# Scientific Programs

# Plenary Lectures

May 30 (Thu) 13:20-14:50 Room 1
Chairperson: Motonori Hoshi (The Open Univ. of Japan)

**PL-01** 13:20-14:05 EMBRYOLOGY AND I

発生学と私

○Ryuzo Yanagimachi (Univ. of Hawaii)

Chairperson: Koji Tamura (Tohoku Univ.)

**PL-02** 14:05-14:50 Development and Regeneration of Ectodermal Organs: Gradient, Topology, and Epigenetic Competence

○Cheng-Ming Chuong (University Southem California)

# Symposia

## Symposium 1: Frontiers in Reproduction Research

May 31 (Fri) 13:30-15:40 Room 1

Organizers: Noritaka Hirohashi (Shimane Univ.)
Kazuya Kobayashi (Hirosaki Univ.)

This symposium aims at briefly introducing a wide variety of hot topics in the area of reproduction research, in particular addressing fundamental questions in relation to the “tactic of sex” at the individual, cellular and molecular levels. The speakers will give us an easy and friendly talk, young people are therefore to be encouraged to join.

**S01-01** 13:35-13:58 Mechanisms for oocyte-specific DNA methylation imprints

卵子形成過程におけるインプリント機構

○Yayoi Obata (Dept. of Bioscience, Tokyo Univ. Agri.)

**S01-02** 13:58-14:21 Switching from asexual to sexual reproduction in the planarian *Dugesia ryukyuensis*：The role of D-amino acid oxidase

プラナリアの一種リュウキュウナミウズムシにおける無性生殖から有性生殖への転換機構：D- アミノ酸酸化酵素の役割について

○Takanobu Maezawa[1], Hiroyuki Tanaka[2], Kazuya Kobayashi[1] (Hirosaki Univ.[1], Shiga Univ. of Medical Science[2])

**S01-03** 14:21-14:44 ER chaperones, ADAM3, and sperm fertilizing ability

精巣シャペロンによる ADAM3 の品質管理と精子受精能力

○Masahito Ikawa (RIMD, Osaka Univ.)

**S01-04** 14:44-15:07 Possibility of the proteomics toward the comprehensive understanding of the fertilization and early development

受精研究におけるプロテオミクス解析の実践と可能性

○Lixy Yamada (Sugashima Marine Biol. Lab., Grad. Sch. Sci., Nagoya Univ.)

**S01-05** 15:07-15:40 Phenotypic engineering using RNAi to study sex in a simultaneous hermaphrodite: functional genomics meets sexual selection research

○Lukas Schärer (Evol Biol, Zool Inst, Uni Basel)

## Symposium 2: The role of cell proliferation in development and regeneration

May 31 (Fri) 13:30 ～ 15:30 Room 2
Organizers: Takashi Takeuchi (Tottori Univ.)
Toshihiko Fujimori (NIBB)

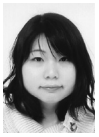
Cell proliferation is one of critical factors which regulate development and regeneration. The proper regulation of cell cycle is required for pattern formation, morphogenesis and differentiation.In this symposium, we will reconsider cell proliferation in various developmental aspects, focus on the research highlighting the mechanisms and significance, and discuss future perspectives in this field.

**S02-01** 13:31-13:55 Spatially regulation of cell proliferation and differentiation in the zebrafish lens

ゼブラフィッシュ水晶体における細胞増殖と細胞分化の空間的な制御

Toshiaki Mochizuki, ○Ichiro Masai (OIST)

**S02-02** 13:55-14:19 Analysis of Tooth Germ Epithelium Morphogenesis by using a Novel Four-dimensional Cell Tracking System



歯胚上皮組織の形態形成における 4 次元細胞動態解析

○Ritsuko Morita[1], Miho Kihira[2], Yousuke Nakatsu[2], Kensaku Mizuno[3], Kazumasa Ohashi[3], Yukitaka Ishimoto[4], Yoshihiro Morishita[4], Takashi Tsuji[1,2,5] (Res. Inst. for Sci. & Tech., Tokyo Univ. of Sci.[1], Fac. of Indus. Sci. & Tech., Tokyo Univ. of Sci.[2], Dep. of Biomolecular Sciences, Tohoku Univ.[3], Lab. for Developmental Morphogeometry, CDB, RIKEN[4], Organ Technologies Inc.[5])

**S02-03** 14:19-14:43 Fluctuations in division modes: a way for cortical neural stem cells to find a new niche

神経幹細胞の分裂モードの変化による脳の形成

○Fumio Matsuzaki (RIKEN CDB)

**S02-04** 14:43-15:07 Gut epithelial renewal is required for systemic response to tissue damage in Drosophila

ショウジョウバエ組織傷害に対する全身性応答に関わる腸上皮の再生

○Masayuki Miura (Dept. of Genetics, Grad. Sch. of Pharm. Scis., Univ. of Tokyo)

**S02-05** 15:07-15:29 Molecular mechanisms of cell proliferation in cardiomyocytes during cardiac development and regeneration

心臓の発生と再生における心筋細胞の増殖制御機構

○Takashi Takeuchi, Shoji Tane, Hitomi Okayama, Aiko Ikenishi, Naoki Yokotani, Akira Matsumoto, Ayumi Myouga, Toshinori Hayashi (Sch. of Life Sci., Fac. of Med., Tottori Univ.)

## Symposium 3: Advances in targeted genome editing

May 31 (Fri) 13:30-15:30 Room 3
Organizers: Takashi Yamamoto (Hiroshima Univ.)
Atsuo Kawahara (RIKEN Qbic)

Genome editing with engineered nucleases is an emerging technology that enables manipulation of targeted genes in many organisms and cell lines. To date, two types of engineered nucleases have been developed. Zinc finger nucleases (ZFNs), which first emerged in 1996, have a long and successful history of genome editing. However, the construction of ZFNs is highly laborious and the success rate of active ZFN construction is very low. Transcription activator-like effector nucleases (TALENs), on the other hand, have been recently developed as a more user-friendly engineered nuclease, because TALENs are easy to construct in-house and the target site may be selected in any gene. Using these engineered nucleases, targeted gene disruptions have been achieved successfully in cultured cells and various organisms. Furthermore, gene correction or targeted gene addition have been reported mainly in cultured cells, and also in several organisms. The purpose of this symposium is to share and discuss the recent research advances in genome editing and related technology.
Co-organized by Genome Editing Consortium

**S03-01** 13:30-13:50 TALEN-mediated genome modifications in zebrafish

ゼブラフィッシュにおける TALEN を用いたゲノム編集の技術開発
Satoshi Ota, Yu Hisano, Michiko Muraki, ○Atsuo Kawahara (RIKEN QBiC)

**S03-02** 13:50-14:10 Knockout of genes with TALE nucleases in the chordate Ciona intestinalis

脊索動物カタユウレイボヤにおける TALEN を用いた遺伝子破壊
○Yasunori Sasakura[1], Nicholas Treen[1], Haruka Sasaki[1], Narudo Kawai[2], Tetsushi Sakuma[3], Takashi Yamamoto[3], Keita Yoshida[1] (Shimoda Marine Res. Center, Univ. Tsukuba[1], Dept. Biol. Res. Edu. Center Natl. Sci. Keio Univ.[2], Dept. Math. Life Sci. Grad. Sch. Sci. Hiroshima Univ.[3])

**S03-03** 14:10-14:30 Gene knockout in Xenopus using TALENs
ツメガエルにおける TALEN による遺伝子破壊
○Ken-ichi Suzuki, Tetsushi Sakuma, Yuto Sakane, Yukiko Isoyama, Keiko Kashiwagi, Akihiko Kashiwagi, Takashi Yamamoto (Hiroshima Univ.)

**S03-04** 14:30-14:50 Efficient gene targeting with ZFN/TALEN in animals

ラットにおける効率的な遺伝子改変技術
○Tomoji Mashimo[1], Takehito Kaneko[1], Tetsushi Sakuma[2], Takashi Yamamoto[2], Tadao Serikawa[1] (ILA, Med, Kyoto Univ.[1], DMLS, Sci, Hiroshima Univ.[2])

**S03-05** 14:50-15:10 Uncovering nuclear dynamics by TAL effector

○Yusuke Miyanari (IGBMC, Strasbourg, FRANCE)

**S03-06** 15:10-15:30 Transposed and Targeted Gene Expression Systems for Guiding Somatic Cell Reprogramming and Differentiation

Tan Ghee Wan[1], Shin-Il Kim[1], Akihito Tanaka[1,2], Kazuo Hayakawa[1], Andras Nagy[3], Hidetoshi Sakurai[1], Junya Toguchida[1], ○Knut Woltjen[1] (Center for iPS Cell Research and Application (CiRA), Kyoto University[1], Department of Immunology, Nagoya University Graduate School of Medicine[2], Samuel Lunenfeld Research Institute (SLRI) [3])

# Oral Presentations (in English)

## OP01: Neural development and function 1

May 29 (Wed) 08:30-10:10 Room 2
Chairpersons: Ichiro Masai (OIST)
Masayuki Miura (Univ. of Tokyo)

**OP01-01 (P-180)** 08:30-08:42 Role of tubulin folding pathway in neurite morphogenesis of *Drosophila* olfactory projection neuron
神経突起形成におけるチューブリン折りたたみ経路の役割
○Misako Okumura[1], Masayuki Miura[1,2], Takahiro Chihara[1,2] (Grad. Sch. Pharm. Sci., Univ. Tokyo[1], CREST, JST[2])

**OP01-02 (P-182)** 08:42-08:54 Roles of Robo endocytic trafficking in acquisition of axonal responsiveness to the repellent Slit during midline crossing
正中線交叉における交連軸索の Slit 応答性の不可逆性スイッチを支える分子基盤
○Junichi Kawada[1], Mariko Kinoshita-Kawada[1], Shigeru Yanagi[2], Ichiro Masai[1], Yi Rao[3], Jane Wu[4] (OIST[1], Sch. of Life Sci. Tokyo Univ. of Pharm. Life Sci.[2], Peking Univ. Sch. of Life Sci.[3], Dept. of Neurology Northwestern Univ. Feinberg Sch. of Med.[4])

**OP01-03 (P-183)** 08:54-09:06 Genetic analysis of the leucine-rich repeat molecule Capricious in synaptic-layer specificity in the Drosophila visual system
ショウジョウバエ視覚神経系における LRR 膜タンパク質 Capricious はシナプス層の特異性を決定していない
Sandra Berger-Mueller[2,3], Atsushi Sugie[2,4], Fumio Takahashi[1], Gaia Tavosanis[4], ○Takashi Suzuki[1,2] (Dept. Biosci, & Biotech., Titech[1], Max Planck Institute of Neurobiology, Martinsreid, Germany[2], CNR/UPS UMR5273 STROMA lab-Inserm U1031, Toulouse, France[3], DZNE, Bonn, Germnay[4])

**OP01-04 (P-185)** 09:06-09:18 Formation process of individual compartments in the cerebellum of mouse embryo
マウス小脳内における、個々の区画の形成過程
○Mitsuhiro Hashimoto, Takaki Miyata (Dep. of Cell Biol. Nagoya Univ.)

**OP01-05 (P-186)** 09:18-09:30 MRE32 RNA is essential for mushroom body morphogenesis in *Drosophila* adult brain
MRE32 RNA はショウジョウバエキノコ体の形態形成に必須である
○Sachi Inagaki[1], Masanao Sato[3,4], Natsuki Nakamura[2], Satoru Kobayashi[3,4], Yuji Kageyama[1,2] (Res Ctr Environmental Genomics, Kobe Univ[1], Dpt Biol, Grad Sch Sci, Kobe Univ[2], OIIB, NINS[3], NIBB, NINS[4])

**OP01-06 (P-188)** 09:30-09:42 Evidence for involvement of apoptosis in establishing proper cerebrospinal fluid hydrodynamics
脳脊髄液動態の確立におけるアポトーシスの関与
Ayako Yoshida[1], ○Yoshifumi Yamaguchi[1,2], Daisuke Kawata[1], Naomi Shinotsuka[1], Mariko Yoshida[1], Masayuki Miura[1,3] (Dept. Genet. Pharma. The Univ. of Tokyo[1], PREST, JST[2], CREST, JST[3])

**OP01-07 (P-189)** 09:42-09:54 Molecular and cellular dissection of axonal pruning in *Drosophila* sensory neurons
ショウジョウバエ感覚ニューロンにおける軸索刈り込みメカニズムの探索

○Rei Morikawa, Kazuo Emoto (Dept. Cell Biol., Osaka Biosci. Inst.)

**OP01-08 (P-190)** 09:54-10:06 Examination of developmental processes of the ferret cerebral cortex using in utero electroporation
子宮内電気穿孔法を用いたフェレット大脳皮質の形成過程解析
○Hiroshi Kawasaki, Tomohisa Toda, Lena Iwai (Grad Sch of Med, Kanazawa Univ)

## OP02: Cellular behavior and differentiation 1

May 29 (Wed) 08:30-10:10 Room 3
Chairpersons: Kenji Matsuno (Osaka Univ.)
Masahiko Hibi (Nagoya Univ.)

**OP02-01 (P-082)** 08:30-08:42 IRSp53 family of I-BAR domain proteins regulates microvillus morphogenesis by sculpting the apical plasma membrane.
IRSp53 ファミリータンパク質は I-BAR ドメインの膜変形活性により微絨毛の形態形成を制御する
○Shusaku Kurisu, Tadaomi Takenawa (ICMS, Kobe Univ. Grad. Schl. of Med.)

**OP02-02 (P-061)** 08:42-08:54 Null mutation of Nolz-1/Zfp503 in mesenchymal cells acts non-cell autonomously to influence differentiation of epithelial cells in developing mouse lung
○Shih-Yun Chen, Fu-Chin Liu (INS, National Yang-Ming Univ.)

**OP02-03 (P-063)** 08:54-09:06 Sequential expression of Lgr5 and Col22a1 in developing synovial joints mark the progressive differentiation of progenitor cells to articular chondrocytes
Amy Feng[1], Wilson Chan[1], Vivian Ng[1], Jia Chi Yeo[2], Sigma Stricker[3], Kathryn Cheah[1], Manuel Koch[4], Stefan Mundlos[3], Huck Hui Ng[2], ○Danny Chan[1] (HKU[1], GIS[2], MPI[3], IBC[4])

**OP02-04 (P-065)** 09:06-09:18 Functional analysis of EDNRB2 in the melanocyte development and differentiation using *EDNRB2*-mutated chickens
突然変異鶏を用いたメラノサイトの発生と分化におけるエンドセリン受容体 B2 の機能解析
○Toyoko Akiyama[1], Ai Shinomiya[1], Keiji Kinoshita[2], Makoto Mizutani[2], Yasunari Kayashima[3], Yoichi Matsuda[2] (Dept. Biol., Keio Univ.[1], Agri.Biosci. Res. Centr., Nagoya Univ. Nagoya, Japan[2], Food and Nutri. Sci., Univ. of Shizuoka, Japan[3])

**OP02-05 (P-067)** 09:18-09:30 Sox5 is involved in fate specification of pigment cells in medaka
メダカ色素細胞分化における Sox5 の役割
○Yusuke Nagao[1], Tomoko Adachi[2,3], Atsushi Shimizu[4], Ryoko Seki[2], Chikako Inoue[2], Yasuhiro Kamei[5], Ikuyo Hara[5], Tetsuaki Kimura[6], Yoshihito Taniguchi[7], Kiyoshi Naruse[6], Robert Kelsh[3], Yuko Wakamatsu[2], Masahiko Hibi[2], Hisashi Hashimoto[2] (Grad. Sch. Sci., Nagoya Univ.[1], Biosci. Biotech. Ctr., Nagoya Univ.[2], Dept. of Biol. Biochem., Univ. of Bath[3], Dept. of Mol. Biol., Sch. of Med., Keio Univ.[4], Spectrography and Bioimaging Facility, NIBB[5], Lab. of Biores., NIBB[6], Dept. of Preventive Medicine and Public Health, Sch. of Med., Keio Univ.[7])

**OP02-06 (P-084)** 09:30-09:42 In vivo collective migration requires N-Cadherin endocytosis controlled by LPA/Edg4 signalling.
生体内集団的細胞遊走には LPA/Edg4 シグナルによって制御される N-cadherin のエンドサイトーシスが必要である
○Sei Kuriyama[1,2], Eric Theveneau[2], Alexandre Benedetto[3], Alexandre Kabla[4], Guillaume

Charras[3], Masamitsu Tanaka[1], Maddy Parsons[5], Roberto Mayor[2] (Akita University[1], UCL, Cell and Developmental Biology Department, UK[2], UCL, London Centre for Nanotechnology, UK[3], Cambridge Univ., UK.[4], King's College London, Randall Division for Biophysics, UK[5])

**OP02-07 (P-069)** 09:42-09:54 TGF-β signals regulate the dorsoventral patterning of neurogenic ectoderm of the sea urchin embryo.
TGF-β シグナルによるウニ胚神経外胚葉の背腹軸方向のパターニング
Junko Yaguchi, Noriyo Takeda, Kazuo Inaba, ○Shunsuke Yaguchi (SMRC, Univ. Tsukuba)

**OP02-08 (P-071)** 09:54-10:06 Identification of novel maternal neurogenic genes that are potential components of Notch signaling in *Drosophila*
ショウジョウバエを用いた Notch 情報伝達系における新規構成因子の探索
○Takuma Gushiken[1,2], Kenjiroo Matsumoto[1], Ryo Hatori[1,2], Tomoko Yamakawa[1], Takeshi Sasamura[1], Kenji Matsuno[1] (Osaka University[1], Dept of Biol. / Tec., Tokyo Univ of Sci.[2])

## OP03: Neural development and function 2

May 29 (Wed) 10:25-11:50 Room 2
Chairpersons: Carina Hanashima (RIKEN CDB)
Takaki Miyata (Nagoya Univ.)

**OP03-01 (P-192)** 10:25-10:37 Generation of the 3-Dimentional Multi-gene Expression Map for the Zebrafish Developing Habenular Nuclei
Guo-Tzau Wang[2], Chang-Huain Hsieh[2], Yuan-Ding Yu[3], Wei-Han Lang[1], ○Yung-Shu Kuan[1,3,4,5] (IBS, NTU, TW[1], NCHC, Taiwan[2], IBC-AS, Taiwan[3], NCSC, NTU, Taiwan[4], NPAS-AS, Taiwan[5])

**OP03-02 (P-193)** 10:37-10:49 SeeDB: an aqueous optical clearing agent for imaging intact fluorescence and morphology in the mouse brain.
新奇透明化試薬 SeeDB の開発とマウス脳の蛍光イメージング
Meng-tsen Ke[1,2], Satoshi Fujimoto[1], ○Takeshi Imai[1,2,3] (RIKEN CDB[1], Grad Sch of Biostudies, Kyoto Univ[2], PRESTO, JST[3])

**OP03-03 (P-194)** 10:49-11:01 Role of early intracortical activity in the maturation of neocortical circuits
初期神経活動による大脳皮質神経回路形成の制御
○Torsten Bullmann, Carina Hanashima (RIKEN CDB)

**OP03-04 (P-196)** 11:01-11:13 How have human brains been evolved? :comparative gene expression analysis among rodents, new world monkeys and old world monkeys
齧歯類、新世界ザル、旧世界ザル間の遺伝子発現比較からヒト脳へと至る大脳皮質進化の機構を探る試み
○Eiji Matsunaga, Sanae Nambu, Mariko Oka, Michio Tanaka, Miki Taoka, Atushi Iriki (Lab for Symbolic Cognitive Development, RIKEN BSI)

**OP03-05 (P-197)** 11:13-11:25 Functional analysis of RP58 transcriptional repressor in neuronal migration during corticogenesis
大脳皮質形成時の神経細胞移動における RP58 転写抑制因子の機能解析
○Chiaki Ohtaka-Maruyama, Haruo Okado (TMIMS)

**OP03-06 (P-198)** 11:25-11:37 Neural-specific elimination of *Mab21l2* results in respiratory failure in mouse neonates

○Chung Man Chan, King Lau Chow (LIFS, HKUST)

**OP03-07 (P-200)** 11:37-11:49 Interkinetic nuclear migration through TAG-1-assisted progenitor elongation prevents neuroepithelial overcrowding and ensures neocortical histogenesis

○Mayumi Okamoto[1], Takashi Namba[2], Tomoyasu Shinoda[1], Ken Sago[1], Kanako Saito[1], Akira Sakakibara[1], Ayano Kawaguchi[1], Kazunori Nakajima[3], Masahiro Ueda[4,5], Shigeo Hayashi[6], Toshihiko Fujimori[7], Kozo Kaibuchi[2], Takaki Miyata[1] (Dept Anat and Cell Biol, Nagoya Univ, Grad Sch of Med[1], Dept Cell Pharmacol, Nagoya Univ, Grad Sch of Med[2], Dept Anat, Keio Univ, Grad Sch of Med[3], Dept Biol Sci, Osaka Univ, Grad Sch of Sci[4], Lab for Cell Signaling Dynamics, QBiC,RIKEN[5], Lab for Morphogenetic Signaling, CDB, RIKEN[6], Div Embryology, NIBB[7])

## OP04: Cellular behavior and differentiation 2

May 29 (Wed) 10:25-11:50 Room 3
Chairpersons: Masanori Taira (Univ. of Tokyo)
Kaoru Sato (Kyoto Univ.)

**OP04-01 (P-073)** 10:25-10:37 Roles of the zinc finger protein Zbtb11 and phosphorylation modification in the regulation of Otx2 activity in early Xenopus eye development
Xenopus の眼の初期形成に関わる Otx2 のリン酸化修飾と活性調節における Zn フィンガー蛋白質 Zbtb11 の役割

○Yumeko Satou[1], Erina Hosono[1], Kohei Minami[1], Takashi Shibano[1], Hiroshi Mamada[1], Shuji Takahashi[2], Makoto Asashima[3], Masanori Taira[1] (Dept. of Biol.Sci, Grad. Sch. of Sci., Univ. of Tokyo[1], KOMEX[2], AIST[3])

**OP04-02 (P-085)** 10:37-10:49 Genetic labeling and ablation of mouse Shh-expressing cells during cortical neurogenesis at late gestation
マウス胎生後期の大脳皮質内での神経発生におけるソニックヘッジホッグ発現細胞の遺伝的検出及び除去

○Jun Motoyama (Brain Science, Doshisha Univ.)

**OP04-03 (P-075)** 10:49-11:01 Novel transgenic tool to live monitor the morphology and behavior of Neurogenin2-expressing cells in the developing mammalian brain

○Takumi Kawaue, Ken Sago, Mayumi Okamoto, Tomoyasu Shinoda, Ayano Kawaguchi, Takaki Miyata (Cell Biology, Nagoya University, Graduate School of Medicine)

**OP04-04 (P-077)** 11:01-11:13 Investigating the roles of developmentally coordinated change of energy metabolism during mouse neural tube closure
マウス神経管閉鎖期に生じるエネルギー代謝状態変化の意義の解明

○Hidenobu Miyazawa[1], Yoshifumi Yamaguchi[1,2], Masayuki Miura[1,3] (Dept. Genetics, Grad. Sch. Pharm. Sci., Univ. Tokyo[1], PREST, JST[2], CREST, JST[3])

**OP04-05 (P-079)** 11:13-11:25 Downregulation of Etv2 promotes endothelial to hematopoietic fate transition

○Makoto Kobayashi, Miki Takeuchi, Mana Watanabe, Miho Takeuchi (Univ. Tsukuba, Fac. Med.)

**OP04-06 (P-080)** 11:25-11:37 Regulation of red blood cell transition from larval to adult type during anuran metamorphosis
無尾類変態期における赤血球転換機構の解析

○Masahiro Yamaguchi[1,3], Yui Kawaguchi[2], Iyo Matsuda[1], Tsutomu Kinoshita[3] (Dept.

Chem. Biochem., Suzuka Natl. Coll. Tech.[1], Adv. Appl. Chem. Mat. Eng., Suzuka Natl. Coll. Tech.[2], Dept. Life Sci., Coll. Sci., Rikkyo Univ.[3])

**OP04-07 (P-087)** 11:37-11:49 Role of Integrin β1 in endothelial cells
血管内皮細胞における Integrin β1 の機能解析
○Kenichi Kanai[1,2], Hiroyuki Yamamoto[2], Manuel Ehling[2], Erina Kuranaga[1], Ralf Adams[2] (RIKEN, CDB[1], MPI, Münster[2])

## OP05: Early embryogenesis 1 / Morphogenesis & Organogenesis 1

May 29 (Wed) 13:25-15:50 Room 2
Chairpersons: Noriko Funayama (Kyoto Univ.)
Shinji Ihara (NIG)

**OP05-01 (P-107)** 13:25-13:37 Expression timing of *Gdf11* reveals positional diversity of the hindlimb in tetrapods
*Gdf11*発現開始タイミングの種間の違いが四肢動物における後肢の位置の多様性を生み出す
○Yoshiyuki Matsubara[1], Ayumi Hattori[2], Yusuke Watanabe[2], Toshihiko Ogura[2], Se-Jin Lee[3], Atsushi Kuroiwa[1], Takayuki Suzuki[1,4] (Div of Biol Sci, Grad Sch of Sci, Nagoya Univ.[1], IDAC, Tohoku Univ.[2], Sch of Med, Johns Hopkins Univ, USA.[3], JST PRESTO[4])

**OP05-02 (P-109)** 13:37-13:49 Transcriptional regulation mechanisms of mesenchymal *Fibroblast growth factor 10* expression in response to the AER signaling
AER 由来シグナルによる肢芽間充織 *Fgf10*の転写制御機構
○Yo-Ichi Yamamoto-Shiraishi, Hiroaki Higuchi, Shigeki Yamamoto, Mie Hirano, Atsushi Kuroiwa (Div.of Biol.Sci., Grad.Sch.of Sci., Nagoya Univ.)

**OP05-03 (P-111)** 13:49-14:01 *Hox* and *Wnt* signaling cooperatively control *Fgf10* expression in the limb field
*Hox*と *Wnt* シグナルは予定肢芽領域における *Fgf10*発現を協調的に制御する
Taishi Ueta, Hiroyuki Inaba, Takehiro Hitokoto, Yo-ichi Shiraishi, Takayuki Suzuki, ○Atsushi Kuroiwa (Div.of Biol.Sci., Grad.Sch.of Sci., Nagoya Univ.)

**OP05-04 (P-113)** 14:01-14:13 Coordination between tubular elongation and cell epithelialization is regulated by FGFs emanating from surrounding tissues
管組織の伸長と細胞上皮化のコーディネーションは周囲組織からの FGF シグナルによって制御される
○Yuji Atsuta[1,2], Yoshiko Takahashi[1] (Grad. Sch. of Sci., Kyoto Univ.[1], NAIST, Biol. Sci.[2])

**OP05-05 (P-115)** 14:13-14:25 Oriented cell division for the formation of the body midline
生体の正中線づくりにおける細胞分裂の方向付け
○Tadayoshi Watanabe[1,2], Gary Liu[1], Takashi Mikawa[1] (CVRI, UCSF[1], Zoology, Kyoto Univ.[2])

**OP05-06 (P-117)** 14:25-14:37 Metabolic dynamics and function during somitogenesis
体節形成過程における代謝経路の役割
○Masayuki Oginuma, Philippe Moncuquet, Pourquié Olivier (IGBMC)

**OP05-07 (P-119)** 14:37-14:49 Lfng regulates the synchronized oscillation of the mouse segmentation clock via trans-repression of Notch signalling
Lfng は周囲の細胞の Notch シグナルをトランスに抑制することでマウス体節時計の同調機構を制御する

○Yusuke Okubo[1], Takeshi Sugawara[2], Natsumi Abe-Koduka[3], Jun Kanno[1], Akatsuki Kimura[2], Yumiko Saga[3] (NIHS[1], NIG[2], NIG[3])

**OP05-08 (P-121)** 14:49-15:01 Understanding the Role of Wnt5a in the Morphogenesis of the Vertebrate Body Plan
マウス初期胚形態形成における Wnt5a の役割
○Rieko Ajima[1,2,3], Prabhakar Gudla[2], Kristin Biris[2], Lino Tessarollo[2], Stephen Lockett[2], Mark Lewandoski[2], Hiroshi Hamada[3], Yumiko Saga[1], Terry Yamaguchi[2] (NIG[1], NCI-Frederick, NIH[2], Grad. School of Frontier Biosciences, Osaka Univ.[3])

**OP05-09 (P-013)** 15:01-15:13 Pattern of early gene expression during early marmoset development
コモンマーモセット初期胚における遺伝子発現パターンの変化
○Ayako Sedohara[1], Hideyuki Okano[2], Erika Sasaki[1] (CIEA[1], Keio University[2])

**OP05-10 (P-016)** 15:13-15:25 The spider *Parasteatoda tepidariorum* is a good model to study cell-cell signaling and cell movement during development
細胞間シグナルと細胞運動の実験系としてのオオヒメグモ
○Yasuko Akiyama-Oda, Hiroki Oda (JT Biohistory Res. Hall)

**OP05-11 (P-019)** 15:25-15:37 Zebrafish embryonic cell migration promoted by pregnenolone that changes the conformation of CLIP-170 and promoting microtubule polymerization
Jui-Hsia Weng, ○Bon-chu Chung (IMB, Academia Sinica)

**OP05-12 (P-022)** 15:37-15:49 Theoretical model of DV-pattern scaling in Xenopus embryo
初期 Xenopus 胚の背腹軸スケーリングを保証する理論モデル
○Tatsuo Shibata[1], Hidehiko Inomata[2,3], Yoshiki Sasai[2] (Lab for Physical Biology, CDB[1], Organogenesis and Neurogenesis Group, CDB[2], PRESTO/JST[3])

## OP06: EvoDevo

May 29 (Wed) 13:25-15:50 Room 3
Chairpersons: Mikiko Tanaka (Tokyo Inst. of Technol.)
Gaku Kumano (Osaka Univ.)

