochondria transfer between live single cells using a microfluidic device toward mtDNA editing
○Ken-Ichi Wada, Kazuo Hosokawa, Yoshihiro Ito, Mizuo Maeda (RIKEN)

P3-140 Designable RNA-binding protein for live-cell imaging and manipulation of authentic RNAs
○Akira Takai[1], Yasushi Okada[1,2] (QBiC, RIKEN[1], Univ. of Tokyo[2])

P3-141 The generation of transchromosomic mice using intracytoplasmic sperm injection and somatic cell nuclear transfer
○Yuki Yoshimura[1], Yasuhiro Kazuki[2,3], Mitsuo Oshimura[3], Takeshi Takahashi[1] (Central Institute for Experimental Animals[1], Department of Biomedical Science, Graduate School of Medical Science, Institute of Regenerative Medicine and Biofunction, Tottori University[2], Chromosome Engineering Research Center, Tottori University[3])

P3-142 A simple and accurate construction of TALEs and its applications
○Kazuho Ikeda, Yoko Terahara, Yasushi Okada (RIKEN, QBiC)

P3-143 (WS09-05) Measurement of caveolin-1 densities in the cell membrane for quantification of caveolar deformation after exposure to hypotonic membrane tension
Masashi Tachikawa[2], ○Shiro Suetsugu[1] (Nara Institute of Science and Technology[1], Theoretical Biology Laboratory, RIKEN[2])

P3-144 (WS09-09) Partially hydrated and markedly destructured hydrogen-bond network of intracellular water investigated with terahertz spectroscopy
○Keiichiro Shiraga[1], Takeshi Matsui[1], Mika Sawada[2], Shojiro Kikuchi[2], Tetsuhito Suzuki[3], Takeshi Mitsunaka[4], Masafumi Yamanoue[4], Yuichi Ogawa[3] (RIKEN Center for Integrative Medical Sciences[1], Institute for Advanced Medical Science, Hyogo College of Medicine[2], Graduate School of Agriculture, Kyoto University[3], Electronic Components and Devices BU., Sharp Corporation[4])

P3-145 Gene knockout and phenotypic analyses of *Xenopus laevis wee1b* gene, a negative regulator of cell cycle, by CRISPR/Cas9 method
○Minoru Watanabe[1,2], Ryutaro Tanaka[2], Miyu Yoshida[2], Satoshi Yoshitome[3], Nobuaki Furuno[4], Nobushige Nakajo[5] (Inst. Lib. Arts Sci., Tokuhima Univ.[1], Fac. Intgr. Arts Sci., Tokushima Univ.[2], Dept. Environ. Sci., Int. Coll. Arts Sci., Fukuoka Women's Univ.[3], Div. Embryol., Amphi. Res. Ctr., Hiroshima Univ.[4], Dept. Biol., Grad. Sch. Sci., Kyushu Univ.[5])

P3-146 KANPHOS Platform: A comprehensive database for kinase-associated neural phosphorylation signaling
○Mutsuki Amano[1], Junichiro Yoshimoto[2], Takayuki Kannon[3], Tomoki Nishioka[1], Shiro Usui[4], Kozo Kaibuchi[1] (Nagoya University, Graduate School of Medicine[1], NAIST, Graduate School of Information Science[2], Kanazawa University, Institute of Medical, Pharmaceutical and Health Sciences[3], RIKEN, Neuroinformatics Japan Center[4])

P3-147 Imaging of intracellular temperature in Neuron-like PC12 cell
○Yoshie Harada[1], Taishu Akiyama[1,2], Masaki Kinoshita[2], Hisashi Tadakuma[1], Kohki Okabe[3,4] (Institute for Protein Research[1], Graduate School of Biostudies, Kyoto University[2], Graduate School of Pharmaceutical Sciences, The University of Tokyo[3], PRESTO, JST[4])

P3-148 Development of a new fluorescent probe for visualization of open

chromatin structure in living cells
○Daisuke Ino[1], Kazuho Ikeda[1], Yasushi Okada[1,2] (Laboratory for Cell Polarity Regulation, QBiC, RIKEN[1], Department of Physics, Graduate School of Science, The University of Tokyo[2])

P3-149 (WS09-02) Depletion of autophagy receptor p62/SQSTM1 enhances the efficiency of gene delivery in mammalian cells
○Hidesato Ogawa[1], Megumi Tsuchiya[1], Takako Koujin[2], Chie Mori[2], Hiroko Osakada[2], Shouhei Kobayashi[2], Yasushi Hiraoka[2,1], Tokuko Haraguchi[1,2] (Osaka Univ.[1], NICT[2])

P3-150 The HiBiT protein quantitation system facilitates determination of antibody affinities under immunoprecipitation conditions
Deshani C. Ranawakage, Takuya Takada, ○Yusuke Kamachi (Kochi University of Technology)

P3-151 Developing a novel fluorescent cross-correlation spectroscopy for applications of the maturation of fluorescent proteins and the efficiency of kinesin dimerization
○Kazunari Mouri[1], Yasushi Okada[1,2] (RIKEN[1], Univ. Tokyo, Grad. Sch. Sci., Dept. Phys.[2])

P3-152 Development of live imaging technique for collagen fiber.
○Yoshihiro Miwa, Junko Kijima Tanaka, Yumi Mori, Tomoki Sakasai, Seiya Mizuno, Masafumi Muratani, Fumihiro Sugiyama, Satoru Takahashi (University of Tsukuba)

P3-153 Attempt to make a breakthrough for live imaging of cells or proteins, and for gene functional analysis, in sponges by establishing a method for gene introduction
○Tomonori Mukai, Noriko Funayama (Dept. Biophysics, Graduate School of Science, Kyoto Univ.)

P3-154 Investigation of postsynaptic signaling using novel phosphoproteomic approach
○Md Imrul Hasan Chowdhury, Tsuboi Daisuke, Kozo Kaibuchi (Department of Cell Pharmacology, Graduate school of Medicine, Nagoya University)

P3-155 The 4th National BioResource Project of *Xenopus tropicalis*
○Takeshi Igawa[1], Akihiko Kashiwagi[1], Keiko Kashiwagi[1], Ichiro Tazawa[1],

Nobuaki Furuno[1], Haruki Ochi[2], Takashi Kato[3], Tsukasa Mori[4], Hajime Ogino[1] (Amphibian Research Center, Hiroshima University[1], School of Medicine, Yamagata University[2], Faculty of Education and Integrated Arts and Sciences & Graduate School of Advanced Science and Engineering, Waseda University[3], College of Bioresource Sciences, Nihon University[4])