**OP06-01 (P-254)** 13:25-13:37 Experimental Evodevo of larval skeleton in Echinodermata
棘皮動物の幼生骨片の実験的進化発生学研究
○Hiroyuki Koga, Yoshiaki Morino, Hiroshi Wada (Univ. Tsukuba)

**OP06-02 (P-256)** 13:37-13:49 Regulation of Left-Right Asymmetry in Sea Urchins
Yi-Jyun Luo, Jeff Chieh-fu Peng, ○Yi-Hsien Su (ICOB, Academia Sinica)

**OP06-03 (P-257)** 13:49-14:01 Nodal signalling determines biradial symmetry in the cnidarian Hydra
刺胞動物ヒドラの分岐形態は Nodal シグナルにより制御される
○Hiroshi Watanabe[1], Heiko Schmidt[2], Bert Hobmayer[3], Suat Özbek[1], Thomas Holstein[1] (COS, Univ. Heidelberg[1], CIBIV[2], Inst. Zool. Univ. Innsbruck[3])

**OP06-04 (P-259)** 14:01-14:13 Possible evolutionary origin of cardiac function
心臓機能の進化的起源
○Hiroshi Shimizu[1], Kevin Pang[2], Mark Q Martindale[2] (NIG[1], Kewalo Marine Laboratory, Univ. Hawaii[2])

**OP06-05 (P-261)** 14:13-14:25 Elastin gene subfunctionalization and formation of teleost-specific outflow tract, “bulbus arteriosus”, in fish evolution and development.
エラスチン遺伝子の機能分化と真骨魚類においてみられる動脈球（流出路）の発生と進化

○Yuuta Moriyama[1], Jun Takeuchi[1,2], Kazuko Koshiba-Takeuchi[1,2] (Cardiovascular Regeneration, IMCB, Univ. of Tokyo, Japan[1], Biological Science, Grad. Sch. of Sciences, Univ. of Tokyo, Japan[2])

**OP06-06 (P-262)** 14:25-14:37 Expression of germline markers in three species of amphioxus supports a preformation mechanism of germ cell development in cephalochordates

Qiu-Jin Zhang[1,2], Yi-Jyun Luo[1], Hui-Ru Wu[1], Yen-Ta Chen[1], ○Jr-Kai Yu[1,3] (ICOB, Academia Sinica[1], Fujian Normal University[2], Inst. Ocean., NTU[3])

**OP06-07 (P-264)** 14:37-14:49 Evolutionary background of pluripotency among amniotes ― FGF/ERK-independent proliferation in early embryos ―

鳥類・爬虫類から見る多能性機構の進化

○Shota Nakanoh, Kiyokazu Agata (Kyoto University, Science)

**OP06-08 (P-266)** 14:49-15:01 Modification of anterior-posterior patterning systems during the fin-to-limb transformation: Insight into the origin of thumbs

対鰭から四肢への形態変化における前後軸形成機構の変更～親指の起源への洞察～

○Koh Onimaru, Mikiko Tanaka (Tokyo Tech.)

**OP06-09 (P-267)** 15:01-15:13 Pax1 and Segmental Development of Pharyngeal Arch

Pax1 が解き明かす咽頭弓分節機構

○Kazunori Okada, Hiroshi Wada (Univ. Tsukuba)

**OP06-10 (P-269)** 15:13-15:25 Evolutionary and functional analysis of cis-regulatory elements in mammalian Gsx1 and Gsx2 homeobox genes.

哺乳類 Gsx1, Gsx2 ホメオボックス遺伝子シス発現調節因子の進化的および機能的解析

○Kenta Sumiyama (NIG)

**OP06-11 (P-271)** 15:25-15:37 Role of *Six1* in evolution of vertebrate primary sensory system

脊椎動物体幹部一次感覚神経系の進化における *Six1*の役割

○Kiyoshi Kawakami[1], Hiroshi Yajima[1], Makoto Suzuki[2], Haruki Ochi[3], Keiko Ikeda[4], Shigeru Sato[1], Hajime Ogino[3], Naoto Ueno[2] (Div. Biol., CMM, Jichi Med. Univ.[1], Div. Morpho. NIBB[2], Dev. Genet. NAIST[3], Dep. Biol. Hyogo Med. Col.[4])

**OP06-12 (P-273)** 15:37-15:49 Conserved genetic module for the development of dorsal flat sheet-like structures among Branchiopod crustaceans

鰓脚綱甲殻類に保存された背部平板状構造形成に関与する遺伝子モジュール

Yuki Ishida, Shin-Ichi Tokishita, ○Yasuhiro Shiga (Tokyo Univ. Pham. & Life Sci., Sch. of Life Scis.)

## OP07: Morphogenesis & Organogenesis 2

May 30 (Thu) 08:30-10:10 Room 1

Chairpersons: Yasuko Akiyama-Oda (JT BRH)
Noriyuki Kinoshita (NIBB)

**OP07-01 (P-123)** 08:30-08:42 Hox gene overexpression in cranial neural crest cells is sufficient for first-to-second pharyngeal arch transformation and reveals a possible Hox/Dlx crosstalk

Hox 遺伝子の過剰発現により、頭頚部神経堤細胞限定的な Hox 遺伝子の発現が鰓弓の領域化に十分条件であること、Hox 遺伝子と Dlx 遺伝

子の相互作用の可能性があることが明らかになった
○Taro Kitazawa[1], Kou Fujisawa[1], Yuichiro Arima[1], Yumiko Kawamura[1], Tsuyoshi Inoue[2,3], Youichiro Wada[2], Takahide Kohro[2,4], Hiroyuki Aburatani[5], Tatsuhiko Kodama[2], Kisung Kim[1], Takahiro Sato[1], Yasunobu Uchijima[1], Giovanni Levi[6], Yukiko Kurihara[1], Hiroki Kurihara[1] (Dept. Physiol. Chem. & Metab., Grad. Sc. of Med., Univ. of Tokyo[1], RCAST[2], Dept. Nephrology & Endocrinology., Grad. Sc. of Med., Univ. of Tokyo[3], Dept Translational Research Healthcare & Clinical Science., Grad. Sc. of Med., Univ. of Tokyo[4], RCAST[5], Evolution des Regulations Endocriniennes, CNRS, UMR7221, Museum National d'Histoire Naturelle[6])

**OP07-02 (P-125)** 08:42-08:54 Seven-pass transmembrane cadherin Celsr1 regulates cell polarity and three-dimensional morphogenesis in the mouse oviduct epithelium.
7 回膜貫通型カドヘリン Celsr1 はマウス卵管において上皮細胞の極性と 3 次元形態の形成を制御する。
○Dongbo Shi[1,2], Kouji Komatsu[1], Hiroshi Koyama[1], Mayumi Hirao[1], Fadel Tissir[3], Andre Goffinet[3], Tadashi Uemura[2], Toshihiko Fujimori[1,4] (NIBB[1], Kyoto Univ.[2], UCL[3], CREST, JST[4])

**OP07-03 (P-127)** 08:54-09:06 Dysregulation of *Aqp3* and endolymphatic hydrops in a mouse model of campomelic dysplasia
Irene.Y.Y. Szeto[1], Tiffany Au[1], Daniel Chu[1], Sarah Wynn[1], Angel Mak[1], Y.S. Chan[2], Robin Lovell-Badge[3], Wood-Yee Chan[4], Mai-har Sham[1], ○Kathryn.S.E. Cheah[1] (Department of Biochemistry, The University of Hong Kong[1], Department of Physiology, The University of Hong Kong[2], Division of Developmental Genetics, MRC National Institute for Medical Research[3], Department of Anatomy, The Chinese University of Hong Kong[4])

**OP07-04 (P-129)** 09:06-09:18 How are the spicule hold-up points regulated? ― Observed spicule hold-up process suggests the involvement of the shape of the body space in regulation of where spicules are held up
骨片を立てる位置はどの様に決まるのか？ 「骨片の一端を持ち上げ立ちあげる過程」から見えてきた体内空間の関与
Kotoe Kawai, Kouji Kishimoto, Chihiro Inui, Kiyokazu Agata, ○Noriko Funayama (Dept. Biophysics, Graduate School of Science, Kyoto-Univ.)

**OP07-05 (P-131)** 09:18-09:30 CXCR7 signaling modulates cell-cell adhesion in Xenopus mesendoderm cells
ツメガエル CXCR7 情報伝達経路は細胞間接着を制御する
○Akimasa Fukui, Kazuya Furusawa, Naoki Sasaki (Transd. Life Sci., Grad. Sch. Life Sci., Hokkaido Univ.)

**OP07-06 (P-133)** 09:30-09:42 Regulation of paraxial protocadherin (PAPC) by a phosphorylation-dependent ubiquitin system is required for *Xenopus* early development
リン酸化依存的なユビキチン化による paraxial protocadherin (PAPC) の調節はアフリカツメガエルの初期発生に必須である
○Masatake Kai[1,2], Noriyuki Kinoshita[2] (Grad. Sch. of Med., Osaka City Univ.[1], NIBB[2])

**OP07-07 (P-135)** 09:42-09:54 Planar Cell Polarity directs Septin-mediated compartmentalization of cortical actomyosin
○Asako Shindo, John Wallingford (HHMI and UT Austin)

**OP07-08 (P-137)** 09:54-10:06 March2 inhibits the Wnt signaling pathways by promoting Dishevelled degradation during Xenopus development
○Hyeyoon Lee[1], Seong-Moon Cheong[2], Gun-Sik Cho[3], Jin-Kwan Han[1] (Department of Life Science, POSTECH, Republic of Korea[1], The F. M. Kirby Neurobiology Center,

Harvard Medical School, USA[2], Johns Hopkins University School of Medicine, USA[3])

## OP08: Cell biology

May 30 (Thu) 08:30-10:10 Room 2
Chairpersons: Shinichi Nakagawa (RIKEN)
Motoyuki Itoh (Chiba Univ.)

**OP08-01 (P-096)** 08:30-08:42
Evidence for multiple opsin phototransduction pathways in larvae of a reef-building coral (Cnidaria: Anthozoa: Hexacorallia: Scleractinia)
○Benjamin Mason[1], David Miller[2] (ARC CofECRS, James Cook Univ.[1], Sch. Pharm & Mol Sci, ARC CofECRS, James Cook Univ.[2])

**OP08-02 (P-098)** 08:42-08:54
Molecular basis of stripe pattern formation in zebrafish
ゼブラフィッシュの体表模様形成機構
○Masakatsu Watanabe[1], Daisuke Watanabe[1], Tomoki Nishida[2], Shigeru Kondo[1] (FBS, Osaka Univ.[1], UHVEM, Osaka Univ.[2])

**OP08-03 (P-099)** 08:54-09:06
Mib1 regulates cell migration via ubiquitination of p120ctn
○Takamasa Mizoguchi[1,3], Kazuya Hirose[2], Shoko Ikeda[3], Saori Watanabe[3], Motoyuki Itoh[1,3] (Grad. Sch. of Pharm. Sci., Chiba Univ.[1], Div. of Bio. Sci., Grad. Sch. of Sci., Nagoya Univ.[2], Fac. of Pharm. Sci., Chiba Univ.[3])

**OP08-04 (P-101)** 09:06-09:18
Identification of genetic modifiers that interact with *pecanex*, encoding a component of Notch signaling in *Drosophila*
Notch 情報伝達系の構成遺伝子 *pecanex* と遺伝的相互作用を示す遺伝子の網羅的探索
○Tomoko Yamakawa[1], Yu Atsumi[1,2], Shiori Kubo[1], Kenji Matsuno[1] (Dept. of Biol. Sci., Grad. school of Sci., Osaka Univ.[1], Dept. of Biol./Tec., Tokyo Univ. of Sci.[2])

**OP08-05 (P-102)** 09:18-09:30
IKKε antagonizes PKC-dependent inhibitory phosphorylation of Singed/Fascin to promote paracrystalline actin bundle assembly
IKKε はアクチン束化タンパク質 Singed/Fascin を PKC による抑制的リン酸化から保護することによって結晶状のアクチン束形成を促進する
○Tetsuhisa Otani[1], Takuya Maeda[1], Kazuyo Misaki[2], Shigenobu Yonemura[2], Shigeo Hayashi[1] (RIKEN CDB, Lab for Morphogenetic Signaling[1], RIKEN CDB, Electron Microscope Lab[2])

**OP08-06 (P-104)** 09:30-09:42
Expression profile of ORC and MCM complex in the anterior and posterior to Morphogenic furrow of Drosophila eye disc.
ショウジョウバエ複眼原基の分化決定した細胞群と未分化細胞群における MCM, ORC の発現パターン
○Hidetsugu Kohzaki[1], Yota Murakami[1,2] (Dept. Cell Biol., IVR, Kyoto Univ.[1], Dept. Chem., Facu., Science, Hokkaido Univ.[2])

**OP08-07 (P-105)** 09:42-09:54
Nuclear Body Paraspeckles Are Essential for the Formation of Functional Corpus Luteum
核内構造体パラスペックルは機能的な黄体形成に必須である
○Shinichi Nakagawa[1], Tetsuro HIrose[2] (RNA Biol Lab, RIKEN[1], BIRC, NAIST[2])

**OP08-08 (P-106)** 09:54-10:06
Cell polarity suppresses Hippo signaling through the regulation of Angiomotin distribution in preimplantation mouse embryos
細胞極性の Angiomotin 分布制御によるマウス着床前胚 Hippo 経路の制御機構

○Yoshikazu Hirate[1], Shino Hirahara[6], Atsushi Suzuki[2], Vernadeth Alarcon[3], Yohei Yoshihama[4], Kazunori Akimoto[2], Takaaki Hirai[4], Takeshi Hara[4], Kazuhiro Chida[4], Shigeo Ohno[2], Yusuke Marikawa[3], Akihiko Shimono[5], Hiroshi Sasaki[1] (IMEG, Kumamoto Univ.[1], Yokohama City Univ[2], Univ of Hawaii, USA[3], Univ of Tokyo[4], Trans Genic, Inc[5], RIKEN CDB[6])

## OP09: Regulation of gene expression

May 30 (Thu) 08:30-10:10 Room 3
Chairpersons: Takayuki Suzuki (Nagoya Univ.)
Haruki Ochi (Yamagata Univ.)

**OP09-01 (P-242)** 08:30-08:42 Screen for modifiers of transcriptional inheritance
転写のエピジェネティック継承の解析
○Tetsuya Muramoto, Masahiro Ueda (RIKEN QBiC)

**OP09-02 (P-243)** 08:42-08:54 Accelerating the Tempo of the Segmentation Clock by Reducing the Number of Introns in the Hes7 Gene
Hes7 遺伝子のイントロン削減による分節時計の加速化
○Yukiko Harima, Yoshiki Takashima, Yuriko Ueda, Toshiyuki Ohtsuka, Ryoichiro Kageyama (IVR, Kyoto Univ.)

**OP09-03 (P-245)** 08:54-09:06 *armadillo* and *orthodenticle* regulate the traveling of a wave of *hedgehog* expression in the early spider embryo
アルマジロとオルソデンティクルは初期クモ胚においてヘッジホッグ発現波の伝播を制御する
○Hiroki Oda, Yasuko Akiyama-Oda (JT BRH)

**OP09-04 (P-246)** 09:06-09:18 Hipk2 plays essential roles in the Wnt-mediated early developmental events by inducing Dishevelled dephosphorylation and stabilization.
タンパク質リン酸化酵素 Hipk2 は、Dishevelled タンパク質の脱リン酸化と安定化を誘導することにより、Wnt 分子が制御する初期発生イベントにおいて必須の役割を果たす.
○Nobuyuki Shimizu, Tohru Ishitani (Div. of Cell Reg. Sys., Dep. of Immuno. and Neurosci., M.I.B., Kyushu Univ.)

**OP09-05 (P-248)** 09:18-09:30 Nipbl and Med12 regulate limb-specific expression of genes cooperatively during vertebrate limb development
脊椎動物四肢発生期において Nipbl と Med12 は肢芽特異的な遺伝子発現を協同的に調節する
○Akihiko Muto[1,2,4], Martha Lopez-Burks[2,4], Yutaka Kikuchi[1], Anne Calof[3,4], Arthur Lander[2,4], Thomas Schilling[2,4] (Dept. Biol. Sci., Hiroshima, Univ.[1], Dept. Dev. Cell Biol., UC Irvine, USA[2], Dept. Anat. Neurobiol, UC Irvine, USA[3], CCBS, UC Irvine, USA[4])

**OP09-06 (P-249)** 09:30-09:42 Hypoxia reduces the toxicity of a metabolic inhibitor via activation of the HIF signalling pathway and reduction of chemical uptake
○I Chen Hung[1,2], Helen Walton[1], Shyh-Jye Lee[2], Ronny van Aerle[1], Megan Resse[1], James Cresswell[1], Rod W. Wilsona[1], Eduarda M. Santos[1] (Biosciences, College of Life and Environmental Sciences, University of Exeter[1], Institute of Zoology, National Taiwan University[2])

**OP09-07 (P-251)** 09:42-09:54 Cis-acting transcriptional repression establishes a sharp boundary in chordate embryos
Admp 遺伝子は Pinhead 遺伝子によりタンパク質レベルおよび転写レ

ベルで二重の抑制をうけ動物胚の腹側の領域を決定する
○Kaoru Imai[1], Yutaka Daidou[2], Takehiro Kusakabe[2], Yutaka Satou[1] (Kyoto Univ.[1], Konan University[2])

**OP09-08 (P-253)** 09:54-10:06 Four signaling pathways cooperatively specify neural fate in ascidian embryos.
ホヤ胚において 4 つのシグナル経路が協調して神経運命決定をする
○Naoyuki Ohta, Yutaka Satou (Kyoto University)

## OP10: Morphogenesis & Organogenesis 3

May 30 (Thu) 10:25-11:50 Room 1
Chairpersons: Hiroshi Sasaki (Kumamoto Univ.)
Yoshio Wakamatsu (Tohoku Univ.)

**OP10-01 (P-139)** 10:25-10:37 Involvement of microtubule-dependent transport of Wnt signaling components in zebrafish dorsal determination
セブラフィッシュ背側決定における Wnt シグナルコンポーネントの微小管依存性輸送の関係
○Hiromu Hino[1,2], Ryoko Seki[1,2], Long Tran[3], Takashi Shimizu[1,2], Karuna Sampath[3], Masahiko Hibi[1,2] (DBS,Nagoya univ.[1], BBC,Nagoya univ[2], TLSL[3])

**OP10-02 (P-141)** 10:37-10:49 Locomotive activity of Xenopus primordial germ cell is regulated by extracellular signals involving SDF-1.
ゼノパス始原生殖細胞の移動能は SDF-1 を含む細胞外シグナルにより制御される。
Kohei Terayama, Hidefumi Orii, Kenji Watanabe, ○Makoto Mochii (Grad. Sch. Life Sci., Univ. Hyogo)

**OP10-03 (P-142)** 10:49-11:01 Multiple origins of myeloid cells in *Xenopus* embryo
ゼノパス胚には 3 つの骨髄球の起源がある
○Mitsugu Maeno, Yasutaka Imai, Hiroyuki Sakata (Grad. Sch. Sci. Tech., Niigata Univ.)

**OP10-04 (P-144)** 11:01-11:13 Spatio-temporal activation of ERK1/2 through VEGFRs regulates establishment and formation of segmental artery in zebrafish
VEGFR を介した時間的空間的 ERK の活性化はゼブラフィッシュにおける体節間動脈の確立と形成維持に重要な働きを示す
○Masahiro Shin, Nathan Lawson (UMASSMED)

**OP10-05 (P-146)** 11:13-11:25 Klf8 is required for cardiac Left-Right patterning through regulation of *spaw* expression in zebrafish embryos
○Sheng-Ping Hwang[1,2], Che-Yi Lin[2], Ming-Yuan Tsai[3], Yi-Chung Chen[1], Yu-Fen Lu[1], Hsin-Chi Liao[1], Chang-Jen Huang[4] (ICOB, Academia Sinica, Taipei, Taiwan[1], Institute of Bioscience and Biotechnology, National Taiwan Ocean University, Keelung, Taiwan[2], Graduate Institute of Life Sciences, National Defense Medical Center, National Defense University, Neihu, Taipei, Taiwan[3], Institute of Biological Chemistry, Academia Sinica, Taipei, Taiwan[4])

**OP10-06 (P-148)** 11:25-11:37 Analysis of mutant stöpsel$_{dt128d}$ (stp) indicating the vertebral form abnormality
椎骨の形態異常を示す変異体 stöpsel$^{dtl28d}$ (stp) の解析
○Akihiro Misu, Hiroaki Yamanaka, Shigeru Kondo (Kondo S lab. FBS Osaka uni)

**OP10-07 (P-150)** 11:37-11:49 Cadherin-mediated physical barrier regulates cell geometry in zebrafish lens epithelium

ゼブラフィッシュ水晶体上皮細胞においてカドヘリンの細胞接着による細胞領域間の堅さの違いが細胞形態、方向性を制御する
○Toshiaki Mochizuki[1], Shohei Suzuki[1], Asako Sakaue-Sawano[2], Atsushi Miyawaki[2], Ichiro Masai[1] (OIST[1], RIKEN BSI[2])

## OP11: Neural development and function 3 / Aging / Technology, Theoretical approach

May 30 (Thu) 10:25-11:50 Room 2
Chairpersons: Takashi Shimizu (Nagoya Univ.)
Yoshihiro Morishita (RIKEN CDB)

**OP11-01 (P-201)** 10:25-10:37 Basement membrane integrity is required for axogenesis of cerebellar granule cells.
小脳顆粒細胞の軸索伸長には正常な基底膜形成が必要である
○Miki Takeuchi[1], Shigenobu Yonemura[2], Kazuhide Asakawa[3], Koichi Kawakami[3], Shinji Takada[4], Takashi Shimizu[1], Masahiko Hibi[1] (Bioscience and Biotechnology Center, Nagoya Univ.[1], RIKEN Center for Developmental Biology[2], National Institute of Genetics[3], Okazaki Institute for Integrative Bioscience[4])

**OP11-02 (P-203)** 10:37-10:49 Highly efficient transplantation into the embryonic mouse cortex reveals the acquisition of apico-basal polarity by neural progenitors derived from pluripotent stem cells
胚性幹細胞から誘導された神経前駆細胞は胎生期脳の上皮極性に従い細胞突起を形成する
Fumiaki Nagashima, ○Yoichi Kosodo (Dept. Anatomy, Kawasaki Med.)

**OP11-03 (P-204)** 10:49-11:01 Sufu controls the number and cell fate of hindbrain progenitors
○Hong Huan Hor[1], XingAn Wang[1], Mai Har Sham[1], Chi Chung Hui[2,3] (Dept of Biochemistry, LKS Faculty of Medicine, HKU[1], Program in Developmental and Stem Cell Biology, The Hospital for Sick Children[2], Department of Molecular Genetics, University of Toronto[3])

**OP11-04 (P-206)** 11:01-11:13 Nemo-like kinase blocks Hedgehog signaling by phosphorylating Gli1 transcription factor in neural progenitor cells and brain tumor.
神経前駆細胞及び脳腫瘍において Nemo-like kinase は転写因子 Gli1 をリン酸化してヘッジホッグシグナルを抑制する
○Tohru Ishitani, Nobuyuki Shimizu, Shizuka Ishitani (Div. of Cell Reg. Sys., Med. Ins. of Bioreg., Kyushu Univ.)

**OP11-05 (P-275)** 11:13-11:25 Age-dependent apoptosis of select olfactory neurons impairs innate attraction behavior in *Drosophila*
特定の嗅覚受容体神経における加齢依存的なアポトーシスが、老化に伴う個体行動変化を引き起こす
○Takahiro Chihara[1,2], Aki Kitabayashi[1], Michie Morimoto[1], Ken-ichi Takeuchi[1], Kaoru Masuyama[3], Ayako Tonoki[4], Ronald Davis[4], Jing Wang[3], Masayuki Miura[1,2] (Dept. Genetics, Grad. Sch. Pharm. Sci., Univ. Tokyo[1], CREST, JST, Japan[2], Neurobiol. Biol Sci, UCSD, USA[3], Neurosci. The Scripps Florida, USA[4])

**OP11-06 (P-279)** 11:25-11:37 A theoretical study of the developmental properties that determine floral organ number
花器官の数はどのような発生過程から決まるのか
○Miho Kitazawa, Koichi Fujimoto (Dept. of Biol. Sci., Grad. Sch. of Sci., Osaka Univ.)

**OP11-07 (P-282)** 11:37-11:49 Targeted genome modifications using ZFNs and TALENs in the cricket *Gryllus bimaculatus*
フタホシコオロギにおける ZFN, TALEN を用いた標的遺伝子改変
○Takahito Watanabe[1], Hiroshi Ochiai[2], Tetsushi Sakuma[2], Taro Nakamura[1], Taro Mito[1], Takashi Yamamoto[2], Sumihare Noji[1] (Dept. of Life Systems, Inst. of Tec. and Sci., Univ. of Tokushima[1], Dept. of Math. and Life Sci., Grad. Sch. of Sci., Hiroshima Univ.[2])

## OP12: Early embryogenesis 2

May 30 (Thu) 10:25-11:50 Room 3
Chairpersons: Michihiko Sugimoto (RIKEN BRC)
Hiroki Oda (JT BRH)

**OP12-01 (P-025)** 10:25-10:37 Zebrafish TSC22D3 Plays Critical Roles in Bmp dependent Dorsoventral Patterning during Early Embryogenesis
○William Ka Fai Tse (Dept. of Biol, HKBU)

**OP12-02 (P-028)** 10:37-10:49 Mechanism of the “KUBIRE” formation in the neurula embryo of the ascidian, Halocynthia roretzi
マボヤ神経胚における「くびれ」形成機構の解析
○Gaku Kumano, Sari Zenpuku, Hiroki Nishida (Osaka University)

**OP12-03 (P-031)** 10:49-11:01 The cilia-dependency of hedgehog signaling in fish
魚類におけるヘッジホッグシグナル伝達経路の繊毛依存性
○Takayoshi Yamamoto, Tatsuya Tsukahara, Hiroyuki Takeda (Lab. of Embryology, Dept. of Biol. Scis., Grad. Sch. of Sci., Univ. of Tokyo)

**OP12-04 (P-034)** 11:01-11:13 Molecular identification of $t^{w5}$: *Vps52* promotes pluripotential cell differentiation through cell interactions
マウス *t*-complex 致死変異より同定された *Vps52*の発生制御遺伝子としての役割
○Michihiko Sugimoto[1], Masayo Kondo[1], Michiko Hirose[2], Misao Suzuki[3], Kazuyuki Mekada[4], Atsuo Ogura[2], Karen Artzt[5], Kuniya Abe[1] (MCD, BRC, RIKEN[1], BED, BRC, RIKEN[2], CARD, Kumamoto Univ.[3], EAD, BRC, RIKEN[4], Univ. Texas Austin[5])

**OP12-05 (P-037)** 11:13-11:25 Epigenetic regulation of Hox gene expression by PcG genes in a primitive mode of insect embryogenesis in the cricket *Gryllus bimaculatus*
原始的発生様式をとる昆虫の胚発生過程におけるポリコーム遺伝子群によるホメオティック遺伝子発現のエピジェネティックな制御
○Yuji Matsuoka[1], Tetsuya Bando[2], Taro Nakamura[1], Takahito Watanabe[1], Sumihare Noji[1], Taro Mito[1] (Dept. of Bio. Sci. and Tech., Fact. of Eng., Tokushima Univ.[1], Dent. and Pharm. Sci. and Grad. of Med., Okayama Univ.[2])

**OP12-06 (P-040)** 11:25-11:37 The Role of Foxc1 in Telencephalic Vascular Development
○Thanit Prasitsak, Masato Ota, Sachiko Iseki (Mol. Cra. Emb., TMDU)

## OP13: Morphogenesis & Organogenesis 4

May 31 (Fri) 08:30-10:10 Room 1
Chairpersons: Shin Takagi (Nagoya Univ.)
Yumi Izutsu (Niigata Univ.)

**OP13-01 (P-152)** 08:30-08:42 The H3K27 demethylase, Jmjd3, regulates pax6 expression for eye development
ヒストン脱メチル化因子 Jmjd3 は、眼の発生において Pax6 の発現を

制御する
○Akane Kawaguchi[1], Haruki Ochi[2], Norihiro Sudou[1], Hajime Ogino[1] (NAIST[1], Yamagata University, Faculty of medicne[2])

**OP13-02 (P-154)** 08:42-08:54 GON-1/ADAMTS and fibulin-1 act through collagen IV to control *C.elegans* organogenesis
GON-1/ADAMTS と fibulin-1 は IV 型コラーゲンを通じて線虫の器官形成を制御する
○Tomomi Takano[1], Yukihiko Kubota[2], Kiyoji Nishiwaki[1] (Dep. of Bisci. Sch. of Sci. and Tech., Kwansei Gakuin Univ.[1], Grad.Sch. of Life Sci. Tohoku Univ.[2])

**OP13-03 (P-156)** 08:54-09:06 Nuclear membrane proteins act in transport of the Netrin receptor, UNC-5 in cell migration in *C. elegans*.
細胞移動における核膜タンパク質の新たな役割
○Hon-Song Kim, Kiyoji Nishiwaki (Dep. of Biosci. Kwansei-Gakuin Univ.)

**OP13-04 (P-158)** 09:06-09:18 The origin of stem and progenitor cells in the zebrafish lateral line primordium.
ゼブラフィッシュ側線における幹細胞と前駆細胞の発生上の起源
○Masataka Nikaido, Richard Alexander, Tatjana Piotrowski (Stowers Inst.)

**OP13-05 (P-160)** 09:18-09:30 Collective unidirectional motion of epithelial cells supported by planar cell dynamics during *Drosophila* organogenesis (part I): Experimental approach
ショウジョウバエ雄性生殖器の形態形成に見られる上皮細胞の集団的一方向性運動 (part I): 実験からのアプローチ
Ayako Isomura[1], Katsuhiko Sato[2], Tetsuya Hiraiwa[2], Emi Maekawa[1], Aimi Tsukioka[1], ○Erina Kuranaga[1] (Lab. Histogenetic Dynamics, RIKEN CDB[1], Lab. Physical Biology, RIKEN CDB[2])

**OP13-06 (P-162)** 09:30-09:42 Collective unidirectional motion of epithelial cells induced by planar cell dynamics during Drosophila organogenesis (part II): Theoretical approach
ショウジョウバエ雄性生殖器の形態形成に見られる上皮細胞の集団的一方向性運動 (part II): 理論からのアプローチ
○Katsuhiko Sato[1], Tetsuya Hiraiwa[1], Emi Maekawa[2], Tatsuo Shibata[1], Ayako Isomura[2], Aimi Tsukioka[2], Erina Kuranaga[2] (Lab. Physical biology, RIKEN CDB[1], Lab. Histogenetic Dynamics, RIKEN CDB[2])

**OP13-07 (P-164)** 09:42-09:54 Mathematical analysis of vascular and spot patterns by auxin and PIN dynamics in plant development
オーキシン -PIN ダイナミクスによる葉脈とスポットパターン形成の数理モデル
○Yoshinori Hayakawa[1,2], Masashi Tachikawa[2], Atsushi Mochizuki[1,2] (Dept Comput. Intelligence & Sys. Science, Tokyo Institute of Technology[1], Theoretical Biology Laboratory, RIKEN[2])

**OP13-08 (P-166)** 09:54-10:06 Analysis of pattern formation in multicellular cyanobacteria by Cellular Automaton model
セルオートマトンモデルによる多細胞性シアノバクテリアの形態形成現象の解析
○Jun-ichi Ishihara[1,2], Masashi Tachikawa[2], Hideo Iwasaki[1], Atsushi Mochizuki[2] (Dept. of Electr. Engin. and Biosci., Waseda Univ.[1], Theoretical Biology Lab., RIKEN[2])

## OP14: Regeneration

May 31 (Fri) 08:30-10:10 Room 2
Chairpersons: Akira Sato (Okayama Univ.)
Takeshi Inoue (Kyoto Univ.)

**OP14-01 (P-211)** 08:30-08:42 Wnt activation in nail epithelium couples nail growth to digit regeneration
マウスにおいて爪表皮での Wnt の活性化が爪の成長と指の再生に必要である
○Makoto Takeo[1], Wei Chin Chou[1], Qi Sun[1], Piul Rabbani[1], Cynthia Loomis[1], Makoto Taketo[2], Mayumi Ito[1] (Dermatology and Cell Biology, NYU[1], Pharmacology, Kyoto Univ.[2])

**OP14-02 (P-214)** 08:42-08:54 Epidermal Wnt/beta-catenin signalling promotes dermal adipocyte differentiation during hair follicle morphogenesis and regeneration
表皮性の Wnt/beta-catenin シグナルが毛包発生と再生時の皮下脂肪の分化を促進する
Giacomo Donati[2,3], ○Hironobu Fujiwara[1,2], Valentina Proserpio[4], Fiona Watt[2,3] (RIKEN CDB[1], Cancer Research UK Cambridge Resesarch Institute[2], King's College London[3], MRC Laboratory of Molecular Biology[4])

**OP14-03 (P-217)** 08:54-09:06 Vascular regeneration in zebrafish caudal fin.
ゼブラフィッシュにおける血管再生機構
○Yoshiko Kametani[1,2], Didier Stainier[2,3], Shinji Takada[1] (OIIB[1], UCSF[2], MPI-HLR[3])

**OP14-04 (P-220)** 09:06-09:18 Cyclooxygenase-2 signaling regulates osteoclast differentiation during fracture healing in medaka.
Cyclooxygenase-2 シグナルがメダカの骨折修復における破骨細胞分化を制御する
○Kazuhiro Takeyama[1,2], Masahiro Chatani[1], Yoshiro Takano[3], Akira Kudo[1] (Dept. of Biological Information, TokyoTech[1], JSPS Reseach Fellow[2], Sect. of Biostructural Science, Grad. Sch. of TMDU[3])

**OP14-05 (P-223)** 09:18-09:30 Different cellular contribution of somite-derived tissues to limb regeneration in larval and adult *Xenopus*
ツメガエルの四肢再生において体節由来組織は幼生期と成体期では異なる細胞寄与を示す
Chikashi Nagayama[1], Takashi Ariizumi[2], Koji Tamura[1], ○Hitoshi Yokoyama[1] (Dept. of Dev. Biol., Grad. School of Life Sci., Tohoku Univ.[1], Dept. of Bioresource Sci., College of Agri., Tamagawa Univ.[2])

**OP14-06 (P-226)** 09:30-09:42 The molecular logic for head regenerative and head non-regenerative ability among different planarian species
頭部再生能の異なるプラナリア種の分子基盤
○Yoshihiko Umesono[1,2], Junichi Tasaki[2], Yui Nishimura[2], Martina Hrouda[2], Eri Kawaguchi[2], Shigenobu Yazawa[2], Osamu Nishimura[2], Kazutaka Hosoda[2], Takeshi Inoue[2], Kiyokazu Agata[2] (RIKEN CDB[1], Kyoto Univ. Department of Biophysics[2])

**OP14-07 (P-229)** 09:42-09:54 Transcriptome analysis to search for genes involved in anteriorization during regeneration of the planarian *Dugesia japonica*
トランスクリプトーム解析によるプラナリアの再生過程における前方化に関わる遺伝子の探索
○Kazutaka Hosoda[1], Osamu Nishimura[2], Shigenobu Yazawa[1], Tetsutaro Hayashi[3], Kiyokazu Agata[1], Yoshihiko Umesono[3] (Dept. of Biophys., Kyoto Univ.[1], GCOE, Kyoto

Univ.[2], RIKEN CDB[3])

**OP14-08 (P-232)** 09:54-10:06 Brain regeneration in *Aeolosoma viride*
○Jiun-Hong Chen, Fei-Man Hsu, Yi-Tze Wu (DLF/IZ, NTU)

## OP15: Stem cell

May 31 (Fri) 08:30-10:10 Room 3
Chairpersons: Norito Shibata (Kyoto Univ.)
Shosei Yoshida (NIBB)

**OP15-01 (P-044)** 08:30-08:42 LIF Responsiveness in Embryonic Stem Cells from different mouse strains.
ES 細胞での LIF 応答性（マウス系統間での比較）
○Satoshi Ohtsuka, Hitoshi Niwa (Laboratory for Pluripotent Stem cell studies, CDB RIKEN)

**OP15-02 (P-046)** 08:42-08:54 Lactic Acid Bacteria Convert Human Fibroblasts to Multipotent Cells
ヒト皮膚細胞は乳酸菌を取り込むと多能性を持つようになる
○Kunimasa Ohta, Rie Kawano, Naofumi Ito (Dept. of Dev. Neurobiol., Kumamoto Univ. Grad. Sch. of Life Scis.)

**OP15-03 (P-048)** 08:54-09:06 A molecular mechanism controlling proliferation of planarian pluripotent stem cells
プラナリア全能性幹細胞の増殖制御機構
○Hayoung Lee, Kiyokazu Agata, Norito Shibata (Dept of Biophys, Kyoto univ.)

**OP15-04 (P-051)** 09:06-09:18 The microRNA mir-235 suspends growth and development during starvation
microRNA mir-235 は飢餓時に発育を抑制する
○Masamitsu Fukuyama, Hidefumi Kasuga, Aya Kitazawa, Masahiko Kume, Takuya Ogawa, Kenji Kontani, Toshiaki Katada (Dept. of Physiological Chem, Grad. Sch. of Pharmaceutical Sci., Univ. of Tokyo)

**OP15-05 (P-053)** 09:18-09:30 Knockdown planarians of the nuclear-type Piwi gene give new insights into planarian stem cell system
核局在型 Piwi の遺伝子機能阻害から得られたプラナリア幹細胞システムの新たな知見
○Makoto Kashima[1], Kuniaki Saito[2], Eri Kawaguchi[3], Osamu Nishimura[3], Shigenobu Yazawa[3], Mikiko Siomi[2], Haruhiko Siomi[2], Kiyokazu Agata[3], Norito Shibata[4] (DB, Kyoto Uni.[1], DMB, Keio uni.[2], gCOE, Kyoto Uni.[3], RB, Kyoto uni.[4])

**OP15-06 (P-055)** 09:30-09:42 Differential response to Retinoic acid achieves balanced self-renewal and differentiation of the stem cell compartment in mouse spermatogenesis
マウス精子幹細胞において、レチノイン酸応答性の異なる細胞集団が幹細胞の自己複製能と分化能を両立させている
○Kanako Ikami[1], Ryo Sugimoto[1,2], Shosei Yoshida[1] (DGCB, NIBB[1], EICM, Kagoshima Univ.[2])

**OP15-07 (P-057)** 09:42-09:54 Neural Crest-Derived Cells sustain the multipotency even after intrusion into the tissues.
組織内に存在する神経堤由来細胞の多分化能の解析
○Tsutomu Motohashi[1], Natsuki Watanabe[1], Masahiro Nishioka[1], Takanori Wakaoka[2], Takahiro Kunisada[1] (RAMS, Gifu Univ[1], OGSM, Gifu Univ.[2])

**OP15-08 (P-059)** 09:54-10:06 Possible roles of regulatory T cells on the hair cycle regulation of pelage hair follicles in mice

マウス体毛毛包の毛周期調節における制御性 T 細胞の機能について
○Takashi Matsuzaki[1], Mariko Oishi[2], Narumi Notsu[1], Ichitaro Niibe[1] (Fac. Life & Environ. Sci., Shimane Univ.[1], Grad. Sch. Life & Environ. Sci., Shimane Univ.[2])

## OP16: Morphogenesis & Organogenesis 5 / Myogenesis

May 31 (Fri) 10:25-11:50 Room 1
Chairpersons: Hajime Ogino (NAIST)
Atsuko Sehara (Kyoto Univ.)

**OP16-01 (P-168)** 10:25-10:37 Regulation of Wnt and BMP signaling pathways in the regional specification of early blastoderm in the cricket Gryllus bimaculatus
○Taro Nakamura, Sumihare Noji, Taro Mito (Dept of Life Systems, Institute of Tech. and Sci., The University of Tokushima)

**OP16-02 (P-170)** 10:37-10:49 Mechanical coupling of apical membrane and luminal matrix shapes tracheal tube geometry in Drosophila
○Bo Dong[1], Edouard Hannezo[2], Jacques Prost[2,3], Jean-Francois Joanny[2], Shigeo Hayashi[1,4] (CDB[1], Physicochimie Curie (Institut Curie/CNRS-UMR168/UPMC), Institut Curie, Centre de Recherche, 26 rue d'Ulm F-75248 Paris Cedex 05, France[2], ESPCI, 10 rue Vauquelin, F-75231 Paris Cedex 05, France[3], Department of Biology, Kobe University Graduate School of Science, 1-1 Rokkodai-cho, Nada-ku, Kobe, Hyogo, 657-8051, Japan[4])

**OP16-03 (P-172)** 10:49-11:01 Cell intercalation and cell junctional length fluctuation during airway tube elongation in Drosophila
ショウジョウバエ気管伸長における細胞境界の組みかえと細胞境界長のゆらぎの役割について
Hosei Wada, Katsuhiko Sato, Tatsuo Shibata, ○Shigeo Hayashi (RIKEN CDB)

**OP16-04 (P-174)** 11:01-11:13 The HOX gene *Antp* in the visceral mesoderm *Drosophila* regulates size balance between 1st and 2nd midgut chambers
ショウジョウバエの内臓中胚葉で発現する HOX 遺伝子 Antp は中腸第 1/ 第 2 チェンバー間の大きさのバランスを制御する
Keita Fujimoto, Masahiko Arishige, Yumiko Harada, ○Ryutaro Murakami (Grad. Sch. Med., Yamaguchi Univ.)

**OP16-05 (P-176)** 11:13-11:25 A secreted decoy of insulin-like receptor antagonizes insulin/IGF signaling to restrict body growth in *Drosophila*
ショウジョウバエ分泌型 'おとり' インスリン様受容体は、体の成長を抑制する
○Naoki Okamoto, Takashi Nishimura (RIKEN, CDB)

**OP16-06 (P-177)** 11:25-11:37 Developmental evolution of the hypaxial muscles of vertebrates
脊椎動物の軸下筋発生機構の進化
○Rie Kusakabe[1], Saori Tani[1], Richard Harland[2], Shigeru Kuratani[3], Kunio Inoue[1] (Dept. Biol., Grad. Sch. Sci., Kobe Univ.[1], Mol. Cell Biol., UC Berkeley, USA[2], CDB, RIKEN, Japan[3])

**OP16-07 (P-179)** 11:37-11:49 The investigation of post-transcriptional process to form adult skeletal muscle stem cells
骨格筋幹細胞の形成に関与する転写後調節機構探求
○Takahiko Sato[1], Takuya Yamamoto[2], Atsuko Sehara[1] (IFMS, Kyoto Univ.[1], CiRA, Kyoto Univ.[2])

## OP17: Gametogenesis, fertilization and reproduction / Sex determination / Chronobiology

May 31 (Fri) 10:25-11:50 Room 2
Chairpersons: Hiroko Sano (Kurume Univ.)
Kazuya Kobayashi (Hirosaki Univ.)

**OP17-01 (P-002)** 10:25-10:37 Characterization of mammalian spermatogenic stem cell niche
精子幹細胞ニッチの探索
○Yu Kitadate, Ayumi Maruyama, Rie Ichikawa, Shosei Yoshida (Germ Cell Biology, NIBB)

**OP17-02 (P-004)** 10:37-10:49 Reconstruction of seminiferous tubule-like structure in 3-D culture system of re-aggregated mouse testicular cells
○Jidong Zhang, Ko Eto, Shin-ichi Abe (GSST, Kumamoto University)

**OP17-03 (P-006)** 10:49-11:01 Role of Glycolysis in Primordial-Germ-Cell Development in Drosophila embryos
ショウジョウバエ始原生殖細胞の発生過程における解糖系の新規役割
○Yoshiki Hayashi, Chiyo Noda, Satoru Kobayashi (Okazaki Institute for Integrative Bioscience, NIBB)

**OP17-04 (P-008)** 11:01-11:13 Identification of a Nanos target in the mouse
マウスにおける Nanos 標的 RNA の同定
○Yuzuru Kato[1], Yumiko Saga[1] (NIG[1], NIG[2])

**OP17-05 (P-010)** 11:13-11:25 Identification of the interactive regions of *Xenopus* dicalcin for its target glycoprotein, gp41
受精調節タンパク質ダイカルシンにおける gp41 結合部位の同定
○Naofumi Miwa, Mayu Hanaue, Ken Takamatsu (Toho Univ., Dept. Physiol.)

**OP17-06 (P-208)** 11:25-11:37 BMP Signaling Determines XX Germ Cell Fate independently of Retinoic Acid-induced Meiotic Initiation
○Quan Wu[1], Chu-Xia Deng[2], Yumiko Saga[1,3] (SOKENDAI[1], NIDDK[2], NIG[3])

**OP17-07 (P-276)** 11:37-11:49 The role of circadian clock gene *per1b* in attention deficit/hyperactvity behaviors
○Han Wang, Jian Huang, Zhaomin Zhong, Mingyong Wang, Yicheng Tan, Xifeng Chen, He Xiong (SUCCC, Soochow Univ.)

## OP18: Regenerative medicine / Epigenetics and Genomics / Cell death

May 31 (Fri) 10:25-11:50 Room 3
Chairpersons: Jun Takeuchi (Univ. of Tokyo)
Kentaro Yomogida (Mukogawa Women's Univ.)

**OP18-01 (P-235)** 10:25-10:37 Finding of molecular triggers of axolotl limb regeneration.
ウーパールーパー四肢再生における再生惹起因子
Aki Makanae[1], Kazumasa Mitogawa[1], Miyuki Moriyasu[1], Ayako Hirata[1], ○Akira Satoh[1,2] (RCIS[1], JST PRESTO[2])

**OP18-02 (P-237)** 10:37-10:49 Wnt and Notch signals guide embryonic stem cell differentiation into the intestinal lineages
Wnt シグナルと Notch シグナルが腸上皮細胞への分化を導く
○Soichiro Ogaki, Nobuaki Shiraki, Kazuhiko Kume, Shoen Kume (Kumamoto Univ

IMEG Dept. of Stem Cell Biol.)

**OP18-03 (P-239)** 10:49-11:01 Antagonistic relationship between H3K27me3 and DNA methylation in the regulation of developmental genes
発生関連遺伝子の発現制御における DNA メチル化と H3K27me3 のアンタゴニズム
○Ryohei Nakamura[1], Taro Saito[2], Wei Qu[2], Jun Yoshimura[2], Shinichi Morishita[2], Yutaka Suzuki[2], Shinichi Hashimoto[2], Tatsuya Tsukahara[1], Hiroyuki Takeda[1] (Dept. Bio. Sci., Grad. Sch. Sci., Univ. Tokyo[1], Dept. Comp. Biol., Grad. Sch. Fro. Sci., Univ. Tokyo[2])

**OP18-04 (P-089)** 11:01-11:13 Stress response to DNA damage and control of apoptosis in germinal stem cell
生殖幹細胞における DNA 損傷応答とアポトーシスについて
○Natsuko Iyoda[1], Mai Akihisa[1], Nami Ueda[1], Keisuke Fukuo[2], Kentaro Yomogida[3] (Mukogawa Women's Univ Human Env Sci[1], Dept. of Food Scis. & Nutrition, Sch. of Humam Env. Sci., Mukogawa Woman's Univ[2], IBS[3])

**OP18-05 (P-091)** 11:13-11:25 Syntaxin18 cis-SNARE complex is a novel alarm factor that detects vesicular transport defects
Syntaxin18 複合体は小胞輸送の異常を監視する役割を果たす
○Yuko Nishiwaki, Asuka Yoshizawa, Yutaka Kojima, Eri Oguri, Shohei Nakamura, Shohei Suzuki, Junichi Yuasa-Kawada, Mariko Kinoshita-Kawada, Toshiaki Mochizuki, Ichiro Masai (OIST)

**OP18-06 (P-093)** 11:25-11:37 Characterization of Integrins function in specific cells for cell-corpses engulfment in Caenorhabditis elegans
○Tsung-Yuan Hsu, Hsiao-Han Hsieh, Hang-Shiang Jiang, Yi-Chun Wu (IMCB, Taiwan Univ)

**OP18-07 (P-095)** 11:37-11:49 Protogenin Prevents Premature Apoptosis of Rostral Cephalic Neural Crest Cells by Activating the α5β1 Integrin
○Yu-Chiuan Wang, Hsien-Chia Juan, Yu-Hui Wong, Wei-Chih Kuo, Yi-Ling Lu, Shu-Fen Lin, Chia-Jing Lu, Ming-Ji Fann (Institute of Neuroscience, NYMU)

# Flash Talks

## FT1: Systems biology / Technology, Theoretical approach / Regulation of gene expression / EvoDevo

May 29 (Wed) 16:25-17:35 Room 2
Chairpersons: Hitoshi Yokoyama (Tohoku Univ.)
Daisuke Kurokawa (Univ. of Tokyo)

**FT1-01** 16:25-16:29 **(P-277)**
Cellular sensory mechanisms for detecting specific fold-changes in extracellular cues
細胞外シグナルの特定倍変化を検出する細胞センサーのメカニズム
○Ken-ichi Hironaka[1,2], Yoshihiro Morishita[2] (Kyushu Univ.[1], RIKEN CDB[2])

**FT1-02** 16:29-16:33 **(P-278)**
Fucci vectors for chick embryos
ニワトリ胚のための Fucci ベクター
○Nozomi Onodera[1], Yui Furesawa[2], Isato Araki[2] (UGSA, Iwate Univ.[1], Dept Chem & Bio-eng, Fac Eng, Iwate Univ[2])

**FT1-03** 16:33-16:37 **(P-280)** **(SW2-10)**
Numerical analyses for behaviors of auxin transport pattern on growing fields
オーキシン極性輸送に基づくパターンの成長場における数値解析
○Akiko Nakamasu[1,2], Kimura Seisuke[1], Nobhiko Suematsu[3,4] (Dep. Biores. Env. Sci. KSU.[1], JSPS Reserch Fellow[2], Grad. School. Adv. Math. Sci. Meiji Univ.[3], MIMS, Meiji Univ.[4])

**FT1-04** 16:37-16:41 **(P-281)**
A theoretical study of mechanical force and cell shape dynamics during cell competition
細胞競合における機械的な力の役割
○Arisu Tsuboi, Koichi Fujimoto (Osaka Univ.)

**FT1-05** 16:41-16:45 **(P-283)** **(SW2-11)**
A theory on the timing of cell fate decision in developing organs
成長組織における細胞運命の決定タイミングに関する理論
○Yoshihiro Morishita[1], Takayuki Suzuki[2] (RIKEN CDB[1], Nagoya Univ.[2])

**FT1-06** 16:45-16:49 **(P-244)**
Identification of a novel regulatory element for *Shh* expression in the mouse lung and gut
*Shh*遺伝子の肺と消化管の発現に関与する新規エンハンサーエレメントの同定
○Takanori Amano[1], Nagaharu Tsukiji[2], Toshihiko Shiroishi[1] (NIG[1], Department of Clinical and Laboratory Medicine, Faculty of Medicine, University of Yamanashi[2])

**FT1-07** 16:49-16:53 **(P-247)**
Estrogen-related receptor beta is necessary to induce Cdx2 gene activation after repression of Oct3/4.
Esrrb は Oct3/4 発現減少に伴って生じる Cdx2 の発現上昇の制御に必要である。
○Mariko Yamane, Toshimi Sugimoto, Hitoshi Niwa (RIKEN　CDB)

**FT1-08** 16:53-16:57 **(P-250)**
Identification of novel zinc finger genes suppressing precocious specification of the brain fate in brain/palp precursor cells in the *Ciona intestinalis* embryo
カタユウレイボヤ胚の脳―付着突起前駆細胞において、適切な時間まで脳への分化プログラムの開始を抑制するジンクフィンガー遺伝子の同定と解析
○Tatsuro Ikeda, Terumi Matsuoka, Yutaka Satou (Dept. of Zool., Grad. Sch. of Sci., Kyoto Univ.)

**FT1-09 (P-252)** 16:57-17:01 Defining the sequence for nuclear localization of C. elegans muscleblind proteins

○Po-Hsuan Chen[1], Bo-Lun Su[1], Li-Chun Wang[1], Hung-Chi Su[2], Kuang-Ming Hsiao[1] (DLS, NCC Univ.[1], DBS, CSM Univ.[2])

**FT1-10 (P-255)** 17:01-17:05 Hox gene cluster structure in the genome of *Halocynthia roretzi.*
マボヤの Hox 遺伝子のクラスター構造

○Yuka Sekigami[1], Takuya Kobayashi[1], Ai Omi[1], Tetsuro Ikuta[1], Asao Fujiyama[2], Noriyuki Satoh[3], Hidetoshi Saiga[1] (TMU[1], NIG[2], OIST[3])

**FT1-11 (P-258)** 17:05-17:09 Anterior-Posterior Axis formation in Non-rodent Mammals
非齧歯類哺乳動物における前後軸形成機構の解析

○Michio Yoshida[1], Eriko Kajikawa[1], Yoko Suda[1], Daisuke Kurokawa[2], Akira Onishi[3], Tomoyuki Tokunaga[4], Shinichi Aizawa[1] (Body plan, CDB, RIKEN[1], Misaki Marine Biological Station, Graduate School of Science, The University of Tokyo, Japan[2], Transgenic Animal Research Center, National Institute of Agrobiological Sciences, Japan[3], Division of Animal Sciences, National Institute of Agrobiological Sciences, Japan[4])

**FT1-12 (P-260)** 17:09-17:13 Molecular mechanisms regulating heterochronic development of marsupial cranial neural crest
有袋類における頭部神経堤発生の異時性の分子制御機構

○Yoshio Wakamatsu[1], Tadashi Nomura[2], Noriko Osumi[1], Kunihiro Suzuki[3] (Div. of Dev. Neurosci., Tohoku Univ. Grad. Sch. of Med.[1], Dept. Biol. Dev. Neurobiol., Kyoto Prefectural Univ. Med., Grad. Sch. Med. Sci.[2], Dept. Biol., Nihon Univ., Sch. Dentist. Matsudo[3])

**FT1-13 (P-263)** 17:13-17:17 Evolutionary divergence of an epithelial linings-specific *Shh* enhancer
上皮特異的な *Shh* エンハンサーの進化的分岐

○Tomoko Sagai[1], Takanori Amano[1], Akiteru Maeno[1], Tetsuaki Kimura[2], Kiyoshi Naruse[2], Toshihiko Shiroishi[1] (Mammal. Genet., NIG[1], Bioresources, NIBB[2])

**FT1-14 (P-265)** 17:17-17:21 A conserved molecular and cellular mechanism of lung-bud formation between tetrapods and *Polypterus senegalus*
四肢動物と古代魚ポリプテルス間で保存されている肺芽形成の分子細胞生物学的メカニズム

○Ritsuko Kobayashi, Koji Fujimura, Masatsugu Noda, Norifumi Tatsumi, Masataka Okabe (Dept. of Anat., Jikei Univ. School of Med.)

**FT1-15 (P-268)** 17:21-17:25 Developmental roles of siamois-related Gene in a basal Actinopterygian: functional and evolutionary implications
原始的条鰭類ポリプテルスの初期発生における新規 siamois 関連遺伝子の役割

○Masaki Takeuchi[1,2], Shinichi Aizawa[2] (Dep. Med. Eng. Kawasaki Univ. Med. Welf.[1], CDB, RIKEN[2])

**FT1-16 (P-270)** 17:25-17:29 Medaka miR-124 is involved in post-transcriptional regulation of polypyrimidine tract binding protein 1 (PTBP1) in neural development
メダカ miR-124 は神経系発生で PTBP1 の転写調節に関与する

○Yumiko Kato[1], Rie Kusakabe[2], Kunio Inoue[2], Shin Tochinai[3] (Dept. Nat. His. Sci., Grad. Sch. Sci., Hokkaido Univ.[1], Dept. Biol., Grad. Sch. Sci., Kobe Univ.[2], Dept. Nat. His. Sci., Fac. Sci., Hokkaido Univ.[3])

**FT1-17 (P-272)** 17:29-17:33 Characterization of Zebrafish internexin neuronal intermediate filament protein, alpha a (inaa), in the developing nervous system

○Meng-Lin Liao, Chung-Liang Chien (DACB, NTU)

## FT2: Cell proliferation / Cell biology / Cell death / Cell-Cell/-Matrix interaction / Cell differentiation / Regenerative medicine

May 29 (Wed) 16:25-17:35 Room 3
Chairpersons: Kota Y. Miyasaka (Tohoku Univ.)
Satoshi Yoshitome (Iwaki Meisei Univ.)

**FT2-01** 16:25-16:29 **(P-088)** **(SW1-08)**
The subcellular localization of cyclin B2 is required for bipolar spindle formation in meiosis I during Xenopus oocyte maturation
サイクリン B2 の細胞内局在はアフリカツメガエル卵成熟過程の二極性紡錘体形成に必要である
○Satoshi Yoshitome[1], Nobuaki Furuno[2], Claude Prigent[3], Eikichi Hashimoto[4] (Fac. Pharm., Iwaki Meisei Univ.[1], Lab. Amphibian Biol., Grad. Sch. Sci.,Hiroshima Univ.[2], Inst. Genet., Dev. Rennes, Univ. Rennes 1[3], Dept. Biomed. Sci., Sch. Life Sci., Tottori Univ.[4])

**FT2-02** 16:29-16:33 **(P-097)**
The acto-myosin system and TGF-βsignaling were involved in the cell sorting process in *Xenopus laevis* embryonic cells
アクトミオシン系と TGF-β シグナリングは，アフリカツメガエル胚の胚細胞における細胞選別過程に関与する
○Ayano Harata (Dep. Bio. Sci. Fac. Life and Environ. Sci., Shimane Uni.)

**FT2-03** 16:33-16:37 **(P-100)**
The involvement of ubiquitin carboxy-terminal hydrolase 37 (UCH37) in Wnt/b-catenin signaling pathway during xenopus development
○Wonhee Han, Seungjoon Lee, Jin-Kwan Han (Department of Life Science, POSTECH, Republic of Korea)

**FT2-04** 16:37-16:41 **(P-103)**
SH2B1β promotes neurite formation and neuronal branching through interacting with IRSp53 and Eps8
○Chien-Jen Chen, Linyi Chen (Institute of Molecular Medicine, NTHU, Taiwan)

**FT2-05** 16:41-16:45 **(P-081)** **(SW1-06)**
Extracellular syntaxin4 triggers the differentiation program in teratocarcinoma F9 cells with impacts on cell adhesion properties.
テラトカルシノーマ F9 細胞における細胞外シンタキシン 4 の細胞接着と分化への影響
○Natsumi Hagiwara, Yohei Hirai (Dep. Bioscience, Grad. Sch. Sci. Technol., Kwansei Gakuin Univ.)

**FT2-06** 16:45-16:49 **(P-083)**
Spatial distribution of Wnt protein in the mouse neural tube
マウス神経管発生における Wnt タンパク質の空間分布の解析
○Takuma Shinozuka[1,2], Ritsuko Takada[2], Shinji Takada[1,2] (Dept. Basic Biology, SOKENDAI[1], Okazaki Institute for Integrative Biosciences, National Institutes of Natural Sciences[2])

**FT2-07** 16:49-16:53 **(P-086)** **(SW1-07)**
Optimal cellular mobility for synchronization arising from the gradual recovery of intercellular interactions
遺伝子発現の同期を達成するための最適な細胞移動率
○Koichiro Uriu[1], Saul Ares[2], Andrew Oates[3], Luis Morelli[4] (Theoretical Biology Laboratory, RIKEN ASI, Japan[1], Logic of Genomic Systems Laboratory, CNB, CSIC, Spain[2], MRC NIMR, UK[3], Departamento de Fisica, FCEyN UBA and IFIBA, CONICET, Argentina[4])

**FT2-08** 16:53-16:57 **(P-062)**
Oct60 is involved in the PGC formation as a germplasm component.
Oct60 は生殖細胞質の構成因子であり、始原生殖細胞形成に関与する。
○Keisuke Morichika[1], Keigo Shimada[1], Hideo Kubo[2], Tsutomu Kinoshita[1] (Dept. Life. Sci.,

Sch. Sci. Rikkyo Univ.[1], Tokyo Metropolitan Inst. Med. Sci.[2])

**FT2-09 (P-064)** 16:57-17:01 Combinatorial expression of defined transcription factors induces ectopic neurons in *C. elegans* larvae
*C. elegans*幼虫における複数転写因子の異所発現による異所的な神経細胞の形成
○Masaki Shimojou, Shin Takagi (Div. of biol. sci., Grad. Sch. of Sci., Nagoya Univ.)

**FT2-10 (P-066)** 17:01-17:05 The phosphoinositide kinase is necessary for polarity determination of epithelial stem cells in *C. elegans*
イノシトールリン脂質合成酵素は *C. elegans*の表皮系幹細胞の極性決定に必要である
○Naoki Yoshida[1,2], Hitoshi Sawa[1,2] (SOKENDAI[1], Multicellular Organization Lab., NIG[2])

**FT2-11 (P-068)** 17:05-17:09 PCP component VANG-1 functions in asymmetric divisions of *C. elegans* seam cell.
線虫表皮幹細胞の非対称分裂における VANG-1 の役割
○Masako Yokoo, Hitoshi Sawa (Multicellular Organization Lab. NIG)

**FT2-12 (P-070)** 17:09-17:13 Investigation of role of a novel pancreatic beta cell gene
β 細胞特異的に発現する新規遺伝子の解析
○Hisayoshi Omori[1], Soichiro Ogaki[2], Yoshinari Nakahara[3], Nobuaki Shiraki[4], Kazuhiko Kume[5], Yutaka Kikuchi[6], Shoen Kume[7] (IMEG, Kumamoto Univ[1], Department of Stem Cell Biology Institute of Molecular Embryology and Genetics Kumamoto University[2], Department of Biological Science, Graduate School of Science, Hiroshima University[3], Department of Stem Cell Biology Institute of Molecular Embryology and Genetics Kumamoto University[4], Department of Stem Cell Biology Institute of Molecular Embryology and Genetics Kumamoto University[5], Department of Biological Science, Graduate School of Science, Hiroshima University[6], Department of Stem Cell Biology Institute of Molecular Embryology and Genetics Kumamoto University[7])

**FT2-13 (P-072)** 17:13-17:17 Identification of novel genes involved with mesoderm formation by the analysis of nanog-responsive genes in Xenopus
アフリカツメガエルにおける Nanog 応答性遺伝子の解析による、中胚葉形成に関与する新規遺伝子の同定
○Kentaro Ishii[1], Aya Miyazaki[1], Shinya Matsukawa[1], Yuzuru Ito[2], Yasuko Onuma[2], Tatsuo Michiue[1] (Graduate School of Arts and Sciences, the University of Tokyo[1], Research Center for Stem Cell Engineering, National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba City, Ibaraki, Japan[2])

**FT2-14 (P-074) (SW1-05)** 17:17-17:21 LGR4 is required for development and maintenance of mammary gland
LGR4 は乳腺組織の発達と維持に必要である
○Kazunori Oyama, Yasuaki Mohri, Mizuki Sone, Katsuhiko Nishimori (Lab. Mol. Biol., Grad. Sch. of Agr. Sci., Univ. of Tohoku)

**FT2-15 (P-076)** 17:21-17:25 MECHANICAL STRESS INDUCES MUSCLE CELL DIFFERENTIATION AND ADAPTS LIPID METABOLISM TO ENERGY DEMAND
メカニカルストレスは細胞内の代謝変化を誘導し細胞分化を制御する
○Kota Miyasaka, Eriko Sato, Toshihiko Ogura (IDAC)

**FT2-16 (P-078)** 17:25-17:29 Transcription factor Blimp-1 controls the fat body remodeling in *Drosophila*
○Abdelrahman Sultan[1] (Okayama Univ.[1], HITOSHI UEDA[2])

**FT2-17 (P-236)** 17:29-17:33 Specific isolation of HCN4 positive cardiac pace-making cells derived from embryonic stem cells
ES 細胞由来 HCN4 陽性心臓ペースメーカ細胞の分取と解析
○Kumi Morikawa, Yasuaki Shirayoshi, Ichiro Hisatome (Dept. of Regenerat. Med. & Therapeut., Grad. Sch. of Med. Sci., Tottori Univ.)

## FT3: Neural development and function / Organogenesis

May 29 (Wed) 17:45-19:00 Room 2
Chairpersons: Jun Motoyama (Doshisya Univ.)
Kunimasa Ohta (Kumamoto Univ.)

**FT3-01 (P-181)** 17:45-17:49 Tag1-mediated early interaction between neural crest cells and motor axons in zebrafish.
神経冠細胞と運動神経軸索との相互作用における Tag1 の機能
○Mika Sato-Maeda[1,2], Wataru Shoji[1] (CIR, Tohoku Univ.[1], Grad Sci, Tohoku Univ.[2])

**FT3-02 (P-184)** 17:49-17:53 Stochastic Ca2+ waves that propagate through the neuroepithelium in various distance of the brain and retina imaged with GCaMP3 in zebrafish embryos
ゼブラフィッシュ初期胚の神経上皮でみられる特徴的な Ca2+ 濃度変化のイメージング
○Shin-ichi Okamoto, Yuuya Takimura, Tadaaki Nishioka, Masashi Nakagawa, Kohei Hatta (Univ. of Hyogo)

**FT3-03 (P-187) (SW2-04)** 17:53-17:57 Unveiling the role of Ephrin for dendrite targeting of *Drosophila* olfactory projection neurons
ショウジョウバエ嗅覚投射神経の樹状突起領域形成におけるエフリンの機能解析
○Shirin Makihara[1], Sayaka Sekine[1], Masayuki Miura[1,2], Takahiro Chihara[1,2] (Genetics, Grad Sch Pharm Sci, Univ Tokyo[1], CREST, JST[2])

**FT3-04 (P-191)** 17:57-18:01 Development of cerebellar granule cell axons in zebrafish
ゼブラフィッシュにおける小脳顆粒細胞の軸索形成機構
○Shingo Yamaguchi[1,2], Miki Takeuchi[1], Kazuhide Asakawa[3], Koichi Kawakami[3], Takashi Shimizu[1,2], Masahiko Hibi[1,2] (Bioscience and Biotechnology Center, Nagoya Univ.[1], Graduate School of Science, Nagoya Univ.[2], National Institute of Genetics[3])

**FT3-05 (P-195)** 18:01-18:05 Dmbx1 can compensate the down-regulation of Otx2 activity
Dmbx1 は Otx2 活性の下方調節を補償できる
Yousuke Ishikawa, ○Isato Araki (Iwate Univ, Fac Eng, Dept Chem Bioeng)

**FT3-06 (P-199)** 18:05-18:09 Cell death inducing mechanisms by maternal separation stress in the postnatal mouse hippocampus
隔離ストレスが仔マウスの海馬に細胞死を誘導するメカニズムの解析
○Tatsuya Katahira[1], Yutaro Miyaji[2], Rikou Fukunaga[2], Jun Motoyama[1] (Laboratory of Developmental Neurobiology, Graduate School of Brain Science, Doshisha University[1], Department of Medical Life Systems, Faculty of Life and Medical Science, Doshisha University[2])

**FT3-07 (P-202)** 18:09-18:13 Aromatic L-amino acid decarboxylase deficiency affects neuronal development in zebrafish
○De-fen Shih[1], Shyh-Jye Lee[1], Wang-Tso Lee[2] (Institute of Zoology, Department of Life Science, NTU[1], Development of Pediatrics, NTUH[2])

**FT3-08** 18:13-18:17 HDAC6 mutations rescue human tau-induced microtubule defects in Drosophila
**(P-205)**
Ying Xiong[1], ○Kai Zhao[1], Jiaxi Wu[1], Zhiheng Xu[1], Shan Jin[2], Yongqing Zhang[1] (IGDB, CAS[1], College of Life Sciences, Hubei University[2])

**FT3-09** 18:17-18:21 BMP/ Smad Signaling in Mouse Sternum Development
**(P-155)**
BMP / Smad でマウス胸骨開発におけるシグナリング
○Ka Kui Tong[1], Yat Long Tsoi[1], Yuk Lau Wong[1], Kin Ming Kwan[1,2,3] (SLS, CUHK[1], CCDB, CUHK[2], SKL of Agrobiotech, CUHK[3])

**FT3-10** 18:21-18:25 The dorsal aorta initiates a molecular cascade that instructs sympatho-adrenal specification
**(P-157)**
背側大動脈は交感神経および副腎髄質の前駆細胞の移動と分化を制御する司令塔としてはたらく
○Daisuke Saito[1], Yuta Takase[1,2], Hidetaka Murai[1,2], Yoshiko Takahashi[2] (NAIST[1], Kyoto University[2])

**FT3-11** 18:25-18:29 Fibronectin mediates correct positioning of the interrenal organ in zebrafish
**(P-159)**
○Chih-Wei Chou, Chih-Hao Chiu, Yi-Wen Liu (Department of Life Science, Tunghai Univ., Taiwan)

**FT3-12** 18:29-18:33 Cloning of FoxN1 and its expression in Xenopus laevis.
**(P-175)**
アフリカツメガエル転写因子 FoxN1 のクローニングと発現解析
○Naoya Iimura, Hideho Uchiyama (Grad. Sch. of Nanobiosciences, Yokohama City Univ.)

**FT3-13** 18:33-18:37 Expression of *Eph/ephrin* family genes in smooth muscle of the embryonic chick digestive organs
**(P-163)**
ニワトリ胚期消化器官平滑筋組織における Eph/ephrin 遺伝子の発現
○Yasuo Ishii, Kiyoe Fujimoto, Sadao Yasugi (Fac. Life Sci., Kyoto Sangyo Univ.)

**FT3-14** 18:37-18:41 Cadherin-7 enhances sonic hedgehog signaling by inhibiting the movement of full-length Gli3 to the primary cilium
**(P-165)**
**(SW1-09)**
カドヘリン－ 7 は転写因子 Gli3 の移動制限によりソニックヘッジホッグシグナルを調節する。
○Rie Kawano[1], Kunimasa Ohta[2], Daisuke Niimori[3] (Dev. Neurobio. Kumamoto University[1], Division of Developmental Neurobiology, Graduate School of Medical Sciences, Kumamoto University, 1-1-1 Honjo, Kumamoto 860-8556, Japan[2], Department of Dermatology and Plastic Surgery, Graduate School of Life Sciences, Kumamoto University, 1-1-1 Honjo Kumamoto 860-8556 Japan[3])

**FT3-15** 18:41-18:45 Study of secondary neurulation: stem cell-like behavior of neural tube precursors implicated by transplantation of EGFP-labeled tail bud
**(P-167)**
**(SW1-10)**
Secondary Neurulation 研究 : EGFP 標識 tail bud の移植から浮かび上がった神経管前駆細胞の幹細胞様の挙動
○Teruaki Kawachi[1], Eisuke Shimokita[2], Yoshiko Takahashi[1] (Department of Zoology, Kyoto University.[1], Graduate School of Biological Science, Nara Institute of Science and Technology.[2])

**FT3-16** 18:45-18:49 Long-distance cell migrations during larval development in an appendicularian, *Oikopleura dioica*.
**(P-169)**
**(SW1-11)**
ワカレオタマボヤ *Oikopleura dioica* 後期発生のライブイメージングによって見出された長距離移動を示す細胞群
○Kanae Kishi, Takeshi Onuma, Hiroki Nishida (Dept. Biol. Sci., Osaka Univ.)

**FT3-17** (P-171) (SW1-12) 18:49-18:53 Role of motile cilia in development and function of renal tubes in fish
魚類の腎臓発生における運動性繊毛の役割
Sayaka Tayama, Yuri Ikeda, Hitomi Igarashi, Hajime Matsui, ○Atsuko Shimada, Hiroyuki Takeda (Dep. Biol. Sci., Grad. Sch. Sci., Univ. Tokyo)

**FT3-18** (P-173) 18:53-18:57 A novel defined factor specifies cardiac-vascular cell fate and promotes heart regeneration
新規転写因子による心臓ー血管運命決定と心臓再生
○Yuika Morita[1,2], Yuko Tsukahara[1], Peter Anderson[3], Junko Kurokawa[4], Hiroe Sugizaki[1], Ryuichi Nishinakamura[5], Tetsushi Furukawa[4], Chulan Kwon[3], Kazuko Koshiba-Takeuchi[1], Jun K. Takeuchi[1,2,6] (Cardiovas. Reg, IMCB, the Univ. of Tokyo[1], Graduate School of Sciences, the Univ. of Tokyo[2], Cardio, Johns Hopkins Univ. School of Med[3], Tokyo Medical and Dental Univ.[4], CARD, Kumamoto Univ.[5], JST PRESTO[6])

## FT4: Stem cell / Epigenetics and Genomics / Others / Cell death / Aging

May 29 (Wed) 17:45-19:00 Room 3
Chairpersons: Kohei Hatta (Univ. of Hyogo)
Shin-ichiro Nishimatsu (Kawasaki Medical School)

**FT4-01** (P-045) 17:45-17:49 Function of *EflMsiA* in the active stem cells (archeocytes) in freshwater sponge, *Ephydatia fluviatilis*
カワカイメン全能性体性幹細胞における *EflMsiA*の機能
○Kazuko Okamoto, Kiyokazu Agata, Noriko Funayama (Dept. Biophys. Grad. Sch. Sci., Kyoto Univ.)

**FT4-02** (P-047) 17:49-17:53 Akhirin is involved in the neural stem cell regulation in the central canal of a mouse spinal cord
○Athary Felemban[1,2,3], Rie Kawano[1], Song Xiaohong[1,2], Hideaki Tanaka[1,2], Kunimasa Ohta[1] (Dep. Dev. Neurobiol., Grad. Sch. Life Sci., Kumamoto Univ.[1], Global COE, Kumamoto Univ.[2], Ministry of H. Edu., Saudi Arabia[3])

**FT4-03** (P-049) 17:53-17:57 The roles of chromatin remodelers in the maintenance of multipotency of mouse trunk neural crest cells in the relationship with the formation mechanisms of neural crest-derived stem cells
マウス体幹神経冠細胞の多分化能維持におけるクロマチンリモデラーの役割と神経冠細胞由来幹細胞の形成メカニズムとの関連
○Kyohei Fujita, Ryuhei Ogawa, Syunsaku Kawawaki, Kazuo Ito (Dept. Biol. Sci., Osaka Univ.)

**FT4-04** (P-050) 17:57-18:01 LHX2 regulates the neural differentiation of human embryonic stem cells via transcriptional modulation of PAX6 and CER1
○Hung-Chih Kuo[1], Pei-Shan Hou[2], Ching-Yu Chuang[1], Cheng-Fu Kao[1], Shen-Ju Chou[1], Lee Stone[1], Hong-Nerng Ho[2], Chung-Liang Chien[2] (ICOB, Academia Sinica[1], NTU[2])

**FT4-05** (P-052) 18:01-18:05 Notch signal play a role in the multipotency of melanoblast.
色素芽細胞のもつ多分化能に Notch シグナルが重要である
○Natsuki Watanabe[1], Masahiro Nishioka[1], Takanori Wakaoka[1], Tomohisa Hirobe[2], Tsutomu Motohashi[1], Takahiro Kunisada[1] (Regeneration & Adv. Med. Sci., Gifu Univ. Grad. Sch. of Med.[1], Active Radiation Protection Research Team, Radiation Risk Reduction Research Program, National Institute of Radiological Sciences[2])

**FT4-06** (P-054) 18:05-18:09 Ddx46 is required for multi-lineage differentiation of hematopoietic stem cells in zebrafish

ゼブラフィッシュにおいて Ddx46 は造血幹細胞の多系列分化に必要である

○Ryo Hirabayashi[1], Shunya Hozumi[1], Shin-ichi Higashijima[2,3], Yutaka Kikuchi[1] (Dep. of Bio. Sci., Grad. Sch. of Sci., Hiroshima Univ.[1], National Institutes of Natural Sciences, Okazaki Institute for Integrative Bioscience, National Institute for Physiological Sciences[2], Graduate University for Advanced Studies[3])

**FT4-07 (P-056)** 18:09-18:13 The regulation analyses of Jagged1 expression in Sertoli cells of mouse testis

マウス精巣のセルトリ細胞における Jagged1 発現制御解析

○Ryu Okada, Taro Hara, Yukio Nishina (Grad of Nanobiosci, Yokohama City Univ.)

**FT4-08 (P-058)** 18:13-18:17 Modelling Spinocerebellar Ataxia type 2 and 3 using human induced pluripotent stem cells

○Ching-Yu Chuang[1], Chih-Chao Yang[3], Hsiang-Po Huang[4], Hung-Chih Kuo[1,2] (GRC, Academia Sinica[1], ICOB, Academia Sinica[2], Department of Neurology, UTUH[3], Departments of Medical Research, NTUH[4])

**FT4-09 (P-060)** 18:17-18:21 Clinical study on stem cells transplantation for treating diabetic foots through improving blood supply

○Kun Lu[1] (Tongji University School of Medicine[1], Shanghai Tenth People's Hospital[2])

**FT4-10 (P-238)** 18:21-18:25 Functional Analysis of Drosophila Histone Methyltransferase G9a

ショウジョウバエヒストンメチル基転移酵素 G9a の機能解析

○Kohei Shimaji[1], Shintaro Tanaka[1], Hiroshi Kimura[3], Yasuyuki Ohkawa[4], Tetsuya Sato[5], Mikita Suyama[5], Hideki Yoshida[1,2], Masamitsu Yamaguchi[1,2] (Kyoto Inst. of Tech. Univ.[1], Insect Biomedical Research Center[2], Graduate School of Frontier Biosciences, Osaka Univ.[3], Dept. of Adv. Med. Initiatives, Fac. of Med., Kyushu Univ.[4], Div. of Bioinformatics, Med. Inst. of Bioregulation, Kyushu Univ.[5])

**FT4-11 (P-240)** 18:25-18:29 The histone demethylase jmjd3 stimulates ectopic eye formation by increasing the access of pax6 protein to its target gene

ヒストン脱メチル化因子 jmjd3 は pax6 が標的遺伝子にアクセスするのを助けて異所的な眼形成を促進する

○Norihiro Sudou, Akane Kawaguchi, Haruki Ochi, Hajime Ogino (NAIST)

**FT4-12 (P-241)** 18:29-18:33 The cis-regulatory evolution for developmental robustness and stress response

○Haruki Ochi[1], Akane Kawaguchi[2], Norihiro Sudou[2], Kazuyuki Hoshijima[4], Hajime Ogino[3] (Fac. of Med., Yamagata Univ.[1], Grad. Sch. of Bio. Sci., NAIST[2], Dept. of Animal Bioscience, Nagahama Inst. of Bio-Sci. and Tech.[3], Dep. of Human Genetics, Univ. of Utah[4])

**FT4-13 (P-284)** 18:33-18:37 Functional characterization of miR-375 and miR-200a of downstream regulation in development of hepatocellular carcinoma

○Cheng-Maw Ho[1,3], Hui-Ling Chen[2], Po-Huang Lee[1,3] (GICM, NTU[1], HRC, NTUH[2], DS, NTUH[3])

**FT4-14 (P-090)** 18:37-18:41 Differentiation and cell death in the Xenopus ectodermal cell mass treated with bFGF protein

bFGF タンパクで処理した Xenopus 外胚葉細胞における分化と細胞死

○Hirotaka Kato[1], Takayuki Nosaki[1], Tomohiro Narita[2], Shinichiro Nishimatsu[2], Tsutomu Nouno[2], Masao Sakai[1] (Chemistry and BioScience, Graduate School of Science and Engineering, Kagoshima University[1], Department of Molecular and Developmental Biology, Kawasaki Medical School[2])

**FT4-15 (P-092)** 18:41-18:45 Klf8 Is Essential for the Survival of Purkinje and Eurydendroid Cells in the Cerebellum of Zebrafish

○Ming-Yuan Tsai[1], Yu-Fen Lu[2], Chang-Jen Huang[1,3], Sheng-Ping Hwang[1,2] (GILS, NDMC, Taiwan[1], ICOB, Academia Sinica, Taiwan[2], IBC, Academia Sinica, Taiwan[3])

**FT4-16 (P-094)** 18:45-18:49 Wallenda regulates JNK-mediated cell death and migration in Drosophila
○Xianjue Ma, Yujun Chen, Lei Xue (SLST, Tongji Univ.)

**FT4-17 (P-274)** 18:49-18:53 Gr33a modulates mate choice based on age in Drosophila
○Yujia Hu, Yi Han, Lei Xue (SLST, Tongji Univ.)

## FT5: Myogenesis / Early embryogenesis

May 30 (Thu) 15:10-16:50 Room 1
Chairpersons: Katsuyoshi Takaoka (Osaka Univ.)
Go Shioi (RIKEN CDB)

**FT5-01 (P-178)** 15:10-15:14 Roles of microRNAs in medaka myogenesis
メダカ胚筋形成における microRNA の役割
○Saori Tani, Rie Kusakabe, Kunio Inoue (Dept. Biol., Grad. Sch. Sci., Kobe Univ.)

**FT5-02 (P-011)** 15:14-15:18 Promoter Assay of Granzyme g Specific Expression in mouse embryo 2-cell stage
○Huan Ou-Yang[1,2], Shinn-Chih Wu[1], Tung-Chou Tsai[2], Winston Cheng[1], Chuan-Mu Chen[1,2] (DAST, NTU.[1], DLS, NCHU.[2])

**FT5-03 (P-012)** 15:18-15:22 Do Wnts function as global cues for asymmetric cell divisions in *C. elegans* embryos ?
Wnts は C. elegans 胚における非対称細胞分裂のためのグローバルな手がかりとして機能するか？
○Sohei Nakayama, Hitoshi Sawa (Multicellular Organization Lab., NIG)

**FT5-04 (P-014)** 15:22-15:26 Participation of Human X-linked intellectual disability (XLID) gene in the cell cycle regulation of early embryo development
○Chun-Yu Chen, I-Shing Yu, Yu-Chen Hsu, Chia-Lun Hung, Chung-Yang Kao, Chien-Yu Lin, Ming-Shian Tsai, Shu-Wha Lin (CLSMB, NTUCM)

**FT5-05 (P-015)** 15:26-15:30 Lhx1 is widely implicated in the differentiation of epiblasts to germ layer.
Lhx1 はエピブラストから胚葉への分化に広く関係する。
○Akira Hasegawa[1], Nobuhito Ikeda[1], Takafumi Nakamura[2], Ichiro Hisatome[1], Yasuaki Shirayoshi[1] (DRMT, Tottori Univ.[1], DIB, Tottori Univ.[2])

**FT5-06 (P-017)** 15:30-15:34 Origin of Anterior-Posterior axis formation in the mouse embryos.
マウス胚における前後軸の起源
○Katsuyoshi Takaoka, Hiroshi Hamada (Osaka university FBS)

**FT5-07 (P-018)** 15:34-15:38 Live Imaging Analysis of Mouse Postimplantation Development
前後軸形成期におけるマウス胚発生のライブイメージング解析
○Go Shioi[1], Hideharu Hoshino[2], Kana Bando[1], Kazuki Nakao[1,3], Toshihiko Fujimori[1,4], Shinichi Aizawa[1,2] (LARGE, CDB, RIKEN[1], Lab. for Vertebrate Body Plan, RIKEN CDB, Japan[2], Lab. of Animal Resources, CDBIM, Univ. of Tokyo, Japan[3], Division of Embryology, NIBB, Japan[4])

**FT5-08 (P-020)** 15:38-15:42 OTX2 and DKK1 Exhibit the Earliest Asymmetric Expression in Distal Visceral Endoderm.
OTX2 と DKK1 は Distal Visceral Endoderm で最初に非対称な発現を示す遺伝子である

○Hideharu Hoshino[1], Go Shioi[2], Hiroshi Kiyonari[2], Takaya Abe[2], Kazuki Nakao[2], Shinichi Aizawa[1,2] (VBP, RIKEN CDB[1], LARGE, RIKEN CDB[2])

**FT5-09 (P-021)** 15:42-15:46 The Comparative Analysis of Early Development in Reptiles
爬虫類初期発生の比較解析
○Eriko Kajikawa[1], Michio Yoshida[1], Daisuke Kurokawa[1,2], Miyuki Noro[1], Shinichi Aizawa[1] (RIKEN CDB[1], MMBS, Univ. Tokyo[2])

**FT5-10 (P-023)** 15:46-15:50 Molecular mechanisms of deep cell reaggregation during early development of an annual killifish *Nothobranchius korthausae.*
一年魚 *Nothobranchius korthausae*の初期発生における深層細胞再集合の分子メカニズムの解析
○Daisuke Kurokawa[1,2], Hotaka Nishikawa[1], Masaaki Yoshida[3], Atsushi Ogura[3], Shinichi Aizawa[2], Koji Akasaka[1] (MMBS, Tokyo Univ.[1], CDB, RIKEN Kobe.[2], OAP, Ochanomizu Univ.[3])

**FT5-11 (P-024)** 15:50-15:54 Establishment of vertebrate body plan via coordinated regulation of dorsal-ventral and anterior-posterior patterning and developmental canalization
○Atsushi Suzuki, Kimiko Takebayashi-Suzuki (Inst. for Amphibian Biol., Hiroshima Univ. Grad. Sch. of Sci.)

**FT5-12 (P-026) (SW1-04)** 15:54-15:58 Scaling of Dorsal-Ventral Patterning by Embryo Size-Dependent Degradation of Spemann's Organizer Signals
オーガナイザー因子の分解を介した背腹軸スケーリングの保証機構
○Hidehiko Inomata[1,2], Tatsuo Shibata[3], Tomoko Haraguchi[1], Yoshiki Sasai[1] (Organogenesis and Neurogenesis Group, CDB[1], PRESTO[2], Laboratory for Physical Biology, CDB[3])

**FT5-13 (P-027)** 15:58-16:02 Mechanical force that drives expansion of the amniotic cavity supports antero-posterior extension of the notochord in mouse embryos.
マウス胚では羊膜腔の膨張による機械的な力の作用が脊索の伸長を支持してる。
○Yu Imuta[1,2,3], Hiroshi Koyama[4], Mototsugu Eiraku[2], Yoshiki Sasai[2], Toshihiko Fujimori,[4], Hiroshi Sasaki[1] (IMEG, Kumamoto Univ[1], RIKEN CDB[2], Osaka University, Graduate School of Medicine[3], NIBB[4])

**FT5-14 (P-029)** 16:02-16:06 P2Y nucleotide receptors are necessary for head structure formation during Xenopus leavis development
アフリカツメガエルの頭部形成においてヌクレオチド受容体 P2Y は重要な機能をもつ
○Haruka Nishida[1], Akiha Nishihara[2], Chikara Hashimoto[1,2] (Osaka Univ., Gra. Sch. of Sci., Dept. Biol[1], BRH[2])

**FT5-15 (P-030)** 16:06-16:10 Efficient induction of cranial neural crest stem cells from mouse ES cells
マウス ES 細胞からの頭部神経冠幹細胞の効率的誘導
○Masami Nozaki[1], Yuki Minamino[1,2], Kenji Kakudo[2], Yuichi Ohnishi[1,2] (Res. Inst. for Microbial Dis., Osaka Univ.[1], Sec. Dept. of Oral and Maxillofacial Surg, Osaka Dent. Univ.[2])

**FT5-16 (P-032)** 16:10-16:14 The specification of the developing telencephalon along dorsal-ventral axis
ニワトリ終脳の背腹領域の特異性獲得機構
○Akari Karaiwa[1], Shigeru Taketani[2], Masasuke Araki[1] (Dev. Neurobiol. Lab., Dept. of.Biol. Sci., NWU[1], Biotechnological Laboratory Faculty of Textile Science Kyoto Institute of Technology[2])

**FT5-17** (P-033) 16:14-16:18 PRDM12 is required for the regionalization of the Xenopus trigemital placode
ツメガエルの三叉神経プラコードの領域化には PRDM12 が必要である
○Shinya Matsukawa, Tatsuo Michiue (Grad. School of Arts and Sciences, The University of Tokyo)

**FT5-18** (P-035) (SW1-03) 16:18-16:22 MPDZ is involved in maintenance and formation of the developing optic cup
眼杯形成における MPDZ の役割
○Lanying Zhao[1], Akira Ito[2], Hirotomo Saitsu[3], Makoto Ishibashi[2], Shigehito Yamada[1,2] (Grad Sch Med, Kyoto Univ[1], Department of Human Health Science, Kyoto University Graduate School of Medicine[2], Department of Human Genetics, Graduate School of Medicine, Yokohama City University[3])

**FT5-19** (P-036) 16:22-16:26 Expression patterns of *Dnmt4, Dnmt6,* and *Dnmt8* in zebrafish development
発生過程におけるゼブラフィッシュ *Dnmt4, Dnmt6, Dnmt8*の発現解析
○Kazuya Takayama[1], Shunsuke Takanaga[1], Nobuyoshi Shimoda[2], Yutaka Kikuchi[1] (Dep. of Bio. Sci., Grad. Sch. of Sci., Hiroshima Univ.[1], Dept. Regenerative Med., Natl. Inst. Longevityu Sci.[2])

**FT5-20** (P-038) 16:26-16:30 Molecular mechanisms underlying segmentation border formation in zebrafish somitogenesis
○Chimwar Wanglar, Taijiro Yabe, Shinji Takada (NIBB, SOKENDAI UNIVERSITY)

**FT5-21** (P-039) 16:30-16:34 The role of thyroid hormone in developing heart
甲状腺ホルモンの心臓形成における役割
○Kazuhiro Maeda, Sachiko Miyagawa-Tomita, Toshio Nakanishi (TWMU)

**FT5-22** (P-041) 16:34-16:38 Lineage tracing analysis of genes contributing to the formation of cardiac conduction system in early heart development.
初期心臓発生における刺激伝導系の細胞系譜の解析
○Akane Sakaguchi[1], Hiroki Kokubo[2], Yumiko Saga[1] (NIG[1], hiroshima univ.[2])

**FT5-23** (P-042) 16:38-16:42 Protogenin participates in mouse vertebral patterning by regulating Hox gene expression
○Wei-Chih Kuo, Yu-Chiuan Wang, Ming-Ji Fann (Department of Life Sciences and Institute of Genome Sciences, NYMU)

**FT5-24** (P-043) 16:42-16:46 Development of an RNA interference method using microinjection in the water flea *Daphnia pulex*
ミジンコ (*Daphnia pulex*) 初期胚へのマイクロインジェクションによる RNAi 法の確立
○Chizue Hiruta[1], Kenji Toyota[1,2], Hitoshi Miyakawa[1], Taisen Iguchi[1,2] (NIBB[1], Grad. Univ. Advanced Studies[2])

## FT6: Morphogenesis

May 30 (Thu) 15:10-16:50 Room 2
Chairpersons: Yasuhiro Shiga (Tokyo Univ. of Pharmacy and Life Sciences)
Yohei Hirai (Kwansei Gakuin Univ.)

**FT6-01** (P-108) 15:10-15:14 Innovative photomicroscopy and inhibitor approaches to understanding the mechanisms of building up the spiculous skeleton of the freshwater sponge *Ephydatia fluviatilis*
カイメンの体を成長させる骨片骨格はどの様に組み上げられるのか―骨片を立ち上げる機構の解析―

○Kotoe Kawai, Kiyokazu Agata, Noriko Funayama (Dept. of Biophysics, Graduate school of Science, Kyoto Univ.)

**FT6-02 (P-110)** 15:14-15:18 Positive feedback mechanism in the simultaneous cell differentiation in Dictyostelium discoideum
Positive feedback を介した細胞性粘菌における同調的な細胞分化機構
○Toru Uchikawa[1], Masahiro Ueda[1,2] (Grad. Sch. of Sci., Osaka Univ.[1], RIKEN QBiC[2])

**FT6-03 (P-112)** 15:18-15:22 Efficient EGL-17/FGF secretion by epidermal cells in *C. elegans* requires components of the synaptic vesicle recycling machinery
*C. elegans* 表皮細胞における効率的な EGL-17/FGF に分泌にはシナプス小胞リサイクリング機構で機能する因子を必要とする
○Hiroki Tanaka, Masaki Shimojou, Shin Takagi (Div. of Bio. Sci., Grad. Sch. of Sci., Nagoya Univ.)

**FT6-04 (P-114)** 15:22-15:26 Analysis of Heparan Sulfate function during C. elegans anchor cell invasion
C. elegans のアンカー細胞浸潤時におけるヘパラン硫酸の機能解析
○Shinji Ihara[1], Sherwood David[2], Hitoshi Sawa[1] (Multicellular Lab, NIG.[1], Duke University, Department of Biology[2])

**FT6-05 (P-116)** 15:26-15:30 Single-minded regulates specification of ventral cell fates in Daphnia magna
オオミジンコ single-minded ホモログは腹部特異化を制御している
○Shinichi Morita[1], Chisato Hiraga[1], Taisen Iguchi[2], Yasuhiro Shiga[1], Shinichi Tokishita[1], Toshihiro Ohota[1] (LEMB at TUPS[1], Div. of Mol. Env. End., NIBB[2])

**FT6-06 (P-118)** 15:30-15:34 Gene expression of twinning formation in Xenopus laevis embryo-#2
アフリカツメガエル 2 次胚形成における遺伝子発現―その 2
○Eiji Sato[1], Yasuko Onuma[3], Michio Fujie[2], Naoki Adati[2], Tadayosi Uezato[1], Naoyuki Miura[1], Yuzuru Ito[3] (Dept. of Biochem., Hamamatsu Univ. Sch. of Med.[1], REC, Hamamatsu Univ. Sch. of Med.[2], AIST[3])

**FT6-07 (P-120)** 15:34-15:38 Differential expression patterns of two types of medaka periostin during development and adulthood
発生期と成体における 2 種類のメダカペリオスチンの発現解析
○Kohei Ito, Masanobu Nishidate, Taku Akiyama, Mai Morioka, Shun Kimura, Akira Kudo (Dept. Biol. Info., Tokyo Inst. Tech.)

**FT6-08 (P-122)** 15:38-15:42 A transmembrane metalloprotease ADAM10a regulates behaviors of primitive erythroblasts and vascular formation in zebrafish development.
ゼブラフィッシュの発生において膜型メタロプロテアーゼ ADAM10a は赤芽球の移動および脈管形成に関与する
Anna Tomosawa, ○Atsuo Iida, Atsuko Sehara-Fujisawa (Ins. for Front. Med. Sci., Kyoto University)

**FT6-09 (P-124)** 15:42-15:46 Irxl1 is regulated by Mef2ca in pharyngeal arch morphogenesis of zebrafish
○Han-Ni Chuang[1,2], Meng-Wei Li[2], Kuang-Ming Hsiao[1], Huichin Pan[2] (Department of life Science, Institute of Molecular Biology, NCCU[1], Department of Biomedical Sciences, CSMU[2])

**FT6-10 (P-126)** 15:46-15:50 Low temperature mitigates cardia bifida in zebrafish embryos
○Che-Yi Lin[1], Cheng-Chen Huang[2], Wen-Der Wang[3], Chung-Der Hsiao[4], Ching-Feng Cheng[5], Yi-Ting Wu[6], Yu-Fen Lu[6], Sheng-Ping Hwang[1,6] (IBB, NTOU, Taiwan[1], DB, UWRF, USA[2], GIAB, NCYU, Taiwan[3], DBT, CYCU, Taiwan[4], DP, TCGH, Taiwan[5], ICOB, Academia Sinica, Taiwan[6])

**FT6-11** 15:50-15:54 Hemodynamically controlled nuclear shuttling of Mrtf-b and its functional role in cardiac development and circulatory homeostasis
**(P-128)**
メカニカルストレス依存的な Mrtf-b の核移行による心臓発生と心機能の恒常性維持機構
○Hideto Osada, Masato Kimura, Kota Miyasaka, Yusuke Watanabe, Toshihiko Ogura (IDAC)

**FT6-12** 15:54-15:58 Quantification of mechanical force driving the left-handed twisting of the gut epithelial tube in *Drosophila*
**(P-130)**
ショウジョウバエにおける消化管上皮の反時計回りの捻転を引き起こす機械的な力の定量化
○Mai Adachi[1], Naotaka Nakazawa[1,3], Reo Maeda[3], Shukei Sugita[2], Takeo Matsumoto[2], Kenji Matsuno[1] (Dept. of Biol. Sci., Osaka Univ[1], Dept. of Mech. Eng., Nagoya Inst. of Tech.[2], Dept. of Biol. Sci / Tec., Tokyo Univ.[3])

**FT6-13** 15:58-16:02 Formation of fin-specific structures (fin-ray) in zebrafish development
**(P-132)**
ゼブラフィッシュの発生における鰭条構造の形成機構
○Tohru Yano, Hitoshi Yokoyama, Koji Tamura (Dept. Dev. Biol. and Neurosci., Grad. Sch. Sci., Tohoku Univ.)

**FT6-14** 16:02-16:06 Cux2 refines the position of limbs along the rostral-caudal axis during chick development
**(P-134)**
○Shogo Ueda[1], Yasuko Kanazawa[1], Natsuno Suda[1], Ryo Yamada[1], Hisanobu Shimamura[1], Ryuichiro Nakato[2], Katsuhiko Shirahige[2], Mikiko Tanaka[1] (Tokyo Tech.[1], IMCB, Tokyo Univ.[2])

**FT6-15** 16:06-16:10 Analysis of the function of *Fgf10* chromosomal enhancers that control limb specific expression
**(P-136)**
**(SW2-03)**
*Fgf10*の発現を肢芽特異的に制御するエンハンサーの機能解析
○Chisa Ando[1], Yu-go Yokota[1], Yu-hei Kohara[1], Yo-ichi Yamamoto-Shiraishi[1], Yo-ichi Mizushina[2], Tomoko Sagai[2], Toshihiko Shiroishi[2], Atsushi Kuroiwa[1] (Div. of Biol. Sci., Grad. Sch. of Sci., Nagoya Univ.[1], Mammalian Genetics Laboratory, National Institute of Genetics.[2])

**FT6-16** 16:10-16:14 Transcriptome analyses of flounder metamorphosis left-right asymmetric differentiation
**(P-138)**
ヒラメ変態の左右非対称化プロセスのトランスクリプトーム解析
○Hayato Yokoi, Xiaoming Wu, Yoshifumi Sakai, Tohru Suzuki (Grad Schl Agricul Sci, Tohoku Univ)

**FT6-17** 16:14-16:18 Reduced cell number in the hindgut epithelium disrupts hindgut left-right asymmetry in a mutant of *pebble*, encoding a RhoGEF, in *Drosophila* embryos
**(P-140)**
RhoGEF をコードする *pebble*の突然変異体におけるショウジョウバエ胚後腸上皮の細胞数の減少が後腸の左右非対称性を乱す
○Mitsutoshi Nakamura[1], Kenjiroo Matsumoto[1], Yuta Iwamoto[1,2], Ryo Hatori[1,2], Kenji Matsuno[1] (Dept of Biol. Sci, Osaka Univ[1], Dept of Biol Sci and Tech, TUS[2])

**FT6-18** 16:18-16:22 The role of cell-ECM interactions in collective cellular movement during the looping morphogenesis of *Drosophila* male terminalia
**(P-161)**
細胞 -ECM 相互作用がショウジョウバエ雄性生殖器の形態形成に与える影響
○Emi Maekawa[1], Aimi Tsukioka[1], Ayako Isomura[1], Kazuyo Misaki[2], Shigenobu Yonemura[2], Erina Kuranaga[1] (Lab. Histogenetic Dynamics, RIKEN CDB[1], Electron Microscope

Lab., RIKEN CDB[2])

**FT6-19 (P-143)** 16:22-16:26 Wnt signaling regulates the left-right axis formation in the node of mouse embryos
マウス左右軸形成における Wnt シグナルの役割
○Keiko Kitajima, Shinya Oki, Tomoyuki Sumi, Chikara Meno (Kyushu Univ.)

**FT6-20 (P-145) (SW2-01)** 16:26-16:30 Temporal observation of the influence of the Fgf signal about somite formation
体節形成における Fgf シグナルの影響の経時的な観察
○Kenji Maekubo, Yohei Hirai (Grad. Sch. of Sci. and Tech., Kwanseigakuin Univ.)

**FT6-21 (P-147)** 16:30-16:34 Ripply2-dependent negative regulation of Tbx6 is required for somitogenesis
○Wei Zhao[1,2], Yumiko Saga[1,2,3] (NIG[1], Graduated School of Science, university of Tokyo[2], Department of Genetics, SOKENDAI[3])

**FT6-22 (P-149) (SW2-02)** 16:34-16:38 Formation of the digestive tract in *Ciona intestinalis* includes two distinct morphogenic processes between its anterior and posterior parts
カタユウレイボヤにおける消化管形成：前方と後方で異なる管のでき方と細胞の由来
○Keiichi Nakazawa[1], Takumi Yamazawa[1], Yuuta Moriyama[1], Yousuke Ogura[2], Narudo Kawai[2], Yasunori Sakakura[2], Hidetoshi Saiga[1] (Dept. Biol. Sci., Tokyo Metro Univ.[1], Shimoda, Tsukuba Univ.[2])

**FT6-23 (P-151)** 16:38-16:42 Exploring the role of atypical cadherins in collective cell migration
集団的細胞移動における非典型的カドヘリンの機能解析
○Masaki Arata[1], Yutaro Nishino[1], Kousuke Mouri[1], Yuzo Watanabe[1], Motoki Saito[1], Tadashi Uemura[1,2] (Grad. Sch. of Bio., Kyoto Univ.[1], CREST, JST[2])

**FT6-24 (P-153) (SW2-08)** 16:42-16:46 Knockdown of ouro genes represses tadpole tail regression during *Xenopus* metamorphosis
オウロ遺伝子のノックダウンは変態期のツメガエル幼生の尾部退縮を抑制する
○Erisa Maruyama, Mitsugu Maeno, Yumi Izutsu (Dept. Biol., Faulty of Sci., Niigata Univ., Japan)

## FT7: Gametogenesis, fertilization and reproduction / Sex determination / Regeneration

May 30 (Thu) 15:10-16:50 Room 3
Chairpersons: Taro Mito (Univ. of Tokushima)
Yoshihiko Umesono (Univ. of Tokushima)

**FT7-01 (P-001)** 15:10-15:14 The mechanism of the establishment of murine spermatogonial stem cells
○Han Pin Pui[1], Yumiko Saga[2] (NIG, SOKENDAI[1], Division of Mammalian Development, NIG, SOKENDAI[2])

**FT7-02 (P-003)** 15:14-15:18 In vitro Reconstruction of Mouse Seminiferous Tubules Supporting Germ Cell Differentiation
マウス未熟精巣を用いた in vitro における精細管再構成と精子形成
○Tetsuhiro Yokonishi, Takuya Sato, Kumiko Katagiri, Mitsuru Komeya, Yoshinobu Kubota, Takehiko Ogawa (Dep. of Urol. Yokohama City Univ. School of Med.)

**FT7-03 (P-005)** 15:18-15:22 Possible involvement of a novel RNA-binding protein, MGC83235, in the promotion of *Xenopus* oocyte maturation
アフリカツメガエル卵成熟誘起への新奇 RNA 結合タンパク質

MGC83235 の関与
○Kazuki Takahashi[1], Ryoma Ota[2], Masakane Yamashita[3] (Grad. Sch. of Life Sci., Hokkaido Univ.[1], Div. of Dev. Genet., Dept. of Dev. Biol., NIBB[2], Dept. of Biol. Sci., Fac. of Sci., Hokkaido Univ.[3])

**FT7-04** 15:22-15:26 **(P-007)** **(SW1-01)**
Pronuclear chromatin binding of Orc6 in mouse fertilized eggs
マウス受精卵における Orc6 の前核クロマチンへの結合
○Shin Murai[1], Yuusuke Fukuda[2,3], Yukiko Katagiri[2], Mineto Morita[2], Shigeru Yamashita[1] (Dept of Biochem, Toho Univ, Sch of Med[1], Dept. of Obst. and Gyn., Toho Univ., Sch. of Med.[2], Dept. of Biol. Univ. of Pennsylvania[3])

**FT7-05** 15:26-15:30 **(P-009)** **(SW1-02)**
Meiotic chromosome behavior in the triploid planarian
3 倍体プラナリアの減数分裂における染色体挙動
○Ayako Chinone, Midori Matsumoto (Dept. of Bioscis. & Informatics, Fac. of Sci. & Tech., Keio Univ.)

**FT7-06** 15:30-15:34 **(P-207)**
Lgr4 knockout mice show female hermaphroditism
雌 Lgr4 ノックアウトマウスは仮性半陰陽を示す
○Masae Koizumi[1], Kazunori Oyama[1], Akihiro Nawa[2], Katsuhiko Nishimori[1] (Lab. Mol. Biol.,Grad. Sh. of univ. of Tohoku[1], Dep. Obstetrics and Gynecology, Grad. Sch. of Med., Univ. of Ehime[2])

**FT7-07** 15:34-15:38 **(P-209)**
Identification of a genetic cause of non-regenerative head tissues in the planarian Phagocata kawakatsui
コガタウズムシにおける頭部構造再生条件の探索
○Yui Nishimura[1], Martina Hrouda[1], Eri Kawaguchi[1], Yazawa Shigenobu[2], Osamu Nishimura[2], Takeshi Inoue[1], Kiyokazu Agata[1], Yoshihiko Umesono[1] (Dept. of Biophysics Grad. School of Science, Kyoto Univ.[1], Global COE Program: Evolution and Biodiversity, Division of Biological Sciences, Graduate School of Science, Kyoto University[2])

**FT7-08** 15:38-15:42 **(P-210)** **(SW2-06)**
*In vivo* model system to study the genetic program of tissue regeneration
組織再生の遺伝プログラム研究に向けた *in vivo* モデルシステムの確立
○Soshiro Kashio[1], Fumiaki Obata[1,2], Liu Zhang[1], Takahiro Chihara[1,2], Masayuki Miura[1,2] (Genetics, Grad Sch Pharm Sci, Univ Tokyo[1], CREST, JST[2])

**FT7-09** 15:42-15:46 **(P-212)**
JAK/STAT signaling promotes blastemal cell proliferation during leg regeneration in the cricket *Gryllus bimaculatus*
脚再生過程において JAK/STAT シグナルは再生芽細胞の増殖を制御する
○Tetsuya Bando[1], Taro Mito[2], Hideyo Ohuchi[1], Sumihare Noji[2] (Okayama Univ.[1], Tokushima Univ.[2])

**FT7-10** 15:46-15:50 **(P-213)**
Analysis of the source of ‘blastema survival factor’ and its downstream signaling during the zebrafish fin fold regeneration
ゼブラフィッシュの膜ヒレ再生時における再生芽生存因子の起源とその下流シグナルの解析
○Tomoya Hasegawa, Teruhiro Nakajima, Takashi Ishida, Akira Kudo, Atsushi Kawakami (Tokyo tech)

**FT7-11** 15:50-15:54 **(P-215)** **(SW2-07)**
Imaging and characterization of mmp9-expressing cells during zebrafish fin regeneration using the Tol2 BAC transgenic
Tol2 BAC トランスジェニックを用いた、ゼブラフィッシュのひれ再生における mmp9 発現細胞の解析
○Kazunori Ando, Akira Kudo, Atsushi Kawakami (Tokyo Tech)

**FT7-12** 15:54-15:58 Critical role of *fibronectin 1b* during zebrafish fin regeneration
**(P-216)** ゼブラフィッシュひれ再生における *fibronectin 1b*の機能解析
**(SW2-09)**
○Eri Shibata, Emiko Murase, Akira Kudo, Atsushi Kawakami (Tokyo tech)

**FT7-13** 15:58-16:02 Transient reduction of 5-methylcytosine and 5-hydroxymethylcytosine is caused by active DNA demethylation during regeneration of zebrafish fin
**(P-218)** ゼブラフィッシュの尾びれ再生過程では能動的 DNA 脱メチル化による 5- メチルシトシンと 5- ヒドロキシメチルシトシンの一時的な減少が生じる
**(SW2-05)**
○Kentaro Hirose[1], Nobuyoshi Shimoda[2], Yutaka Kikuchi[1] (Dep. of Biol. Sci., Grad. Sch, of Sci., Hiroshima Univ.[1], Dep. of Rege. Med., NCGG[2])

**FT7-14** 16:02-16:06 The analysis on pattern formation of the joint during newt limb regeneration
**(P-219)** イモリの四肢再生における関節のパターン形成の解析
○Rio Tsutsumi, Shota Takemura, Miki Hiramaya, Yuko Urata, Wataru Yamashita, Takeshi Inoue, Kiyokazu Agata (Dept. of Biophys., Grad. Sch. of Sci, Kyoto Univ.)

**FT7-15** 16:06-16:10 Comprehensive Analysis of Time-course of Gene Expression Pattern during Forelimb Regeneration in Newt *Cynops pyrrhogaster*
**(P-221)** アカハライモリの前肢再生過程における遺伝子発現変化の網羅的解析
○Shota Takemura, Rio Tsutsumi, Miki Hirayama, Yuko Urata, Chiaki Michibayashi, Wataru Yamashita, Takeshi Inoue, Kiyokazu Agata (Dept. of Biophys., Grad. of Sci., Kyoto Univ.)

**FT7-16** 16:10-16:14 Hippo signaling is important for Xenopus limb regeneration
**(P-222)** アフリカツメガエルの四肢再生における Hippo 系路の重要性
○Shinichi Hayashi[1], Haruki Ochi[2], Hajime Ogino[2], Koji Tamura[1], Hitoshi Yokoyama[1] (Laboratory of Organ Morphogenesis, Tohoku University[1], Developmental Genomics Research Gruop, NAIST[2])

**FT7-17** 16:14-16:18 A new regeneration study system in Xenopus laevis; Ectopic blastema induction by nerve deviation and skin wounding
**(P-224)** アフリカツメガエル (Xenopus laevis) における新規再生研究系 ; 神経遊走と皮膚損傷による異所再生芽の誘導
○Kazumasa Mitogawa, Miyuki Moriyasu, Ayako Hirata, Aki Makanae, Akira Satoh (RCIS,Okayama Univ)

**FT7-18** 16:18-16:22 Comparative study of limb regeneration between amphibians and mammals
**(P-225)** 両生類との比較から探るマウスの四肢再生能
○Shinichirou Miura, Tetsuya Endo (Lab. of Biol., Aichi Gakuin Univ.)

**FT7-19** 16:22-16:26 Amphibian retinal regeneration is triggered by matrix metalloproteinases
**(P-227)** 両生類網膜再生初期過程を制御する matrix metalloproteinases の解析
○Hanako Naito[1], Yoko Ueda[1], Takahiko Sato[2], Atsuko Sehara-Fujisawa[2], Masasuke Araki[1] (Dev. Neurobiol. Lab., Dept. of Biol. Sci., Nara Women's Univ.[1], Department of Growth Regulation, Institute for Frontier Medical Sciences, Kyoto Univ.[2])

**FT7-20** 16:26-16:30 *Rax* and *Pax6* expressions are related to the localization of cell adhesion molecules during retinal regeneration in Xenopus
**(P-228)** 成体ツメガエル網膜再生における Rax・Pax6 遺伝子の発現パターンと細胞接着分子の動態の解析
○Yoko Ueda[1], Rika Teshigawara[2], Masasuke Araki[1,2] (Graduate school of humanities and science, NWU[1], Dev. Neurobilo. Lab., Dept. of Biol. Sci., NWU[2])

**FT7-21 (P-230)** 16:30-16:34 Studies on regeneration of the dopaminergic neuron in newts, *Cynops pyrrhogaster*
アカハライモリを用いたドーパミン神経細胞再生の解析
○Yuko Urata, Wataru Yamashita, Rio Tsutsumi, Shota Takemura, Miki Hirayama, Takeshi Inoue, Kiyokazu Agata (Dept. of Biophys. Grad. Sch. of Sci., Kyoto Univ.)

**FT7-22 (P-231)** 16:34-16:38 In vitro analysis of the neural stem cells in newt Cynops phyrrhogaster
アカハライモリ神経幹細胞の In vitro 解析
○Wataru Yamashita, Yuko Urata, Chiaki Michibayashi, Rio Tsutsumi, Shota Takemura, Miki Hirayama, Takeshi Inoue, Kiyokazu Agata (Dept. of Biophys. Grad. Sci., Kyoto Univ.)

**FT7-23 (P-233)** 16:38-16:42 Lineage tracing analysis of cardiomyocytes in the newt cardiac regeneration by tamoxifen-inducible Cre loxP system.
タモキシフェン誘導型 Cre loxP システムを用いたイモリの心臓再生過程における細胞系譜の追跡。
○Ayumi Myouga, Naoki Yokotani, Takashi Takeuchi, Toshinori Hayashi (Scl of Life Science, Tottori Univ.)

**FT7-24 (P-234)** 16:42-16:46 What Molecule Triggers Proliferation of Cardiomyocytes during Newt Heart Regeneration?
イモリ心臓再生過程において、心筋細胞の増殖を開始させるトリガーは何か？
Naoki Yokotani[1], Takeshi Inoue[2], Eri Kawaguchi[2], Kiyokazu Agata[2], Takashi Takeuchi[1], ○Toshinori Hayashi[1] (Scl. of Life Science, Tottori Univ.[1], Grad. Scl. Science., Kyoto Univ.[2])

# Satellite Workshops (in Japanese)

## SW01: Gametogenesis, fertilization and reproduction/Early embryogenesis/ Cell differentiation/Cell-Cell/-Matrix interaction/Cell proliferation/ Organogenesis

May 28 (Tue) 15:00-17:00 Room 2
Chairpersons: Atsushi Kawakami (Tokyo Inst. of Technol.)
Takahiro Chihara (Univ. of Tokyo)

**SW1-01 (FT7-04) (P-007)** 15:00-15:10 Pronuclear chromatin binding of Orc6 in mouse fertilized eggs
マウス受精卵における Orc6 の前核クロマチンへの結合
○Shin Murai[1], Yuusuke Fukuda[2,3], Katagiri Yukiko[2], Mineto Morita[2], Shigeru Yamashita[1] (Dept of Biochem, Toho Univ, Sch of Med[1], Dept. of Obst. and Gyn., Toho Univ., Sch. of Med.[2], Dept. of Biol. Univ. of Pennsylvania[3])

**SW1-02 (FT7-05) (P-009)** 15:10-15:20 Meiotic chromosome behavior in the triploid planarian
3 倍体プラナリアの減数分裂における染色体挙動
○Ayako Chinone, Midori Matsumoto (Dept. of Bioscis. & Informatics, Fac. of Sci. & Tech., Keio Univ.)

**SW1-03 (FT5-18) (P-035)** 15:20-15:30 MPDZ is involved in maintenance and formation of the developing optic cup
眼杯形成における MPDZ の役割
○Lanying Zhao[1], Akira Ito[2], Hirotomo Saitsu[3], Makoto Ishibashi[2], Shigehito Yamada[1,2] (Grad Sch Med, Kyoto Univ[1], Department of Human Health Science, Kyoto University Graduate School of Medicine[2], Department of Human Genetics, Graduate School of Medicine, Yokohama City University[3])

**SW1-04 (FT5-12) (P-026)** 15:30-15:40 Scaling of Dorsal-Ventral Patterning by Embryo Size-Dependent Degradation of Spemann's Organizer Signals
オーガナイザー因子の分解を介した背腹軸スケーリングの保証機構
○Hidehiko Inomata[1,2], Tatsuo Shibata[3], Tomoko Haraguchi[1], Yoshiki Sasai[1] (Organogenesis and Neurogenesis Group, CDB[1], PRESTO[2], Laboratory for Physical Biology, CDB[3])

**SW1-05 (FT2-14) (P-074)** 15:40-15:50 LGR4 is required for development and maintenance of mammary gland
LGR4 は乳腺組織の発達と維持に必要である
○Kazunori Oyama, Yasuaki Mohri, Mizuki Sone, Katsuhiko Nishimori (Lab. Mol. Biol., Grad. Sch. of Agr. Sci., Univ. of Tohoku)

**SW1-06 (FT2-05) (P-081)** 15:50-16:00 Extracellular syntaxin4 triggers the differentiation program in teratocarcinoma F9 cells with impacts on cell adhesion properties.
テラトカルシノーマ F9 細胞における細胞外シンタキシン 4 の細胞接着と分化への影響
○Natsumi Hagiwara, Yohei Hirai (Dep. Bioscience, Grad. Sch. Sci. Technol., Kwansei Gakuin Univ.)

**SW1-07 (FT2-07) (P-086)** 16:00-16:10 Optimal cellular mobility for synchronization arising from the gradual recovery of intercellular interactions
遺伝子発現の同期を達成するための最適な細胞移動率
○Koichiro Uriu[1], Saul Ares[2], Andrew Oates[3], Luis Morelli[4] (Theoretical Biology Laboratory, RIKEN ASI, Japan[1], Logic of Genomic Systems Laboratory, CNB, CSIC, Spain[2], MRC NIMR, UK[3], Departamento de Fisica, FCEyN UBA and IFIBA, CONICET, Argentina[4])

**SW1-08 (FT2-01) (P-088)** 16:10-16:20 The subcellular localization of cyclin B2 is required for bipolar spindle formation in meiosis I during Xenopus oocyte maturation
サイクリン B2 の細胞内局在はアフリカツメガエル卵成熟過程の二極性紡錘体形成に必要である
○Satoshi Yoshitome[1], Nobuaki Furuno[2], Claude Prigent[3], Eikichi Hashimoto[4] (Fac. Pharm., Iwaki Meisei Univ.[1], Lab. Amphibian Biol., Grad. Sch. Sci.,Hiroshima Univ.[2], Inst. Genet., Dev. Rennes, Univ. Rennes 1[3], Dept. Biomed. Sci., Sch. Life Sci., Tottori Univ.[4])

**SW1-09 (FT3-14) (P-165)** 16:20-16:30 Cadherin-7 enhances sonic hedgehog signaling by inhibiting the movement of full-length Gli3 to the primary cilium
カドヘリン－ 7 は転写因子 Gli3 の移動制限によりソニックヘッジホッグシグナルを調節する。
○Rie Kawano[1], Kunimasa Ohta[2], Daisuke Niimori[3] (Dev. Neurobio. Kumamoto University[1], Division of Developmental Neurobiology, Graduate School of Medical Sciences, Kumamoto University, 1-1-1 Honjo, Kumamoto 860-8556, Japan[2], Department of Dermatology and Plastic Surgery, Graduate School of Life Sciences, Kumamoto University, 1-1-1 Honjo Kumamoto 860-8556 Japan[3])

**SW1-10 (FT3-15) (P-167)** 16:30-16:40 Study of secondary neurulation: stem cell-like behavior of neural tube precursors implicated by transplantation of EGFP-labeled tail bud
Secondary Neurulation 研究 : EGFP 標識 tail bud の移植から浮かび上がった神経管前駆細胞の幹細胞様の挙動
○Teruaki Kawachi[1], Eisuke Shimokita[2], Yoshiko Takahashi[1] (Department of Zoology, Kyoto University.[1], Graduate School of Biological Science, Nara Institute of Science and Technology.[2])

**SW1-11 (FT3-16) (P-169)** 16:40-16:50 Long-distance cell migrations during larval development in an appendicularian, *Oikopleura dioica*.
ワカレオタマボヤ *Oikopleura dioica* 後期発生のライブイメージングによって見出された長距離移動を示す細胞群
○Kanae Kishi, Takeshi Onuma, Hiroki Nishida (Dept. Biol. Sci., Osaka Univ.)

**SW1-12 (FT3-17) (P-171)** 16:50-17:00 Role of motile cilia in development and function of renal tubes in fish
魚類の腎臓発生における運動性繊毛の役割
Sayaka Tayama, Yuri Ikeda, Hitomi Igarashi, Hajime Matsui, ○Atsuko Shimada, Hiroyuki Takeda (Dep. Biol. Sci., Grad. Sch. Sci., Univ. Tokyo)

## SW02: Morphogenesis/Neural development and function/Regeneration/Technology, Theoretical approach

May 28 (Tue) 17:10-19:00 Room 2
Chairpersons: Hidehiko Inomata (RIKEN CDB)
Midori Matsumoto (Keiko Univ.)

**SW2-01 (FT6-20) (P-145)** 17:10-17:20 Temporal observation of the influence of the Fgf signal about somite formation
体節形成における Fgf シグナルの影響の経時的な観察
○Kenji Maekubo, Yohei Hirai (Grad. Sch. of Sci. and Tech., Kwanseigakuin Univ.)

**SW2-02 (FT6-22) (P-149)** 17:20-17:30 Formation of the digestive tract in *Ciona intestinalis* includes two distinct morphogenic processes between its anterior and posterior parts
カタユウレイボヤにおける消化管形成：前方と後方で異なる管のでき方と細胞の由来

○Keiichi Nakazawa[1], Takumi Yamazawa[1], Yuuta Moriyama[1], Yousuke Ogura[2], Narudo Kawai[2], Yasunori Sakakura[2], Hidetoshi Saiga[1] (Dept. Biol. Sci., Tokyo Metro Univ.[1], Shimoda, Tsukuba Univ.[2])

**SW2-03 (FT6-15) (P-136)** 17:30-17:40

Analysis of the function of *Fgf10* chromosomal enhancers that control limb specific expression

*Fgf10*の発現を肢芽特異的に制御するエンハンサーの機能解析

○Chisa Ando[1], Yu-go Yokota[1], Yu-hei Kohara[1], Yo-ichi Yamamoto-Shiraishi[1], Yo-ichi Mizushina[2], Tomoko Sagai[2], Toshihiko Shiroishi[2], Atsushi Kuroiwa[1] (Div. of Biol. Sci., Grad. Sch. of Sci., Nagoya Univ.[1], Mammalian Genetics Laboratory, National Institute of Genetics.[2])

**SW2-04 (FT3-03) (P-187)** 17:40-17:50

Unveiling the role of Ephrin for dendrite targeting of *Drosophila* olfactory projection neurons

ショウジョウバエ嗅覚投射神経の樹状突起領域形成におけるエフリンの機能解析

○Shirin Makihara[1], Sayaka Sekine[1], Masayuki Miura[1,2], Takahiro Chihara[1,2] (Genetics, Grad Sch Pharm Sci, Univ Tokyo[1], CREST, JST[2])

**SW2-05 (FT7-13) (P-218)** 17:50-18:00

Transient reduction of 5-methylcytosine and 5-hydroxymethylcytosine is caused by active DNA demethylation during regeneration of zebrafish fin

ゼブラフィッシュの尾びれ再生過程では能動的 DNA 脱メチル化による 5-メチルシトシンと 5-ヒドロキシメチルシトシンの一時的な減少が生じる

○Kentaro Hirose[1], Nobuyoshi Shimoda[2], Yutaka Kikuchi[1] (Dep. of Biol. Sci., Grad. Sch, of Sci., Hiroshima Univ.[1], Dep. of Rege. Med., NCGG[2])

**SW2-06 (FT7-08) (P-210)** 18:00-18:10

*In vivo* model system to study the genetic program of tissue regeneration

組織再生の遺伝プログラム研究に向けた *in vivo* モデルシステムの確立

○Soshiro Kashio[1], Fumiaki Obata[1,2], Liu Zhang[1], Takahiro Chihara[1,2], Masayuki Miura[1,2] (Genetics, Grad Sch Pharm Sci, Univ Tokyo[1], CREST, JST[2])

**SW2-07 (FT7-11) (P-215)** 18:10-18:20

Imaging and characterization of mmp9-expressing cells during zebrafish fin regeneration using the Tol2 BAC transgenic

Tol2 BAC トランスジェニックを用いた、ゼブラフィッシュのひれ再生における mmp9 発現細胞の解析

○Kazunori Ando, Akira Kudo, Atsushi Kawakami (Tokyo Tech)

**SW2-08 (FT6-24) (P-153)** 18:20-18:30

Knockdown of ouro genes represses tadpole tail regression during *Xenopus* metamorphosis

オウロ遺伝子のノックダウンは変態期のツメガエル幼生の尾部退縮を抑制する

○Erisa Maruyama, Mitsugu Maeno, Yumi Izutsu (Dept. Biol., Faulty of Sci., Niigata Univ., Japan)

**SW2-09 (FT7-12) (P-216)** 18:30-18:40

Critical role of *fibronectin 1b* during zebrafish fin regeneration

ゼブラフィッシュひれ再生における *fibronectin 1b*の機能解析

○Eri Shibata, Emiko Murase, Akira Kudo, Atsushi Kawakami (Tokyo tech)

**SW2-10 (FT1-03) (P-280)** 18:40-18:50

Numerical analyses for behaviors of auxin transport pattern on growing fields

オーキシン極性輸送に基づくパターンの成長場における数値解析

○Akiko Nakamasu[1,2], Kimura Seisuke[1], Nobhiko Suematsu[3,4] (Dep. Biores. Env. Sci. KSU.[1], JSPS Reserch Fellow[2], Grad. School. Adv. Math. Sci. Meiji Univ.[3], MIMS, Meiji Univ.[4])

**SW2-11** 18:50-19:00 A theory on the timing of cell fate decision in developing organs
**(FT1-05)**
**(P-283)** 成長組織における細胞運命の決定タイミングに関する理論
○Yoshihiro Morishita[1], Takayuki Suzuki[2] (RIKEN CDB[1], Nagoya Univ.[2])

# Technical Workshop: Technical tips

May 28 (Tue) 15:30-18:30 Room 3
Chairpersons: Ken-ichi Suzuki (Hiroshima Univ.)
Toshinori Hayashi (Tottori Univ.)

The NGS sequencing, quantitative/3D imaging, and genome editing by TALEN, these techniques are becoming an integral part of development biology. In order to aim at sharing the new and advanced technologies, we planned this workshop. The speakers talk about principles, applications and technical tips regarding these techniques. We hope that our technical tips would be “exciting” and “helpful” for participants from senior scientists to students.

**TW-1** 15:30-15:55 Next-generation sequencing for developmental biology
発生生物学のための次世代シーケンス
○Shigehiro Kuraku (RIKEN CDB GRAS)

**TW-2** 15:55-16:20 What is the best microscope for developmental biologists?
○Shigenori Nonaka (NIBB)

**TW-3** 16:30-16:55 Quantitative approach to understand whole organ morphogenesis
器官全体の形態形成を理解するための定量的アプローチの方法
○Takayuki Suzuki[1], Atsushi Kuroiwa[1], Yoshihiro Morishita[2] (Div. of Biol. Sci., Nagoya Univ.[1], RIKEN, CDB[2])

**TW-4** 16:55-17:20 Platinum Gate TALEN: Establishment of highly-active TALEN construction system
プラチナゲート TALEN: 高活性型 TALEN の作製システムの確立
○Tetsushi Sakuma, Takashi Yamamoto (Dept. of Math. and Life Sci., Grad. Sch. of Sci., Hiroshima Univ.)

**TW-5** 17:25-17:50 Molecular Genetic System for Regenerative Studies Using Newts
イモリを使った分子遺伝学実験系の構築
○Toshinori Hayashi[1], Naoki Yokotani[1], Akira Matsumoto[1], Ayumi Myouga[1], Mitsumasa Okamoto[2], Takashi Takeuchi[1] (Scl. of Life Science, Tottori Univ.[1], Nagoya Univ.[2])

# Satellite symposium (in Japanese)

## 植物の逆襲 ― 植物の形づくりの理論モデルと実験 :

May 28 (Tue) 18:30-20:35 Room 3
Chairpersons: Koichi Fujimoto (Osaka Univ.)
Takashi Miura (Kyusyu Univ.)

本シンポジウムでは、植物パターン形成の理論モデルとその応用を紹介する。発生生物学会では、もともと植物と動物の境は無く、お互いの研究対象について忌憚なく議論をしていた。近年の分子生物学の発達によって、細胞間相互作用を司る分子は植物と動物で大きく異なることが明らかになって来て、バベルの塔が崩れ、植物の研究者は学会から姿を消してしまった。しかし、実はパターン形成の背後にある数理や物理には共通性があり、意外なところで接点が見つかることが多い。当シンポジウムではそのような例をいくつか紹介することで、動植物の研究領域の間に新たな関連を生むことを目的とする。
Co-organized by「植物細胞壁の情報処理システム」(http://www.plantcellwall.jp)

**SS-1** 18:35-19:05 Cell wall and skull bone - understanidng pattern formation dynamics using mathematical model
細胞壁と頭蓋骨―パターン形成ダイナミクスの数理モデルによる統合的理解
○Takumi Higaki[1], Takashi Miura[2] (Dept Integratet Biosci, Univ Tokyo[1], Dept Anat Cell Biol, Kyushu Univ Grad Sch Med[2])

**SS-2** 19:05-19:35 Image clustering of plant cells and pattern recognition
植物細胞の画像クラスタリングとパターン認識
○Natsumaro Kutsuna (Dept Integrated Biosci, Univ Tokyo)

**SS-3** 19:35-20:05 葉原基におけるタンパク質拡散係数の非一様性と細胞増殖活性の時空間分布
○Kensuke Kawade[1], Hirokazu Tanimoto[2] (RIKEN Plant Science Center[1], Institut Curie[2])

**SS-4** 20:05-20:35 Initiation of Cell Wall Pattern by a Rho GTPase- and Microtubule-Driven Symmetry Breaking
Rho GTPase と表層微小管による自発的な細胞壁パターンの構築
○Yoshihisa Oda[1,2], Hiroo Fukuda[1] (Dep. Biol, Tokyo Univ.[1], PRESTO, JST[2])

# **Poster Sessions:** May 29 (Wed)-May 31 (Fri)

**P-001 (FT7-01)**
The mechanism of the establishment of murine spermatogonial stem cells
○Han Pin Pui[1], Yumiko Saga[2] (NIG, SOKENDAI[1], Division of Mammalian Development, NIG, SOKENDAI[2])

**P-002 (OP17-01)**
Characterization of mammalian spermatogenic stem cell niche
精子幹細胞ニッチの探索
○Yu Kitadate, Ayumi Maruyama, Rie Ichikawa, Shosei Yoshida (Germ Cell Biology, NIBB)

**P-003 (FT7-02)**
In vitro Reconstruction of Mouse Seminiferous Tubules Supporting Germ Cell Differentiation
マウス未熟精巣を用いた in vitro における精細管再構成と精子形成
○Tetsuhiro Yokonishi, Takuya Sato, Kumiko Katagiri, Mitsuru Komeya, Yoshinobu Kubota, Takehiko Ogawa (Dep. of Urol. Yokohama City Univ. School of Med.)

**P-004 (OP17-02)**
Reconstruction of seminiferous tubule-like structure in 3-D culture system of re-aggregated mouse testicular cells
○Jidong Zhang, Ko Eto, Shin-ichi Abe (GSST, Kumamoto University)

**P-005 (FT7-03)**
Possible involvement of a novel RNA-binding protein, MGC83235, in the promotion of *Xenopus* oocyte maturation
アフリカツメガエル卵成熟誘起への新奇 RNA 結合タンパク質 MGC83235 の関与
○Kazuki Takahashi[1], Ryoma Ota[2], Masakane Yamashita[3] (Grad. Sch. of Life Sci., Hokkaido Univ.[1], Div. of Dev. Genet., Dept. of Dev. Biol., NIBB[2], Dept. of Biol. Sci., Fac. of Sci., Hokkaido Univ.[3])

**P-006 (OP17-03)**
Role of Glycolysis in Primordial-Germ-Cell Development in Drosophila embryos
ショウジョウバエ始原生殖細胞の発生過程における解糖系の新規役割
○Yoshiki Hayashi, Chiyo Noda, Satoru Kobayashi (Okazaki Institute for Integrative Bioscience, NIBB)

**P-007 (FT7-04) (SW1-01)**
Pronuclear chromatin binding of Orc6 in mouse fertilized eggs
マウス受精卵における Orc6 の前核クロマチンへの結合
○Shin Murai[1], Yuusuke Fukuda[2,3], Katagiri Yukiko[2], Mineto Morita[2], Shigeru Yamashita[1] (Dept of Biochem, Toho Univ, Sch of Med[1], Dept. of Obst. and Gyn., Toho Univ., Sch. of Med.[2], Dept. of Biol. Univ. of Pennsylvania[3])

**P-008 (OP17-04)**
Identification of a Nanos target in the mouse
マウスにおける Nanos 標的 RNA の同定
○Yuzuru Kato[1], Yumiko Saga[1] (NIG[1], NIG[2])

**P-009 (FT7-05) (SW1-02)**
Meiotic chromosome behavior in the triploid planarian
3 倍体プラナリアの減数分裂における染色体挙動
○Ayako Chinone, Midori Matsumoto (Dept. of Bioscis. & Informatics, Fac. of Sci. & Tech., Keio Univ.)

**P-010 (OP17-05)**
Identification of the interactive regions of *Xenopus* dicalcin for its target glycoprotein, gp41
受精調節タンパク質ダイカルシンにおける gp41 結合部位の同定
○Naofumi Miwa, Mayu Hanaue, Ken Takamatsu (Toho Univ., Dept. Physiol.)

**P-011 (FT5-02)**
Promoter Assay of Granzyme g Specific Expression in mouse embryo 2-cell stage
○Huan Ou-Yang[1,2], Shinn-Chih Wu[1], Tung-Chou Tsai[2], Winston Cheng[1], Chuan-Mu Chen[1,2] (DAST, NTU.[1], DLS, NCHU.[2])

**P-012 (FT5-03)**
Do Wnts function as global cues for asymmetric cell divisions in *C. elegans* embryos?
Wnts は C. elegans 胚における非対称細胞分裂のためのグローバルな手がかりとして機能するか？
○Sohei Nakayama, Hitoshi Sawa (Multicellular Organization Lab., NIG)

**P-013 (OP05-09)**
Pattern of early gene expression during early marmoset development
コモンマーモセット初期胚における遺伝子発現パターンの変化
○Ayako Sedohara[1], Hideyuki Okano[2], Erika Sasaki[1] (CIEA[1], Keio University[2])

**P-014 (FT5-04)**
Participation of Human X-linked intellectual disability (XLID) gene in the cell cycle regulation of early embryo development
○Chun-Yu Chen, I-Shing Yu, Yu-Chen Hsu, Chia-Lun Hung, Chung-Yang Kao, Chien-Yu Lin, Ming-Shian Tsai, Shu-Wha Lin (CLSMB, NTUCM)

**P-015 (FT5-05)**
Lhx1 is widely implicated in the differentiation of epiblasts to germ layer.
Lhx1 はエピブラストから胚葉への分化に広く関係する。
○Akira Hasegawa[1], Nobuhito Ikeda[1], Takafumi Nakamura[2], Ichiro Hisatome[1], Yasuaki Shirayoshi[1] (DRMT, Tottori Univ.[1], DIB, Tottori Univ.[2])

**P-016 (OP05-10)**
The spider *Parasteatoda tepidariorum* is a good model to study cell-cell signaling and cell movement during development
細胞間シグナルと細胞運動の実験系としてのオオヒメグモ
○Yasuko Akiyama-Oda, Hiroki Oda (JT Biohistory Res. Hall)

**P-017 (FT5-06)**
Origin of Anterior-Posterior axis formation in the mouse embryos.
マウス胚における前後軸の起源
○Katsuyoshi Takaoka, Hiroshi Hamada (Osaka university FBS)

**P-018 (FT5-07)**
Live Imaging Analysis of Mouse Postimplantation Development
前後軸形成期におけるマウス胚発生のライブイメージング解析
○Go Shioi[1], Hideharu Hoshino[2], Kana Bando[1], Kazuki Nakao[1,3], Toshihiko Fujimori[1,4], Shinichi Aizawa[1,2] (LARGE, CDB, RIKEN[1], Lab. for Vertebrate Body Plan, RIKEN CDB, Japan[2], Lab. of Animal Resources, CDBIM, Univ. of Tokyo, Japan[3], Division of Embryology, NIBB, Japan[4])

**P-019 (OP05-11)**
Zebrafish embryonic cell migration promoted by pregnenolone that changes the conformation of CLIP-170 and promoting microtubule polymerization
Jui-Hsia Weng, ○Bon-chu Chung (IMB, Academia Sinica)

**P-020 (FT5-08)**
OTX2 and DKK1 Exhibit the Earliest Asymmetric Expression in Distal Visceral Endoderm.
OTX2 と DKK1 は Distal Visceral Endoderm で最初に非対称な発現を示す遺伝子である
○Hideharu Hoshino[1], Go Shioi[2], Hiroshi Kiyonari[2], Takaya Abe[2], Kazuki Nakao[2], Shinichi Aizawa[1,2] (VBP, RIKEN CDB[1], LARGE, RIKEN CDB[2])

**P-021 (FT5-09)**
The Comparative Analysis of Early Development in Reptiles
爬虫類初期発生の比較解析
○Eriko Kajikawa[1], Michio Yoshida[1], Daisuke Kurokawa[1,2], Miyuki Noro[1], Shinichi Aizawa[1] (RIKEN CDB[1], MMBS, Univ. Tokyo[2])

**P-022 (OP05-12)**
Theoretical model of DV-pattern scaling in Xenopus embryo
初期 Xenopus 胚の背腹軸スケーリングを保証する理論モデル
○Tatsuo Shibata[1], Hidehiko Inomata[2,3], Yoshiki Sasai[2] (Lab for Physical Biology, CDB[1], Organogenesis and Neurogenesis Group, CDB[2], PRESTO/JST[3])

**P-023 (FT5-10)** Molecular mechanisms of deep cell reaggregation during early development of an annual killifish *Nothobranchius korthausae.*
一年魚 *Nothobranchius korthausae*の初期発生における深層細胞再集合の分子メカニズムの解析
○Daisuke Kurokawa[1,2], Hotaka Nishikawa[1], Masaaki Yoshida[3], Atsushi Ogura[3], Shinichi Aizawa[2], Koji Akasaka[1] (MMBS, Tokyo Univ.[1], CDB, RIKEN Kobe.[2], OAP, Ochanomizu Univ.[3])

**P-024 (FT5-11)** Establishment of vertebrate body plan via coordinated regulation of dorsal-ventral and anterior-posterior patterning and developmental canalization
○Atsushi Suzuki, Kimiko Takebayashi-Suzuki (Inst. for Amphibian Biol., Hiroshima Univ. Grad. Sch. of Sci.)

**P-025 (OP12-01)** Zebrafish TSC22D3 Plays Critical Roles in Bmp dependent Dorsoventral Patterning during Early Embryogenesis
○William Ka Fai Tse (Dept. of Biol, HKBU)

**P-026 (FT5-12) (SW1-04)** Scaling of Dorsal-Ventral Patterning by Embryo Size-Dependent Degradation of Spemann's Organizer Signals
オーガナイザー因子の分解を介した背腹軸スケーリングの保証機構
○Hidehiko Inomata[1,2], Tatsuo Shibata[3], Tomoko Haraguchi[1], Yoshiki Sasai[1] (Organogenesis and Neurogenesis Group, CDB[1], PRESTO[2], Laboratory for Physical Biology, CDB[3])

**P-027 (FT5-13)** Mechanical force that drives expansion of the amniotic cavity supports antero-posterior extension of the notochord in mouse embryos.
マウス胚では羊膜腔の膨張による機械的な力の作用が脊索の伸長を支持してる。
○Yu Imuta[1,2,3], Hiroshi Koyama[4], Mototsugu Eiraku[2], Yoshiki Sasai[2], Toshihiko Fujimori,[4], Hiroshi Sasaki[1] (IMEG, Kumamoto Univ[1], RIKEN CDB[2], Osaka University, Graduate School of Medicine[3], NIBB[4])

**P-028 (OP12-02)** Mechanism of the "KUBIRE" formation in the neurula embryo of the ascidian, Halocynthia roretzi
マボヤ神経胚における「くびれ」形成機構の解析
○Gaku Kumano, Sari Zenpuku, Hiroki Nishida (Osaka University)

**P-029 (FT5-14)** P2Y nucleotide receptors are necessary for head structure formation during Xenopus leavis development
アフリカツメガエルの頭部形成においてヌクレオチド受容体 P2Y は重要な機能をもつ
○Haruka Nishida[1], Akiha Nishihara[2], Chikara Hashimoto[1,2] (Osaka Univ., Gra. Sch. of Sci., Dept. Biol[1], BRH[2])

**P-030 (FT5-15)** Efficient induction of cranial neural crest stem cells from mouse ES cells
マウス ES 細胞からの頭部神経冠幹細胞の効率的誘導
○Masami Nozaki[1], Yuki Minamino[1,2], Kenji Kakudo[2], Yuichi Ohnishi[1,2] (Res. Inst. for Microbial Dis., Osaka Univ.[1], Sec. Dept. of Oral and Maxillofacial Surg, Osaka Dent. Univ.[2])

**P-031 (OP12-03)** The cilia-dependency of hedgehog signaling in fish
魚類におけるヘッジホッグシグナル伝達経路の繊毛依存性
○Takayoshi Yamamoto, Tatsuya Tsukahara, Hiroyuki Takeda (Lab. of Embryology, Dept. of Biol. Scis., Grad. Sch. of Sci., Univ. of Tokyo)

**P-032 (FT5-16)** The specification of the developing telencephalon along dorsal-ventral axis
ニワトリ終脳の背腹領域の特異性獲得機構
○Akari Karaiwa[1], Shigeru Taketani[2], Masasuke Araki[1] (Dev. Neurobiol. Lab., Dept. of. Biol. Sci.,

NWU[1], Biotechnological Laboratory Faculty of Textile Science Kyoto Institute of Technology[2])

**P-033 (FT5-17)** PRDM12 is required for the regionalization of the Xenopus trigemital placode
ツメガエルの三叉神経プラコードの領域化には PRDM12 が必要である
○Shinya Matsukawa, Tatsuo Michiue (Grad. School of Arts and Sciences, The University of Tokyo)

**P-034 (OP12-04)** Molecular identification of $t^{w5}$: *Vps52* promotes pluripotential cell differentiation through cell interactions
マウス *t*-complex 致死変異より同定された *Vps52*の発生制御遺伝子としての役割
○Michihiko Sugimoto[1], Masayo Kondo[1], Michiko Hirose[2], Misao Suzuki[3], Kazuyuki Mekada[4], Atsuo Ogura[2], Karen Artzt[5], Kuniya Abe[1] (MCD, BRC, RIKEN[1], BED, BRC, RIKEN[2], CARD, Kumamoto Univ.[3], EAD, BRC, RIKEN[4], Univ. Texas Austin[5])

**P-035 (FT5-18) (SW1-03)** MPDZ is involved in maintenance and formation of the developing optic cup
眼杯形成における MPDZ の役割
○Lanying Zhao[1], Akira Ito[2], Hirotomo Saitsu[3], Makoto Ishibashi[2], Shigehito Yamada[1,2] (Grad Sch Med, Kyoto Univ[1], Department of Human Health Science, Kyoto University Graduate School of Medicine[2], Department of Human Genetics, Graduate School of Medicine, Yokohama City University[3])

**P-036 (FT5-19)** Expression patterns of *Dnmt4, Dnmt6,* and *Dnmt8* in zebrafish development
発生過程におけるゼブラフィッシュ *Dnmt4, Dnmt6, Dnmt8*の発現解析
○Kazuya Takayama[1], Shunsuke Takanaga[1], Nobuyoshi Shimoda[2], Yutaka Kikuchi[1] (Dep. of Bio. Sci., Grad. Sch. of Sci., Hiroshima Univ.[1], Dept. Regenerative Med., Natl. Inst. Longevityu Sci.,[2])

**P-037 (OP12-05)** Epigenetic regulation of Hox gene expression by PcG genes in a primitive mode of insect embryogenesis in the cricket *Gryllus bimaculatus*
原始的発生様式をとる昆虫の胚発生過程におけるポリコーム遺伝子群によるホメオティック遺伝子発現のエピジェネティックな制御
○Yuji Matsuoka[1], Tetsuya Bando[2], Taro Nakamura[1], Takahito Watanabe[1], Sumihare Noji[1], Taro Mito[1] (Dept. of Bio. Sci. and Tech., Fact. of Eng., Tokushima Univ.[1], Dent. and Pharm. Sci. and Grad. of Med., Okayama Univ.[2])

**P-038 (FT5-20)** Molecular mechanisms underlying segmentation border formation in zebrafish somitogenesis
○Chimwar Wanglar, Taijiro Yabe, Shinji Takada (NIBB, SOKENDAI UNIVERSITY)

**P-039 (FT5-21)** The role of thyroid hormone in developing heart
甲状腺ホルモンの心臓形成における役割
○Kazuhiro Maeda, Sachiko Miyagawa-Tomita, Toshio Nakanishi (TWMU)

**P-040 (OP12-06)** The Role of Foxc1 in Telencephalic Vascular Development
○Thanit Prasitsak, Masato Ota, Sachiko Iseki (Mol. Cra. Emb., TMDU)

**P-041 (FT5-22)** Lineage tracing analysis of genes contributing to the formation of cardiac conduction system in early heart development.
初期心臓発生における刺激伝導系の細胞系譜の解析
○Akane Sakaguchi[1], Hiroki Kokubo[2], Yumiko Saga[1] (NIG[1], hiroshima univ.[2])

**P-042 (FT5-23)** Protogenin participates in mouse vertebral patterning by regulating Hox gene expression
○Wei-Chih Kuo, Yu-Chiuan Wang, Ming-Ji Fann (Department of Life Sciences and Institute of Genome Sciences, NYMU)

**P-043 (FT5-24)** Development of an RNA interference method using microinjection in the water flea *Daphnia pulex*
ミジンコ (*Daphnia pulex*) 初期胚へのマイクロインジェクションによる RNAi 法の確立

○Chizue Hiruta[1], Kenji Toyota[1,2], Hitoshi Miyakawa[1], Taisen Iguchi[1,2] (NIBB[1], Grad. Univ. Advanced Studies[2])

**P-044 (OP15-01)** LIF Responsiveness in Embryonic Stem Cells from different mouse strains.
ES 細胞での LIF 応答性（マウス系統間での比較）

○Satoshi Ohtsuka, Hitoshi Niwa (Laboratory for Pluripotent Stem cell studies, CDB RIKEN)

**P-045 (FT4-01)** Function of *EflMsiA* in the active stem cells (archeocytes) in freshwater sponge, *Ephydatia fluviatilis*
カワカイメン全能性体性幹細胞における *EflMsiA*の機能

○Kazuko Okamoto, Kiyokazu Agata, Noriko Funayama (Dept. Biophys. Grad. Sch. Sci., Kyoto Univ.)

**P-046 (OP15-02)** Lactic Acid Bacteria Convert Human Fibroblasts to Multipotent Cells
ヒト皮膚細胞は乳酸菌を取り込むと多能性を持つようになる

○Kunimasa Ohta, Rie Kawano, Naofumi Ito (Dept. of Dev. Neurobiol., Kumamoto Univ. Grad. Sch. of Life Scis.)

**P-047 (FT4-02)** Akhirin is involved in the neural stem cell regulation in the central canal of a mouse spinal cord

○Athary Felemban[1,2,3], Rie Kawano[1], Song Xiaohong[1,2], Hideaki Tanaka[1,2], Kunimasa Ohta[1] (Dep. Dev. Neurobiol., Grad. Sch. Life Sci., Kumamoto Univ.[1], Global COE, Kumamoto Univ.[2], Ministry of H. Edu., Saudi Arabia[3])

**P-048 (OP15-03)** A molecular mechanism controlling proliferation of planarian pluripotent stem cells
プラナリア全能性幹細胞の増殖制御機構

○Hayoung Lee, Kiyokazu Agata, Norito Shibata (Dept of Biophys, Kyoto univ.)

**P-049 (FT4-03)** The roles of chromatin remodelers in the maintenance of multipotency of mouse trunk neural crest cells in the relationship with the formation mechanisms of neural crest-derived stem cells
マウス体幹神経冠細胞の多分化能維持におけるクロマチンリモデラーの役割と神経冠細胞由来幹細胞の形成メカニズムとの関連

○Kyohei Fujita, Ryuhei Ogawa, Syunsaku Kawawaki, Kazuo Ito (Dept. Biol. Sci., Osaka Univ.)

**P-050 (FT4-04)** LHX2 regulates the neural differentiation of human embryonic stem cells via transcriptional modulation of PAX6 and CER1

○Hung-Chih Kuo[1], Pei-Shan Hou[2], Ching-Yu Chuang[1], Cheng-Fu Kao[1], Shen-Ju Chou[1], Lee Stone[1], Hong-Nerng Ho[2], Chung-Liang Chien[2] (ICOB, Academia Sinica[1], NTU[2])

**P-051 (OP15-04)** The microRNA mir-235 suspends growth and development during starvation
microRNA mir-235 は飢餓時に発育を抑制する

○Masamitsu Fukuyama, Hidefumi Kasuga, Aya Kitazawa, Masahiko Kume, Takuya Ogawa, Kenji Kontani, Toshiaki Katada (Dept. of Physiological Chem, Grad. Sch. of Pharmaceutical Sci., Univ. of Tokyo)

**P-052 (FT4-05)** Notch signal play a role in the multipotency of melanoblast
色素芽細胞のもつ多分化能に Notch シグナルが重要である

○Natsuki Watanabe[1], Masahiro Nishioka[1], Takanori Wakaoka[1], Tomohisa Hirobe[2], Tsutomu Motohashi[1], Takahiro Kunisada[1] (Regeneration & Adv. Med. Sci., Gifu Univ. Grad. Sch. of Med.[1], Active Radiation Protection Research Team, Radiation Risk Reduction Research Program, National Institute of Radiological Sciences[2])

**P-053 (OP15-05)** Knockdown planarians of the nuclear-type Piwi gene give new insights into planarian stem cell system
核局在型 Piwi の遺伝子機能阻害から得られたプラナリア幹細胞システムの新たな

知見

○Makoto Kashima[1], Kuniaki Saito[2], Eri Kawaguchi[3], Osamu Nishimura[3], Shigenobu Yazawa[3], Mikiko Siomi[2], Haruhiko Siomi[2], Kiyokazu Agata[3], Norito Shibata[4] (DB, Kyoto Uni.[1], DMB, Keio uni.[2], gCOE, Kyoto Uni.[3], RB, Kyoto uni.[4])

**P-054 (FT4-06)** Ddx46 is required for multi-lineage differentiation of hematopoietic stem cells in zebrafish
ゼブラフィッシュにおいて Ddx46 は造血幹細胞の多系列分化に必要である

○Ryo Hirabayashi[1], Shunya Hozumi[1], Shin-ichi Higashijima[2,3], Yutaka Kikuchi[1] (Dep. of Bio. Sci., Grad. Sch. of Sci., Hiroshima Univ.[1], National Institutes of Natural Sciences, Okazaki Institute for Integrative Bioscience, National Institute for Physiological Sciences[2], Graduate University for Advanced Studies[3])

**P-055 (OP15-06)** Differential response to Retinoic acid achieves balanced self-renewal and differentiation of the stem cell compartment in mouse spermatogenesis
マウス精子幹細胞において、レチノイン酸応答性の異なる細胞集団が幹細胞の自己複製能と分化能を両立させている

○Kanako Ikami[1], Ryo Sugimoto[1,2], shosei Yoshida[1] (DGCB, NIBB[1], EICM, Kagoshima Univ.[2])

**P-056 (FT4-07)** The regulation analyses of Jagged1 expression in Sertoli cells of mouse testis
マウス精巣のセルトリ細胞における Jagged1 発現制御解析

○Ryu Okada, Taro Hara, Yukio Nishina (Grad of Nanobiosci, Yokohama City Univ.)

**P-057 (OP15-07)** Neural Crest-Derived Cells sustain the multipotency even after intrusion into the tissues.
組織内に存在する神経堤由来細胞の多分化能の解析

○Tsutomu Motohashi[1], Natsuki Watanabe[1], Masahiro Nishioka[1], Takanori Wakaoka[2], Takahiro Kunisada[1] (RAMS, Gifu Univ[1], OGSM, Gifu Univ.[2])

**P-058 (FT4-08)** Modelling Spinocerebellar Ataxia type 2 and 3 using human induced pluripotent stem cells

○Ching-Yu Chuang[1], Chih-Chao Yang[3], Hsiang-Po Huang[4], Hung-Chih Kuo[1,2] (GRC, Academia Sinica[1], ICOB, Academia Sinica[2], Department of Neurology, UTUH[3], Departments of Medical Research, NTUH[4])

**P-059 (OP15-08)** Possible roles of regulatory T cells on the hair cycle regulation of pelage hair follicles in mice
マウス体毛毛包の毛周期調節における制御性 T 細胞の機能について

○Takashi Matsuzaki[1], Mariko Oishi[2], Narumi Notsu[1], Ichitaro Niibe[1] (Fac. Life & Environ. Sci., Shimane Univ.[1], Grad. Sch. Life & Environ. Sci., Shimane Univ.[2])

**P-060 (FT4-09)** Clinical study on stem cells transplantation for treating diabetic foots through improving blood supply

○Kun Lu[1] (Tongji University School of Medicine[1], Shanghai Tenth People's Hospital[2])

**P-061 (OP02-02)** Null mutation of Nolz-1/Zfp503 in mesenchymal cells acts non-cell autonomously to influence differentiation of epithelial cells in developing mouse lung

○Shih-Yun Chen, Fu-Chin Liu (INS, National Yang-Ming Univ.)

**P-062 (FT2-08)** Oct60 is involved in the PGC formation as a germplasm component.
Oct60 は生殖細胞質の構成因子であり、始原生殖細胞形成に関与する。

○Keisuke Morichika[1], Keigo Shimada[1], Hideo Kubo[2], Tsutomu Kinoshita[1] (Dept. Life.Sci., Sch. Sci. Rikkyo Univ.[1], Tokyo Metropolitan Inst. Med. Sci.[2])

**P-063 (OP02-03)** Sequential expression of Lgr5 and Col22a1 in developing synovial joints mark the progressive differentiation of progenitor cells to articular chondrocytes

Amy Feng[1], Wilson Chan[1], Vivian Ng[1], Jia Chi Yeo[2], Sigma Stricker[3], Kathryn Cheah[1], Manuel Koch[4], Stefan Mundlos[3], Huck Hui Ng[2], ○Danny Chan[1] (HKU[1], GIS[2], MPI[3], IBC[4])

**P-064 (FT2-09)** Combinatorial expression of defined transcription factors induces ectopic neurons in *C. elegans* larvae
*C. elegans*幼虫における複数転写因子の異所発現による異所的な神経細胞の形成
○Masaki Shimojou, Shin Takagi (Div. of biol. sci., Grad. Sch. of Sci., Nagoya Univ.)

**P-065 (OP02-04)** Functional analysis of EDNRB2 in the melanocyte development and differentiation using *EDNRB2*-mutated chickens
突然変異鶏を用いたメラノサイトの発生と分化におけるエンドセリン受容体 B2 の機能解析
○Toyoko Akiyama[1], Ai Shinomiya[1], Keiji Kinoshita[2], Makoto Mizutani[2], Yasunari Kayashima[3], Yoichi Matsuda[2] (Dept. Biol., Keio Univ.[1], Agri.Biosci. Res. Centr., Nagoya Univ. Nagoya, Japan[2], Food and Nutri. Sci., Univ. of Shizuoka, Japan[3])

**P-066 (FT2-10)** The phosphoinositide kinase is necessary for polarity determination of epithelial stem cells in *C. elegans*
イノシトールリン脂質合成酵素は *C. elegans*の表皮系幹細胞の極性決定に必要である
○Naoki Yoshida[1,2], Hitoshi Sawa[1,2] (SOKENDAI[1], Multicellular Organization Lab., NIG[2])

**P-067 (OP02-05)** Sox5 is involved in fate specification of pigment cells in medaka
メダカ色素細胞分化における Sox5 の役割
○Yusuke Nagao[1], Tomoko Adachi[2,3], Atsushi Shimizu[4], Ryoko Seki[2], Chikako Inoue[2], Yasuhiro Kamei[5], Ikuyo Hara[5], Tetsuaki Kimura[6], Yoshihito Taniguchi[7], Kiyoshi Naruse[6], Robert Kelsh[3], Yuko Wakamatsu[2], Masahiko Hibi[2], Hisashi Hashimoto[2] (Grad. Sch. Sci., Nagoya Univ.[1], Biosci. Biotech. Ctr., Nagoya Univ.[2], Dept. of Biol. Biochem., Univ. of Bath[3], Dept. of Mol. Biol., Sch. of Med., Keio Univ.[4], Spectrography and Bioimaging Facility, NIBB[5], Lab. of Biores., NIBB[6], Dept. of Preventive Medicine and Public Health, Sch. of Med., Keio Univ.[7])

**P-068 (FT2-11)** PCP component VANG-1 functions in asymmetric divisions of *C. elegans* seam cell
線虫表皮幹細胞の非対称分裂における VANG-1 の役割
○Masako Yokoo, Hitoshi Sawa (Multicellular Organization Lab. NIG)

**P-069 (OP02-07)** TGF-s signals regulate the dorsoventral patterning of neurogenic ectoderm of the sea urchin embryo
TGF-s シグナルによるウニ胚神経外胚葉の背腹軸方向のパターニング
Junko Yaguchi, Noriyo Takeda, Kazuo Inaba, ○Shunsuke Yaguchi (SMRC, Univ. Tsukuba)

**P-070 (FT2-12)** Investigation of role of a novel pancreatic beta cell gene
β 細胞特異的に発現する新規遺伝子の解析
○Hisayoshi Omori[1], Soichiro Ogaki[2], Yoshinari Nakahara[3], Nobuaki Shiraki[4], Kazuhiko Kume[5], Yutaka Kikuchi[6], Shoen Kume[7] (IMEG,Kumamoto Univ[1], Department of Stem Cell Biology Institute of Molecular Embryology and Genetics Kumamoto University[2], Department of Biological Science, Graduate School of Science, Hiroshima University[3], Department of Stem Cell Biology Institute of Molecular Embryology and Genetics Kumamoto University[4], Department of Stem Cell Biology Institute of Molecular Embryology and Genetics Kumamoto University[5], Department of Biological Science, Graduate School of Science, Hiroshima University[6], Department of Stem Cell Biology Institute of Molecular Embryology and Genetics Kumamoto University[7])

**P-071 (OP02-08)** Identification of novel maternal neurogenic genes that are potential components of Notch signaling in *Drosophila*
ショウジョウバエを用いた Notch 情報伝達系における新規構成因子の探索
○Takuma Gushiken[1,2], Kenjiroo Matsumoto[1], Ryo Hatori[1,2], Tomoko Yamakawa[1], Takeshi Sasamura[1], Kenji Matsuno[1] (Osaka University[1], Dept of Biol. / Tec., Tokyo Univ of Sci.[2])

**P-072 (FT2-13)** Identification of novel genes involved with mesoderm formation by the analysis of nanog-responsive genes in Xenopus
アフリカツメガエルにおける Nanog 応答性遺伝子の解析による、中胚葉形成に関与する新規遺伝子の同定
○Kentaro Ishii[1], Aya Miyazaki[1], Shinya Matsukawa[1], Yuzuru Ito[2], Yasuko Onuma[2], Tatsuo Michiue[1] (Graduate School of Arts and Sciences, the University of Tokyo[1], Research Center for Stem Cell Engineering, National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba City, Ibaraki, Japan[2])

**P-073 (OP04-01)** Roles of the zinc finger protein Zbtb11 and phosphorylation modification in the regulation of Otx2 activity in early Xenopus eye development
Xenopus の眼の初期形成に関わる Otx2 のリン酸化修飾と活性調節における Zn フィンガー蛋白質 Zbtb11 の役割
○Yumeko Satou[1], Erina Hosono[1], Kohei Minami[1], Takashi Shibano[1], Hiroshi Mamada[1], Shuji Takahashi[2], Makoto Asashima[3], Masanori Taira[1] (Dept. of Biol.Sci, Grad. Sch. of Sci., Univ. of Tokyo[1], KOMEX[2], AIST[3])

**P-074 (FT2-14) (SW1-05)** LGR4 is required for development and maintenance of mammary gland
LGR4 は乳腺組織の発達と維持に必要である
○Kazunori Oyama, Yasuaki Mohri, Mizuki Sone, Katsuhiko Nishimori (Lab. Mol. Biol., Grad. Sch. of Agr. Sci., Univ. of Tohoku)

**P-075 (OP04-03)** Novel transgenic tool to live monitor the morphology and behavior of Neurogenin2-expressing cells in the developing mammalian brain
○Takumi Kawaue, Ken Sago, Mayumi Okamoto, Tomoyasu Shinoda, Ayano Kawaguchi, Takaki Miyata (Cell Biology, Nagoya University, Graduate School of Medicine)

**P-076 (FT2-15)** MECHANICAL STRESS INDUCES MUSCLE CELL DIFFERENTIATION AND ADAPTS LIPID METABOLISM TO ENERGY DEMAND
メカニカルストレスは細胞内の代謝変化を誘導し細胞分化を制御する
○Kota Miyasaka, Eriko Sato, Toshihiko Ogura (IDAC)

**P-077 (OP04-04)** Investigating the roles of developmentally coordinated change of energy metabolism during mouse neural tube closure
マウス神経管閉鎖期に生じるエネルギー代謝状態変化の意義の解明
○Hidenobu Miyazawa[1], Yoshifumi Yamaguchi[1,2], Masayuki Miura[1,3] (Dept. Genetics, Grad. Sch. Pharm. Sci., Univ. Tokyo[1], PREST, JST[2], CREST, JST[3])

**P-078 (FT2-16)** Transcription factor Blimp-1 controls the fat body remodeling in *Drosophila*
○Abdelrahman Sultan[1] (Okayama Univ.[1], HITOSHI UEDA[2])

**P-079 (OP04-05)** Downregulation of Etv2 promotes endothelial to hematopoietic fate transition
○Makoto Kobayashi, Miki Takeuchi, Mana Watanabe, Miho Takeuchi (Univ. Tsukuba, Fac. Med.)

**P-080 (OP04-06)** Regulation of red blood cell transition from larval to adult type during anuran metamorphosis
無尾類変態期における赤血球転換機構の解析
○Masahiro Yamaguchi[1,3], Yui Kawaguchi[2], Iyo Matsuda[1], Tsutomu Kinoshita[3] (Dept. Chem. Biochem., Suzuka Natl. Coll. Tech.[1], Adv. Appl. Chem. Mat. Eng., Suzuka Natl. Coll. Tech.[2], Dept. Life Sci., Coll. Sci., Rikkyo Univ.[3])

**P-081 (FT2-05) (SW1-06)** Extracellular syntaxin4 triggers the differentiation program in teratocarcinoma F9 cells with impacts on cell adhesion properties.
テラトカルシノーマ F9 細胞における細胞外シンタキシン 4 の細胞接着と分化への

影響
○Natsumi Hagiwara, Yohei Hirai (Dep. Bioscience, Grad. Sch. Sci. Technol., Kwansei Gakuin Univ.)

**P-082 (OP02-01)**

IRSp53 family of I-BAR domain proteins regulates microvillus morphogenesis by sculpting the apical plasma membrane.
IRSp53 ファミリータンパク質は I-BAR ドメインの膜変形活性により微絨毛の形態形成を制御する
○Shusaku Kurisu, Tadaomi Takenawa (ICMS, Kobe Univ. Grad. Schl. of Med.)

**P-083 (FT2-06)**

Spatial distribution of Wnt protein in the mouse neural tube
マウス神経管発生における Wnt タンパク質の空間分布の解析
○Takuma Shinozuka[1,2], Ritsuko Takada[2], Shinji Takada[1,2] (Dept. Basic Biology, SOKENDAI[1], Okazaki Institute for Integrative Biosciences, National Institutes of Natural Sciences[2])

**P-084 (OP02-06)**

In vivo collective migration requires N-Cadherin endocytosis controlled by LPA/Edg4 signalling.
生体内集団的細胞遊走には LPA/Edg4 シグナルによって制御される N-cadherin のエンドサイトーシスが必要である
○Sei Kuriyama[1,2], Eric Theveneau[2], Alexandre Benedetto[3], Alexandre Kabla[4], Guillaume Charras[3], Masamitsu Tanaka[1], Maddy Parsons[5], Roberto Mayor[2] (Akita University[1], UCL, Cell and Developmental Biology Department, UK[2], UCL, London Centre for Nanotechnology, UK[3], Cambridge Univ., UK.[4], King's College London, Randall Division for Biophysics, UK[5])

**P-085 (OP04-02)**

Genetic labeling and ablation of mouse Shh-expressing cells during cortical neurogenesis at late gestation
マウス胎生後期の大脳皮質内での神経発生におけるソニックヘッジホッグ発現細胞の遺伝的検出及び除去
○Jun Motoyama (Brain Science, Doshisha Univ.)

**P-086 (FT2-07) (SW1-07)**

Optimal cellular mobility for synchronization arising from the gradual recovery of intercellular interactions
遺伝子発現の同期を達成するための最適な細胞移動率
○Koichiro Uriu[1], Saul Ares[2], Andrew Oates[3], Luis Morelli[4] (Theoretical Biology Laboratory, RIKEN ASI, Japan[1], Logic of Genomic Systems Laboratory, CNB, CSIC, Spain[2], MRC NIMR, UK[3], Departamento de Fisica, FCEyN UBA and IFIBA, CONICET, Argentina[4])

**P-087 (OP04-07)**

Role of Integrin β1 in endothelial cells
血管内皮細胞における Integrin β1 の機能解析
○Kenichi Kanai[1,2], Hiroyuki Yamamoto[2], Manuel Ehling[2], Erina Kuranaga[1], Ralf Adams[2] (RIKEN, CDB[1], MPI, Münster[2])

**P-088 (FT2-01) (SW1-08)**

The subcellular localization of cyclin B2 is required for bipolar spindle formation in meiosis I during Xenopus oocyte maturation
サイクリン B2 の細胞内局在はアフリカツメガエル卵成熟過程の二極性紡錘体形成に必要である
○Satoshi Yoshitome[1], Nobuaki Furuno[2], Claude Prigent[3], Eikichi Hashimoto[4] (Fac. Pharm., Iwaki Meisei Univ.[1], Lab. Amphibian Biol., Grad. Sch. Sci.,Hiroshima Univ.[2], Inst. Genet., Dev. Rennes, Univ. Rennes 1[3], Dept. Biomed. Sci., Sch. Life Sci., Tottori Univ.[4])

**P-089 (OP18-04)**

Stress response to DNA damage and control of apoptosis in germinal stem cell
生殖幹細胞における DNA 損傷応答とアポトーシスについて
○Natsuko Iyoda[1], Mai Akihisa[1], Nami Ueda[1], Keisuke Fukuo[2], Kentaro Yomogida[3] (Mukogawa Women's Univ Human Env Sci[1], Dept. of Food Scis. & Nutrition, Sch. of Humam Env. Sci., Mukogawa Woman's Univ[2], IBS[3])

**P-090 (FT4-14)** Differentiation and cell death in the Xenopus ectodermal cell mass treated with bFGF protein

bFGF タンパクで処理した Xenopus 外胚葉細胞における分化と細胞死

○Hirotaka Kato[1], Takayuki Nosaki[1], Tomohiro Narita[2], Shinichiro Nishimatsu[2], Tsutomu Nouno[2], Masao Sakai[1] (Chemistry and BioScience, Graduate School of Science and Engineering, Kagoshima University[1], Department of Molecular and Developmental Biology, Kawasaki Medical School[2])

**P-091 (OP18-05)** Syntaxin18 cis-SNARE complex is a novel alarm factor that detects vesicular transport defects

Syntaxin18 複合体は小胞輸送の異常を監視する役割を果たす

○Yuko Nishiwaki, Asuka Yoshizawa, Yutaka Kojima, Eri Oguri, Shohei Nakamura, Shohei Suzuki, Junichi Yuasa-Kawada, Mariko Kinoshita-Kawada, Toshiaki Mochizuki, Ichiro Masai (OIST)

**P-092 (FT4-15)** Klf8 Is Essential for the Survival of Purkinje and Eurydendroid Cells in the Cerebellum of Zebrafish

○Ming-Yuan Tsai[1], Yu-Fen Lu[2], Chang-Jen Huang[1,3], Sheng-Ping Hwang[1,2] (GILS, NDMC, Taiwan[1], ICOB, Academia Sinica, Taiwan[2], IBC, Academia Sinica, Taiwan[3])

**P-093 (OP18-06)** Characterization of Integrins function in specific cells for cell-corpses engulfment in Caenorhabditis elegans

○Tsung-Yuan Hsu, Hsiao-Han Hsieh, Hang-Shiang Jiang, Yi-Chun Wu (IMCB, Taiwan Univ)

**P-094 (FT4-16)** Wallenda regulates JNK-mediated cell death and migration in Drosophila

○Xianjue Ma, Yujun Chen, Lei Xue (SLST, Tongji Univ.)

**P-095 (OP18-07)** Protogenin Prevents Premature Apoptosis of Rostral Cephalic Neural Crest Cells by Activating the α5β1 Integrin

○Yu-Chiuan Wang, Hsien-Chia Juan, Yu-Hui Wong, Wei-Chih Kuo, Yi-Ling Lu, Shu-Fen Lin, Chia-Jing Lu, Ming-Ji Fann (Institute of Neuroscience, NYMU)

**P-096 (OP08-01)** Evidence for multiple opsin phototransduction pathways in larvae of a reef-building coral (Cnidaria: Anthozoa: Hexacorallia: Scleractinia)

○Benjamin Mason[1], David Miller[2] (ARC CofECRS, James Cook Univ.[1], Sch. Pharm & Mol Sci, ARC CofECRS, James Cook Univ.[2])

**P-097 (FT2-02)** The acto-myosin system and TGF-βsignaling were involved in the cell sorting process in *Xenopus laevis* embryonic cells

アクトミオシン系と TGF-β シグナリングは、アフリカツメガエル胚の胚細胞における細胞選別過程に関与する

○Ayano Harata (Dep. Bio. Sci. Fac. Life and Environ. Sci., Shimane Uni.)

**P-098 (OP08-02)** Molecular basis of stripe pattern formation in zebrafish

ゼブラフィッシュの体表模様形成機構

○Masakatsu Watanabe[1], Daisuke Watanabe[1], Tomoki Nishida[2], Shigeru Kondo[1] (FBS, Osaka Univ.[1], UHVEM, Osaka Univ.[2])

**P-099 (OP08-03)** Mib1 regulates cell migration via ubiquitination of p120ctn

○Takamasa Mizoguchi[1,3], Kazuya Hirose[2], Shoko Ikeda[3], Saori Watanabe[3], Motoyuki Itoh[1,3] (Grad. Sch. of Pharm. Sci., Chiba Univ.[1], Div. of Bio. Sci., Grad. Sch. of Sci., Nagoya Univ.[2], Fac. of Pharm. Sci., Chiba Univ.[3])

**P-100 (FT2-03)** The involvement of ubiquitin carboxy-terminal hydrolase 37 (UCH37) in Wnt/b-catenin signaling pathway during xenopus development

○Wonhee Han, Seungjoon Lee, Jin-Kwan Han (Department of Life Science, POSTECH, Republic of Korea)

**P-101 (OP08-04)** Identification of genetic modifiers that interact with *pecanex*, encoding a component of Notch signaling in *Drosophila*
Notch 情報伝達系の構成遺伝子 *pecanex*と遺伝的相互作用を示す遺伝子の網羅的探索
○Tomoko Yamakawa[1], Yu Atsumi[1,2], Shiori Kubo[1], Kenji Matsuno[1] (Dept. of Biol. Sci., Grad. school of Sci., Osaka Univ.[1], Dept. of Biol./Tec., Tokyo Univ. of Sci.[2])

**P-102 (OP08-05)** IKKε antagonizes PKC-dependent inhibitory phosphorylation of Singed/Fascin to promote paracrystalline actin bundle assembly
IKKε はアクチン束化タンパク質 Singed/Fascin を PKC による抑制的リン酸化から保護することによって結晶状のアクチン束形成を促進する
○Tetsuhisa Otani[1], Takuya Maeda[1], Kazuyo Misaki[2], Shigenobu Yonemura[2], Shigeo Hayashi[1] (RIKEN CDB, Lab for Morphogenetic Signaling[1], RIKEN CDB, Electron Microscope Lab[2])

**P-103 (FT2-04)** SH2B1β promotes neurite formation and neuronal branching through interacting with IRSp53 and Eps8
○Chien-Jen Chen, Linyi Chen (Institute of Molecular Medicine, NTHU, Taiwan)

**P-104 (OP08-06)** Expression profile of ORC and MCM complex in the anterior and posterior to Morphogenic furrow of Drosophila eye disc.
ショウジョウバエ複眼原基の分化決定した細胞群と未分化細胞群における MCM, ORC の発現パターン
○Hidetsugu Kohzaki[1], Yota Murakami[1,2] (Dept. Cell Biol., IVR, Kyoto Univ.[1], Dept. Chem., Facu., Science, Hokkaido Univ.[2])

**P-105 (OP08-07)** Nuclear Body Paraspeckles Are Essential for the Formation of Functional Corpus Luteum
核内構造体パラスペックルは機能的な黄体形成に必須である
○Shinichi Nakagawa[1], Tetsuro HIrose[2] (RNA Biol Lab, RIKEN[1], BIRC, NAIST[2])

**P-106 (OP08-08)** Cell polarity suppresses Hippo signaling through the regulation of Angiomotin distribution in preimplantation mouse embryos
細胞極性の Angiomotin 分布制御によるマウス着床前胚 Hippo 経路の制御機構
○Yoshikazu Hirate[1], Shino Hirahara[6], Atsushi Suzuki[2], Vernadeth Alarcon[3], Yohei Yoshihama[4], Kazunori Akimoto[2], Takaaki Hirai[4], Takeshi Hara[4], Kazuhiro Chida[4], Shigeo Ohno[2], Yusuke Marikawa[3], Akihiko Shimono[5], Hiroshi Sasaki[1] (IMEG, Kumamoto Univ.[1], Yokohama City Univ[2], Univ of Hawaii, USA[3], Univ of Tokyo[4], Trans Genic, Inc[5], RIKEN CDB[6])

**P-107 (OP05-01)** Expression timing of *Gdf11* reveals positional diversity of the hindlimb in tetrapods
*Gdf11*発現開始タイミングの種間の違いが四肢動物における後肢の位置の多様性を生み出す
○Yoshiyuki Matsubara[1], Ayumi Hattori[2], Yusuke Watanabe[2], Toshihiko Ogura[2], Se-Jin Lee[3], Atsushi Kuroiwa[1], Takayuki Suzuki[1,4] (Div of Biol Sci, Grad Sch of Sci, Nagoya Univ.[1], IDAC, Tohoku Univ.[2], Sch of Med, Johns Hopkins Univ, USA.[3], JST PRESTO[4])

**P-108 (FT6-01)** Innovative photomicroscopy and inhibitor approaches to understanding the mechanisms of building up the spiculous skeleton of the freshwater sponge *Ephydatia fluviatilis*
カイメンの体を成長させる骨片骨格はどの様に組み上げられるのか―骨片を立ち上げる機構の解析―
○Kotoe Kawai, Kiyokazu Agata, Noriko Funayama (Dept. of Biophysics, Graduate school of Science, Kyoto Univ.)

**P-109 (OP05-02)** Transcriptional regulation mechanisms of mesenchymal *Fibroblast growth factor 10* expression in response to the AER signaling

AER 由来シグナルによる肢芽間充織 *Fgf10*の転写制御機構
○Yo-ichi Yamamoto-Shiraishi, Hiroaki Higuchi, Shigeki Yamamoto, Mie Hirano, Atsushi Kuroiwa (Div. of Biol. Sci., Grad. Sch. of Sci., Nagoya Univ.)

**P-110 (FT6-02)** Positive feedback mechanism in the simultaneous cell differentiation in Dictyostelium discoideum
Positive feedback を介した細胞性粘菌における同調的な細胞分化機構
○Toru Uchikawa[1], Masahiro Ueda[1,2] (Grad. Sch. of Sci., Osaka Univ.[1], RIKEN QBiC[2])

**P-111 (OP05-03)** *Hox* and *Wnt* signaling cooperatively control *Fgf10* expression in the limb field
*Hox*と *Wnt* シグナルは予定肢芽領域における *Fgf10*発現を協調的に制御する
Taishi Ueta, Hiroyuki Inaba, Takehiro Hitokoto, Yo-ichi Shiraishi, Takayuki Suzuki, ○Atsushi Kuroiwa (Div. of Biol. Sci., Grad. Sch. of Sci., Nagoya Univ.)

**P-112 (FT6-03)** Efficient EGL-17/FGF secretion by epidermal cells in *C. elegans* requires components of the synaptic vesicle recycling machinery
*C. elegans* 表皮細胞における効率的な EGL-17/FGF に分泌にはシナプス小胞リサイクリング機構で機能する因子を必要とする
○Hiroki Tanaka, Masaki Shimojou, Shin Takagi (Div. of Bio. Sci., Grad. Sch. of Sci., Nagoya Univ.)

**P-113 (OP05-04)** Coordination between tubular elongation and cell epithelialization is regulated by FGFs emanating from surrounding tissues
管組織の伸長と細胞上皮化のコーディネーションは周囲組織からの FGF シグナルによって制御される
○Yuji Atsuta[1,2], Yoshiko Takahashi[1] (Grad. Sch. of Sci., Kyoto Univ.[1], NAIST, Biol. Sci.[2])

**P-114 (FT6-04)** Analysis of Heparan Sulfate function during C. elegans anchor cell invasion
C. elegans のアンカー細胞浸潤時におけるヘパラン硫酸の機能解析
○Shinji Ihara[1], Sherwood David[2], Hitoshi Sawa[1] (Multicellular Lab, NIG.[1], Duke University, Department of Biology[2])

**P-115 (OP05-05)** Oriented cell division for the formation of the body midline
生体の正中線づくりにおける細胞分裂の方向付け
○Tadayoshi Watanabe[1,2], Gary Liu[1], Takashi Mikawa[1] (CVRI, UCSF[1], Zoology, Kyoto Univ.[2])

**P-116 (FT6-05)** Single-minded regulates specification of ventral cell fates in Daphnia magna
オオミジンコ single-minded ホモログは腹部特異化を制御している
○Shinichi Morita[1], Chisato Hiraga[1], Taisen Iguchi[2], Yasuhiro Shiga[1], Shinichi Tokishita[1], Toshihiro Ohota[1] (LEMB at TUPS[1], Div. of Mol. Env. End., NIBB[2])

**P-117 (OP05-06)** Metabolic dynamics and function during somitogenesis
体節形成過程における代謝経路の役割
○Masayuki Oginuma, Philippe Moncuquet, Pourquié Olivier (IGBMC)

**P-118 (FT6-06)** Gene expression of twinning formation in Xenopus laevis embryo-#2
アフリカツメガエル 2 次胚形成における遺伝子発現ーその 2
○Eiji Sato[1], Yasuko Onuma[3], Michio Fujie[2], Naoki Adati[2], Tadayosi Uezato[1], Naoyuki Miura[1], Yuzuru Ito[3] (Dept. of Biochem., Hamamatsu Univ. Sch. of Med.[1], REC, Hamamatsu Univ. Sch. of Med.[2], AIST[3])

**P-119 (OP05-07)** Lfng regulates the synchronized oscillation of the mouse segmentation clock via trans-repression of Notch signalling
Lfng は周囲の細胞の Notch シグナルをトランスに抑制することでマウス体節時計の同調機構を制御する
○Yusuke Okubo[1], Takeshi Sugawara[2], Natsumi Abe-Koduka[3], Jun Kanno[1], Akatsuki Kimura[2], Yumiko

Saga[3] (NIHS[1], NIG[2], NIG[3])

**P-120 (FT6-07)** Differential expression patterns of two types of medaka periostin during development and adulthood
発生期と成体における 2 種類のメダカペリオスチンの発現解析
○Kohei Ito, Masanobu Nishidate, Taku Akiyama, Mai Morioka, Shun Kimura, Akira Kudo (Dept.Biol. Info., Tokyo Inst. Tech.)

**P-121 (OP05-08)** Understanding the Role of Wnt5a in the Morphogenesis of the Vertebrate Body Plan
マウス初期胚形態形成における Wnt5a の役割
○Rieko Ajima[1,2,3], Prabhakar Gudla[2], Kristin Biris[2], Lino Tessarollo[2], Stephen Lockett[2], Mark Lewandoski[2], Hiroshi Hamada[3], Yumiko Saga[1], Terry Yamaguchi[2] (NIG[1], NCI-Frederick, NIH[2], Grad. School of Frontier Biosciences, Osaka Univ.[3])

**P-122 (FT6-08)** A transmembrane metalloprotease ADAM10a regulates behaviors of primitive erythroblasts and vascular formation in zebrafish development.
ゼブラフィッシュの発生において膜型メタロプロテアーゼ ADAM10a は赤芽球の移動および脈管形成に関与する
Anna Tomosawa, ○Atsuo Iida, Atsuko Sehara-Fujisawa (Ins. for Front. Med. Sci., Kyoto University)

**P-123 (OP07-01)** Hox gene overexpression in cranial neural crest cells is sufficient for first-to-second pharyngeal arch transformation and reveals a possible Hox/Dlx crosstalk
Hox 遺伝子の過剰発現により、頭頚部神経堤細胞限定的な Hox 遺伝子の発現が鰓弓の領域化に十分条件であること、Hox 遺伝子と Dlx 遺伝子の相互作用の可能性があることが明らかになった
○Taro Kitazawa[1], Kou Fujisawa[1], Yuichiro Arima[1], Yumiko Kawamura[1], Tsuyoshi Inoue[2,3], Youichiro Wada[2], Takahide Kohro[2,4], Hiroyuki Aburatani[5], Tatsuhiko Kodama[2], Kisung Kim[1], Takahiro Sato[1], Yasunobu Uchijima[1], Giovanni Levi[6], Yukiko Kurihara[1], Hiroki Kurihara[1] (Dept. Physiol. Chem. & Metab., Grad. Sc. of Med., Univ. of Tokyo[1], RCAST[2], Dept. Nephrology & Endocrinology., Grad. Sc. of Med., Univ. of Tokyo[3], Dept Translational Research Healthcare & Clinical Science., Grad. Sc. of Med., Univ. of Tokyo[4], RCAST[5], Evolution des Regulations Endocriniennes, CNRS, UMR7221, Museum National d’ Histoire Naturelle[6])

**P-124 (FT6-09)** Irxl1 is regulated by Mef2ca in pharyngeal arch morphogenesis of zebrafish
○Han-Ni Chuang[1,2], Meng-Wei Li[2], Kuang-Ming Hsiao[1], Huichin Pan[2] (Department of life Science, Institute of Molecular Biology, NCCU[1], Department of Biomedical Sciences, CSMU[2])

**P-125 (OP07-02)** Seven-pass transmembrane cadherin Celsr1 regulates cell polarity and three-dimensional morphogenesis in the mouse oviduct epithelium.
7 回膜貫通型カドヘリン Celsr1 はマウス卵管において上皮細胞の極性と 3 次元形態の形成を制御する。
○Dongbo Shi[1,2], Kouji Komatsu[1], Hiroshi Koyama[1], Mayumi Hirao[1], Fadel Tissir[3], Andre Goffinet[3], Tadashi Uemura[2], Toshihiko Fujimori[1,4] (NIBB[1], Kyoto Univ.[2], UCL[3], CREST, JST[4])

**P-126 (FT6-10)** Low temperature mitigates cardia bifida in zebrafish embryos
○Che-Yi Lin[1], Cheng-Chen Huang[2], Wen-Der Wang[3], Chung-Der Hsiao[4], Ching-Feng Cheng[5], Yi-Ting Wu[6], Yu-Fen Lu[6], Sheng-Ping Hwang[1,6] (IBB, NTOU, Taiwan[1], DB, UWRF, USA[2], GIAB, NCYU, Taiwan[3], DBT, CYCU, Taiwan[4], DP, TCGH, Taiwan[5], ICOB, Academia Sinica, Taiwan[6])

**P-127 (OP07-03)** Dysregulation of *Aqp3* and endolymphatic hydrops in a mouse model of campomelic dysplasia
Irene.Y.Y. Szeto[1], Tiffany Au[1], Daniel Chu[1], Sarah Wynn[1], Angel Mak[1], Y.S. Chan[2], Robin Lovell-Badge[3], Wood-Yee Chan[4], Mai-har Sham[1], ○Kathryn.S.E. Cheah[1] (Department of Biochemistry, The University of Hong Kong[1], Department of Physiology, The University of Hong Kong[2], Division of

Developmental Genetics, MRC National Institute for Medical Research[3], Department of Anatomy, The Chinese University of Hong Kong[4])

**P-128 (FT6-11)** Hemodynamically controlled nuclear shuttling of Mrtf-b and its functional role in cardiac development and circulatory homeostasis
メカニカルストレス依存的な Mrtf-b の核移行による心臓発生と心機能の恒常性維持機構
○Hideto Osada, Masato Kimura, Kota Miyasaka, Yusuke Watanabe, Toshihiko Ogura (IDAC)

**P-129 (OP07-04)** How are the spicule hold-up points regulated? ― Observed spicule hold-up process suggests the involvement of the shape of the body space in regulation of where spicules are held up
骨片を立てる位置はどの様に決まるのか？ 「骨片の一端を持ち上げ立ちあげる過程」から見えてきた体内空間の関与
Kotoe Kawai, Kouji Kishimoto, Chihiro Inui, Kiyokazu Agata, ○Noriko Funayama (Dept. Biophysics, Graduate School of Science, Kyoto-Univ.)

**P-130 (FT6-12)** Quantification of mechanical force driving the left-handed twisting of the gut epithelial tube in *Drosophila*
ショウジョウバエにおける消化管上皮の反時計回りの捻転を引き起こす機械的な力の定量化
○Mai Adachi[1], Naotaka Nakazawa[1,3], Reo Maeda[3], Shukei Sugita[2], Takeo Matsumoto[2], Kenji Matsuno[1] (Dept. of Biol. Sci., Osaka Univ[1], Dept. of Mech. Eng., Nagoya Inst. of Tech.[2], Dept. of Biol. Sci / Tec., Tokyo Univ.[3])

**P-131 (OP07-05)** CXCR7 signaling modulates cell-cell adhesion in Xenopus mesendoderm cells
ツメガエル CXCR7 情報伝達経路は細胞間接着を制御する
○Akimasa Fukui, Kazuya Furusawa, Naoki Sasaki (Transd. Life Sci., Grad. Sch. Life Sci., Hokkaido Univ.)

**P-132 (FT6-13)** Formation of fin-specific structures (fin-ray) in zebrafish development
ゼブラフィッシュの発生における鰭条構造の形成機構
○Tohru Yano, Hitoshi Yokoyama, Koji Tamura (Dept. Dev. Biol. and Neurosci., Grad. Sch. Sci., Tohoku Univ.)

**P-133 (OP07-06)** Regulation of paraxial protocadherin (PAPC) by a phosphorylation-dependent ubiquitin system is required for *Xenopus* early development
リン酸化依存的なユビキチン化による paraxial protocadherin (PAPC) の調節はアフリカツメガエルの初期発生に必須である
○Masatake Kai[1,2], Noriyuki Kinoshita[2] (Grad. Sch. of Med., Osaka City Univ.[1], NIBB[2])

**P-134 (FT6-14)** Cux2 refines the position of limbs along the rostral-caudal axis during chick development
○Shogo Ueda[1], Yasuko Kanazawa[1], Natsuno Suda[1], Ryo Yamada[1], Hisanobu Shimamura[1], Ryuichiro Nakato[2], Katsuhiko Shirahige[2], Mikiko Tanaka[1] (Tokyo Tech.[1], IMCB, Tokyo Univ.[2])

**P-135 (OP07-07)** Planar Cell Polarity directs Septin-mediated compartmentalization of cortical actomyosin
○Asako Shindo, John Wallingford (HHMI and UT Austin)

**P-136 (FT6-15) (SW2-03)** Analysis of the function of *Fgf10* chromosomal enhancers that control limb specific expression
*Fgf10*の発現を肢芽特異的に制御するエンハンサーの機能解析
○Chisa Ando[1], Yu-go Yokota[1], Yu-hei Kohara[1], Yo-ichi Yamamoto-Shiraishi[1], Yo-ichi Mizushina[2], Tomoko Sagai[2], Toshihiko Shiroishi[2], Atsushi Kuroiwa[1] (Div. of Biol. Sci., Grad. Sch. of Sci., Nagoya Univ.[1], Mammalian Genetics Laboratory, National Institute of Genetics.[2])

**P-137 (OP07-08)** March2 inhibits the Wnt signaling pathways by promoting Dishevelled degradation during Xenopus development

○Hyeyoon Lee[1], Seong-Moon Cheong[2], Gun-Sik Cho[3], Jin-Kwan Han[1] (Department of Life Science, POSTECH, Republic of Korea[1], The F. M. Kirby Neurobiology Center, Harvard Medical School, USA[2], Johns Hopkins University School of Medicine, USA[3])

**P-138 (FT6-16)** Transcriptome analyses of flounder metamorphosis left-right asymmetric differentiation

ヒラメ変態の左右非対称化プロセスのトランスクリプトーム解析

○Hayato Yokoi, Xiaoming Wu, Yoshifumi Sakai, Tohru Suzuki (Grad Schl Agricul Sci, Tohoku Univ)

**P-139 (OP10-01)** Involvement of microtubule-dependent transport of Wnt signaling components in zebrafish dorsal determination

セブラフィッシュ背側決定における Wnt シグナルコンポーネントの微小管依存性輸送の関係

○Hiromu Hino[1,2], Ryoko Seki[1,2], Long Tran[3], Takashi Shimizu[1,2], Karuna Sampath[3], Masahiko Hibi[1,2] (DBS, Nagoya univ.[1], BBC,Nagoya univ[2], TLSL[3])

**P-140 (FT6-17)** Reduced cell number in the hindgut epithelium disrupts hindgut left-right asymmetry in a mutant of *pebble*, encoding a RhoGEF, in *Drosophila* embryos

RhoGEF をコードする *pebble*の突然変異体におけるショウジョウバエ胚後腸上皮の細胞数の減少が後腸の左右非対称性を乱す

○Mitsutoshi Nakamura[1], Kenjiroo Matsumoto[1], Yuta Iwamoto[1,2], Ryo Hatori[1,2], Kenji Matsuno[1] (Dept of Biol. Sci, Osaka Univ[1], Dept of Biol Sci and Tech, TUS[2])

**P-141 (OP10-02)** Locomotive activity of Xenopus primordial germ cell is regulated by extracellular signals involving SDF-1.

ゼノパス始原生殖細胞の移動能は SDF-1 を含む細胞外シグナルにより制御される

Kohei Terayama, Hidefumi Orii, Kenji Watanabe, ○Makoto Mochii (Grad. Sch. Life Sci., Univ. Hyogo)

**P-142 (OP10-03)** Multiple origins of myeloid cells in *Xenopus* embryo

ゼノパス胚には 3 つの骨髄球の起源がある

○Mitsugu Maeno, Yasutaka Imai, Hiroyuki Sakata (Grad. Sch. Sci. Tech., Niigata Univ.)

**P-143 (FT6-19)** Wnt signaling regulates the left-right axis formation in the node of mouse embryos

マウス左右軸形成における Wnt シグナルの役割

○Keiko Kitajima, Shinya Oki, Tomoyuki Sumi, Chikara Meno (Kyushu Univ.)

**P-144 (OP10-04)** Spatio-temporal activation of ERK1/2 through VEGFRs regulates establishment and formation of segmental artery in zebrafish

VEGFR を介した時間的空間的 ERK の活性化はゼブラフィッシュにおける体節間動脈の確立と形成維持に重要な働きを示す

○Masahiro Shin, Nathan Lawson (UMASSMED)

**P-145 (FT6-20) (SW2-01)** Temporal observation of the influence of the Fgf signal about somite formation

体節形成における Fgf シグナルの影響の経時的な観察

○Kenji Maekubo, Yohei Hirai (Grad. Sch. of Sci. and Tech., Kwanseigakuin Univ.)

**P-146 (OP10-05)** Klf8 is required for cardiac Left-Right patterning through regulation of *spaw* expression in zebrafish embryos

○Sheng-Ping Hwang[1,2], Che-Yi Lin[2], Ming-Yuan Tsai[3], Yi-Chung Chen[1], Yu-Fen Lu[1], Hsin-Chi Liao[1], Chang-Jen Huang[4] (ICOB, Academia Sinica, Taipei, Taiwan[1], Institute of Bioscience and Biotechnology, National Taiwan Ocean University, Keelung, Taiwan[2], Graduate Institute of Life Sciences, National Defense Medical Center, National Defense University, Neihu, Taipei, Taiwan[3], Institute of Biological Chemistry, Academia Sinica, Taipei, Taiwan[4])

**P-147 (FT6-21)**
Ripply2-dependent negative regulation of Tbx6 is required for somitogenesis
○Wei Zhao[1,2], Yumiko Saga[1,2,3] (NIG[1], Graduated School of Science, university of Tokyo[2], Department of Genetics, SOKENDAI[3])

**P-148 (OP10-06)**
Analysis of mutant stöpsel$_{dtl28d}$ (stp) indicating the vertebral form abnormality
椎骨の形態異常を示す変異体 stöpsel$^{dtl28d}$ (stp) の解析
○Akihiro Misu, Hiroaki Yamanaka, Shigeru Kondo (Kondo S lab. FBS Osaka uni)

**P-149 (FT6-22) (SW2-02)**
Formation of the digestive tract in *Ciona intestinalis* includes two distinct morphogenic processes between its anterior and posterior parts
カタユウレイボヤにおける消化管形成：前方と後方で異なる管のでき方と細胞の由来
○Keiichi Nakazawa[1], Takumi Yamazawa[1], Yuuta Moriyama[1], Yousuke Ogura[2], Narudo Kawai[2], Yasunori Sakakura[2], Hidetoshi Saiga[1] (Dept. Biol. Sci., Tokyo Metro Univ.[1], Shimoda, Tsukuba Univ.[2])

**P-150 (OP10-07)**
Cadherin-mediated physical barrier regulates cell geometry in zebrafish lens epithelium
ゼブラフィッシュ水晶体上皮細胞においてカドヘリンの細胞接着による細胞領域間の堅さの違いが細胞形態、方向性を制御する
○Toshiaki Mochizuki[1], Shohei Suzuki[1], Asako Sakaue-Sawano[2], Atsushi Miyawaki[2], Ichiro Masai[1] (OIST[1], RIKEN BSI[2])

**P-151 (FT6-23)**
Exploring the role of atypical cadherins in collective cell migration
集団的細胞移動における非典型的カドヘリンの機能解析
○Masaki Arata[1], Yutaro Nishino[1], Kousuke Mouri[1], Yuzo Watanabe[1], Motoki Saito[1], Tadashi Uemura[1,2] (Grad. Sch. of Bio., Kyoto Univ.[1], CREST, JST[2])

**P-152 (OP13-01)**
The H3K27 demethylase, Jmjd3, regulates pax6 expression for eye development
ヒストン脱メチル化因子 Jmjd3 は、眼の発生において Pax6 の発現を制御する
○Akane Kawaguchi[1], Haruki Ochi[2], Norihiro Sudou[1], Hajime Ogino[1] (NAIST[1], Yamagata University, Faculty of medicne[2])

**P-153 (FT6-24) (SW2-08)**
Knockdown of ouro genes represses tadpole tail regression during *Xenopus* metamorphosis
オウロ遺伝子のノックダウンは変態期のツメガエル幼生の尾部退縮を抑制する
○Erisa Maruyama, Mitsugu Maeno, Yumi Izutsu (Dept. Biol., Faulty of Sci., Niigata Univ., Japan)

**P-154 (OP13-02)**
GON-1/ADAMTS and fibulin-1 act through collagen IV to control *C.elegans* organogenesis
GON-1/ADAMTS と fibulin-1 は IV 型コラーゲンを通じて線虫の器官形成を制御する
○Tomomi Takano[1], Yukihiko Kubota[2], Kiyoji Nishiwaki[1] (Dep. of Bisci. Sch. of Sci. and Tech., Kwansei Gakuin Univ.[1], Grad. Sch. of Life Sci. Tohoku Univ.[2])

**P-155 (FT3-09)**
BMP/ Smad Signaling in Mouse Sternum Development
BMP / Smad でマウス胸骨開発におけるシグナリング
○Ka Kui Tong[1], Yat Long Tsoi[1], Yuk Lau Wong[1], Kin Ming Kwan[1,2,3] (SLS, CUHK[1], CCDB, CUHK[2], SKL of Agrobiotech, CUHK[3])

**P-156 (OP13-03)**
Nuclear membrane proteins act in transport of the Netrin receptor, UNC-5 in cell migration in *C. elegans*.
細胞移動における核膜タンパク質の新たな役割
○Hon-Song Kim, Kiyoji Nishiwaki (Dep. of Biosci. Kwansei-Gakuin Univ.)

**P-157 (FT3-10)**
The dorsal aorta initiates a molecular cascade that instructs sympatho-adrenal specification
背側大動脈は交感神経および副腎髄質の前駆細胞の移動と分化を制御する司令塔

としてはたらく
○Daisuke Saito[1], Yuta Takase[1,2], Hidetaka Murai[1,2], Yoshiko Takahashi[2] (NAIST[1], Kyoto University[2])

**P-158 (OP13-04)** The origin of stem and progenitor cells in the zebrafish lateral line primordium.
ゼブラフィッシュ側線における幹細胞と前駆細胞の発生上の起源
○Masataka Nikaido, Richard Alexander, Tatjana Piotrowski (Stowers Inst.)

**P-159 (FT3-11)** Fibronectin mediates correct positioning of the interrenal organ in zebrafish
○Chih-Wei Chou, Chih-Hao Chiu, Yi-Wen Liu (Department of Life Science, Tunghai Univ., Taiwan)

**P-160 (OP13-05)** Collective unidirectional motion of epithelial cells supported by planar cell dynamics during *Drosophila* organogenesis (part I): Experimental approach
ショウジョウバエ雄性生殖器の形態形成に見られる上皮細胞の集団的一方向性運動 (part I): 実験からのアプローチ
Ayako Isomura[1], Katsuhiko Sato[2], Tetsuya Hiraiwa[2], Emi Maekawa[1], Aimi Tsukioka[1], ○Erina Kuranaga[1] (Lab. Histogenetic Dynamics, RIKEN CDB[1], Lab. Physical Biology, RIKEN CDB[2])

**P-161 (FT6-18)** The role of cell-ECM interactions in collective cellular movement during the looping morphogenesis of *Drosophila* male terminalia
細胞 -ECM 相互作用がショウジョウバエ雄性生殖器の形態形成に与える影響
○Emi Maekawa[1], Aimi Tsukioka[1], Ayako Isomura[1], Kazuyo Misaki[2], Shigenobu Yonemura[2], Erina Kuranaga[1] (Lab. Histogenetic Dynamics, RIKEN CDB[1], Electron Microscope Lab., RIKEN CDB[2])

**P-162 (OP13-06)** Collective unidirectional motion of epithelial cells induced by planar cell dynamics during Drosophila organogenesis (part II): Theoretical approach
ショウジョウバエ雄性生殖器の形態形成に見られる上皮細胞の集団的一方向性運動 (part II): 理論からのアプローチ
○Katsuhiko Sato[1], Tetsuya Hiraiwa[1], Emi Maekawa[2], Tatsuo Shibata[1], Ayako Isomura[2], Aimi Tsukioka[2], Erina Kuranaga[2] (Lab. Physical biology, RIKEN CDB[1], Lab. Histogenetic Dynamics, RIKEN CDB[2])

**P-163 (FT3-13)** Expression of *Eph/ephrin* family genes in smooth muscle of the embryonic chick digestive organs
ニワトリ胚期消化器官平滑筋組織における Eph/ephrin 遺伝子の発現
○Yasuo Ishii, Kiyoe Fujimoto, Sadao Yasugi (Fac. Life Sci., Kyoto Sangyo Univ.)

**P-164 (OP13-07)** Mathematical analysis of vascular and spot patterns by auxin and PIN dynamics in plant development
オーキシン -PIN ダイナミクスによる葉脈とスポットパターン形成の数理モデル
○Yoshinori Hayakawa[1,2], Masashi Tachikawa[2], Atsushi Mochizuki[1,2] (Dept Comput. Intelligence & Sys. Science, Tokyo Institute of Technology[1], Theoretical Biology Laboratory, RIKEN[2])

**P-165 (FT3-14) (SW1-09)** Cadherin-7 enhances sonic hedgehog signaling by inhibiting the movement of full-length Gli3 to the primary cilium
カドヘリン－ 7 は転写因子 Gli3 の移動制限によりソニックヘッジホッグシグナルを調節する。
○Rie Kawano[1], Kunimasa Ohta[2], Daisuke Niimori[3] (Dev. Neurobio. Kumamoto University[1], Division of Developmental Neurobiology, Graduate School of Medical Sciences, Kumamoto University, 1-1-1 Honjo, Kumamoto 860-8556, Japan[2], Department of Dermatology and Plastic Surgery, Graduate School of Life Sciences, Kumamoto University, 1-1-1 Honjo Kumamoto 860-8556 Japan[3])

**P-166 (OP13-08)** Analysis of pattern formation in multicellular cyanobacteria by Cellular Automaton model
セルオートマトンモデルによる多細胞性シアノバクテリアの形態形成現象の解析
○Jun-ichi Ishihara[1,2], Masashi Tachikawa[2], Hideo Iwasaki[1], Atsushi Mochizuki[2] (Dept. of Electr. Engin. and Biosci., Waseda Univ.[1], Theoretical Biology Lab., RIKEN[2])

**P-167 (FT3-15) (SW1-10)**
Study of secondary neurulation: stem cell-like behavior of neural tube precursors implicated by transplantation of EGFP-labeled tail bud
Secondary Neurulation 研究 : EGFP 標識 tail bud の移植から浮かび上がった神経管前駆細胞の幹細胞様の挙動
○Teruaki Kawachi[1], Eisuke Shimokita[2], Yoshiko Takahashi[1] (Department of Zoology, Kyoto University.[1], Graduate School of Biological Science, Nara Institute of Science and Technology.[2])

**P-168 (OP16-01)**
Regulation of Wnt and BMP signaling pathways in the regional specification of early blastoderm in the cricket Gryllus bimaculatus
○Taro Nakamura, Sumihare Noji, Taro Mito (Dept of Life Systems, Institute of Tech. and Sci., The University of Tokushima)

**P-169 (FT3-16) (SW1-11)**
Long-distance cell migrations during larval development in an appendicularian, *Oikopleura dioica*.
ワカレオタマボヤ *Oikopleura dioica* 後期発生のライブイメージングによって見出された長距離移動を示す細胞群
○Kanae Kishi, Takeshi Onuma, Hiroki Nishida (Dept. Biol. Sci., Osaka Univ.)

**P-170 (OP16-02)**
Mechanical coupling of apical membrane and luminal matrix shapes tracheal tube geometry in Drosophila
○Bo Dong[1], Edouard Hannezo[2], Jacques Prost[2,3], Jean-Francois Joanny[2], Shigeo Hayashi[1,4] (CDB[1], Physicochimie Curie (Institut Curie/CNRS-UMR168/UPMC), Institut Curie, Centre de Recherche, 26 rue d' Ulm F-75248 Paris Cedex 05, France[2], ESPCI, 10 rue Vauquelin, F-75231 Paris Cedex 05, France[3], Department of Biology, Kobe University Graduate School of Science, 1-1 Rokkodai-cho, Nada-ku, Kobe, Hyogo, 657-8051, Japan[4])

**P-171 (FT3-17) (SW1-12)**
Role of motile cilia in development and function of renal tubes in fish
魚類の腎臓発生における運動性繊毛の役割
Sayaka Tayama, Yuri Ikeda, Hitomi Igarashi, Hajime Matsui, ○Atsuko Shimada, Hiroyuki Takeda (Dep. Biol. Sci., Grad. Sch. Sci., Univ. Tokyo)

**P-172 (OP16-03)**
Cell intercalation and cell junctional length fluctuation during airway tube elongation in Drosophila elongation in Drosophila
ショウジョウバエ気管伸長における細胞境界の組みかえと細胞境界長のゆらぎの役割について
Hosei Wada, Katsuhiko Sato, Tatsuo Shibata, ○Shigeo Hayashi (RIKEN CDB)

**P-173 (FT3-18)**
A novel defined factor specifies cardiac-vascular cell fate and promotes heart regeneration
新規転写因子による心臓一血管運命決定と心臓再生
○Yuika Morita[1,2], Yuko Tsukahara[1], Peter Anderson[3], Junko Kurokawa[4], Hiroe Sugizaki[1], Ryuichi Nishinakamura[5], Tetsushi Furukawa[4], Chulan Kwon[3], Kazuko Koshiba-Takeuchi[1], Jun K. Takeuchi[1,2,6] (Cardiovas. Reg, IMCB, the Univ. of Tokyo[1], Graduate School of Sciences, the Univ. of Tokyo[2], Cardio, Johns Hopkins Univ. School of Med[3], Tokyo Medical and Dental Univ.[4], CARD, Kumamoto Univ.[5], JST PRESTO[6])

**P-174 (OP16-04)**
The HOX gene *Antp* in the visceral mesoderm *Drosophila* regulates size balance between 1st and 2nd midgut chambers
ショウジョウバエの内臓中胚葉で発現する HOX 遺伝子 Antp は中腸第 1/ 第 2 チェンバー間の大きさのバランスを制御する
Keita Fujimoto, Masahiko Arishige, Yumiko Harada, ○Ryutaro Murakami (Grad. Sch. Med., Yamaguchi Univ.)

**P-175 (FT3-12)**
Cloning of FoxN1 and its expression in Xenopus laevis.
アフリカツメガエル転写因子 FoxN1 のクローニングと発現解析

○Naoya Iimura, Hideho Uchiyama (Grad. Sch. of Nanobiosciences, Yokohama City Univ.)

**P-176 (OP16-05)** A secreted decoy of insulin-like receptor antagonizes insulin/IGF signaling to restrict body growth in *Drosophila*
ショウジョウバエ分泌型‘おとり’インスリン様受容体は、体の成長を抑制する
○Naoki Okamoto, Takashi Nishimura (RIKEN, CDB)

**P-177 (OP16-06)** Developmental evolution of the hypaxial muscles of vertebrates
脊椎動物の軸下筋発生機構の進化
○Rie Kusakabe[1], Saori Tani[1], Richard Harland[2], Shigeru Kuratani[3], Kunio Inoue[1] (Dept. Biol., Grad. Sch. Sci., Kobe Univ.[1], Mol. Cell Biol., UC Berkeley, USA[2], CDB, RIKEN, Japan[3])

**P-178 (FT5-01)** Roles of microRNAs in medaka myogenesis
メダカ胚筋形成における microRNA の役割
○Saori Tani, Rie Kusakabe, Kunio Inoue (Dept. Biol., Grad. Sch. Sci., Kobe Univ.)

**P-179 (OP16-07)** The investigation of post-transcriptional process to form adult skeletal muscle stem cells
骨格筋幹細胞の形成に関与する転写後調節機構探求
○Takahiko Sato[1], Takuya Yamamoto[2], Atsuko Sehara[1] (IFMS, Kyoto Univ.[1], CiRA, Kyoto Univ.[2])

**P-180 (OP01-01)** Role of tubulin folding pathway in neurite morphogenesis of *Drosophila* olfactory projection neuron
神経突起形成におけるチューブリン折りたたみ経路の役割
○Misako Okumura[1], Masayuki Miura[1,2], Takahiro Chihara[1,2] (Grad. Sch. Pharm. Sci., Univ. Tokyo[1], CREST, JST[2])

**P-181 (FT3-01)** Tag1-mediated early interaction between neural crest cells and motor axons in zebrafish.
神経冠細胞と運動神経軸索との相互作用における Tag1 の機能
○Mika Sato-Maeda[1,2], Wataru Shoji[1] (CIR, Tohoku Univ.[1], Grad Sci, Tohoku Univ.[2])

**P-182 (OP01-02)** Roles of Robo endocytic trafficking in acquisition of axonal responsiveness to the repellent Slit during midline crossing
正中線交叉における交連軸索の Slit 応答性の不可逆性スイッチを支える分子基盤
○Junichi Kawada[1], Mariko Kinoshita-Kawada[1], Shigeru Yanagi[2], Ichiro Masai[1], Yi Rao[3], Jane Wu[4] (OIST[1], Sch. of Life Sci. Tokyo Univ. of Pharm. Life Sci.[2], Peking Univ. Sch. of Life Sci.[3], Dept. of Neurology Northwestern Univ. Feinberg Sch. of Med.[4])

**P-183 (OP01-03)** Genetic analysis of the leucine-rich repeat molecule Capricious in synaptic-layer specificity in the Drosophila visual system
ショウジョウバエ視覚神経系における LRR 膜タンパク質 Capricious はシナプス層の特異性を決定していない
Sandra Berger-Mueller[2,3], Atsushi Sugie[2,4], Fumio Takahashi[1], Gaia Tavosanis[4], ○Takashi Suzuki[1,2] (Dept. Biosci, & Biotech., Titech[1], Max Planck Institute of Neurobiology, Martinsreid, Germany[2], CNR/UPS UMR5273 STROMA lab-Inserm U1031, Toulouse, France[3], DZNE, Bonn, Germnay[4])

**P-184 (FT3-02)** Stochastic Ca2+ waves that propagate through the neuroepithelium in various distance of the brain and retina imaged with GCaMP3 in zebrafish embryos
ゼブラフィッシュ初期胚の神経上皮でみられる特徴的な Ca2+ 濃度変化のイメージング
○Shin-ichi Okamoto, Yuuya Takimura, Tadaaki Nishioka, Masashi Nakagawa, Kohei Hatta (Univ. of Hyogo)

**P-185 (OP01-04)** Formation process of individual compartments in the cerebellum of mouse embryo
マウス小脳内における、個々の区画の形成過程

○Mitsuhiro Hashimoto, Takaki Miyata (Dep. of Cell Biol. Nagoya Univ.)

**P-186 (OP01-05)** MRE32 RNA is essential for mushroom body morphogenesis in *Drosophila* adult brain
MRE32 RNA はショウジョウバエキノコ体の形態形成に必須である
○Sachi Inagaki[1], Masanao Sato[3,4], Natsuki Nakamura[2], Satoru Kobayashi[3,4], Yuji Kageyama[1,2] (Res Ctr Environmental Genomics, Kobe Univ[1], Dpt Biol, Grad Sch Sci, Kobe Univ[2], OIIB, NINS[3], NIBB, NINS[4])

**P-187 (FT3-03) (SW2-04)** Unveiling the role of Ephrin for dendrite targeting of *Drosophila* olfactory projection neurons
ショウジョウバエ嗅覚投射神経の樹状突起領域形成におけるエフリンの機能解析
○Shirin Makihara[1], Sayaka Sekine[1], Masayuki Miura[1,2], Takahiro Chihara[1,2] (Genetics, Grad Sch Pharm Sci, Univ Tokyo[1], CREST, JST[2])

**P-188 (OP01-06)** Evidence for involvement of apoptosis in establishing proper cerebrospinal fluid hydrodynamics
脳脊髄液動態の確立におけるアポトーシスの関与
Ayako Yoshida[1], ○Yoshifumi Yamaguchi[1,2], Daisuke Kawata[1], Naomi Shinotsuka[1], Mariko Yoshida[1], Masayuki Miura[1,3] (Dept. Genet. Pharma. The Univ. of Tokyo[1], PREST, JST[2], CREST, JST[3])

**P-189 (OP01-07)** Molecular and cellular dissection of axonal pruning in *Drosophila* sensory neurons
ショウジョウバエ感覚ニューロンにおける軸索刈り込みメカニズムの探索
○Rei Morikawa, Kazuo Emoto (Dept. Cell Biol., Osaka Biosci. Inst.)

**P-190 (OP01-08)** Examination of developmental processes of the ferret cerebral cortex using in utero electroporation
子宮内電気穿孔法を用いたフェレット大脳皮質の形成過程解析
○Hiroshi Kawasaki, Tomohisa Toda, Lena Iwai (Grad Sch of Med, Kanazawa Univ)

**P-191 (FT3-04)** Development of cerebellar granule cell axons in zebrafish
ゼブラフィッシュにおける小脳顆粒細胞の軸索形成機構
○Shingo Yamaguchi[1,2], Miki Takeuchi[1], Kazuhide Asakawa[3], Koichi Kawakami[3], Takashi Shimizu[1,2], Masahiko Hibi[1,2] (Bioscience and Biotechnology Center, Nagoya Univ.[1], Graduate School of Science, Nagoya Univ.[2], National Institute of Genetics[3])

**P-192 (OP03-01)** Generation of the 3-Dimentional Multi-gene Expression Map for the Zebrafish Developing Habenular Nuclei
Guo-Tzau Wang[2], Chang-Huain Hsieh[2], Yuan-Ding Yu[3], Wei-Han Lang[1], ○Yung-Shu Kuan[1,3,4,5] (IBS, NTU, TW[1], NCHC, Taiwan[2], IBC-AS, Taiwan[3], NCSC, NTU, Taiwan[4], NPAS-AS, Taiwan[5])

**P-193 (OP03-02)** SeeDB: an aqueous optical clearing agent for imaging intact fluorescence and morphology in the mouse brain.
新奇透明化試薬 SeeDB の開発とマウス脳の蛍光イメージング
Meng-tsen Ke[1,2], Satoshi Fujimoto[1], ○Takeshi Imai[1,2,3] (RIKEN CDB[1], Grad Sch of Biostudies, Kyoto Univ[2], PRESTO, JST[3])

**P-194 (OP03-03)** Role of early intracortical activity in the maturation of neocortical circuits
初期神経活動による大脳皮質神経回路形成の制御
○Torsten Bullmann, Carina Hanashima (RIKEN CDB)

**P-195 (FT3-05)** Dmbx1 can compensate the down-regulation of Otx2 activity
Dmbx1 は Otx2 活性の下方調節を補償できる
Yousuke Ishikawa, ○Isato Araki (Iwate Univ, Fac Eng, Dept Chem Bioeng)

**P-196 (OP03-04)** How have human brains been evolved? : comparative gene expression analysis among rodents, new world monkeys and old world monkeys
齧歯類、新世界ザル、旧世界ザル間の遺伝子発現比較からヒト脳へと至る大脳皮質進化の機構を探る試み
○Eiji Matsunaga, Sanae Nambu, Mariko Oka, Michio Tanaka, Miki Taoka, Atushi Iriki (Lab for Symbolic Cognitive Development, RIKEN BSI)

**P-197 (OP03-05)** Functional analysis of RP58 transcriptional repressor in neuronal migration during corticogenesis
大脳皮質形成時の神経細胞移動における RP58 転写抑制因子の機能解析
○Chiaki Ohtaka-Maruyama, Haruo Okado (TMIMS)

**P-198 (OP03-06)** Neural-specific elimination of *Mab21l2* results in respiratory failure in mouse neonates
○Chung Man Chan, King Lau Chow (LIFS, HKUST)

**P-199 (FT3-06)** Cell death inducing mechanisms by maternal separation stress in the postnatal mouse hippocampus
隔離ストレスが仔マウスの海馬に細胞死を誘導するメカニズムの解析
○Tatsuya Katahira[1], Yutaro Miyaji[2], Rikou Fukunaga[2], Jun Motoyama[1] (Laboratory of Developmental Neurobiology, Graduate School of Brain Science, Doshisha University[1], Department of Medical Life Systems, Faculty of Life and Medical Science, Doshisha University[2])

**P-200 (OP03-07)** Interkinetic nuclear migration through TAG-1-assisted progenitor elongation prevents neuroepithelial overcrowding and ensures neocortical histogenesis
○Mayumi Okamoto[1], Takashi Namba[2], Tomoyasu Shinoda[1], Ken Sago[1], Kanako Saito[1], Akira Sakakibara[1], Ayano Kawaguchi[1], Kazunori Nakajima[3], Masahiro Ueda[4,5], Shigeo Hayashi[6], Toshihiko Fujimori[7], Kozo Kaibuchi[2], Takaki Miyata[1] (Dept Anat and Cell Biol, Nagoya Univ, Grad Sch of Med[1], Dept Cell Pharmacol, Nagoya Univ, Grad Sch of Med[2], Dept Anat, Keio Univ, Grad Sch of Med[3], Dept Biol Sci, Osaka Univ, Grad Sch of Sci[4], Lab for Cell Signaling Dynamics, QBiC,RIKEN[5], Lab for Morphogenetic Signaling, CDB, RIKEN[6], Div Embryology, NIBB[7])

**P-201 (OP11-01)** Basement membrane integrity is required for axogenesis of cerebellar granule cells.
小脳顆粒細胞の軸索伸長には正常な基底膜形成が必要である
○Miki Takeuchi[1], Shigenobu Yonemura[2], Kazuhide Asakawa[3], Koichi Kawakami[3], Shinji Takada[4], Takashi Shimizu[1], Masahiko Hibi[1] (Bioscience and Biotechnology Center, Nagoya Univ.[1], RIKEN Center for Developmental Biology[2], National Institute of Genetics[3], Okazaki Institute for Integrative Bioscience[4])

**P-202 (FT3-07)** Aromatic L-amino acid decarboxylase deficiency affects neuronal development in zebrafish
○De-fen Shih[1], Shyh-Jye Lee[1], Wang-Tso Lee[2] (Institute of Zoology, Department of Life Science, NTU[1], Development of Pediatrics, NTUH[2])

**P-203 (OP11-02)** Highly efficient transplantation into the embryonic mouse cortex reveals the acquisition of apico-basal polarity by neural progenitors derived from pluripotent stem cells
胚性幹細胞から誘導された神経前駆細胞は胎生期脳の上皮極性に従い細胞突起を形成する
Fumiaki Nagashima, ○Yoichi Kosodo (Dept. Anatomy, Kawasaki Med.)

**P-204 (OP11-03)** Sufu controls the number and cell fate of hindbrain progenitors
○Hong Huan Hor[1], XingAn Wang[1], Mai Har Sham[1], Chi Chung Hui[2,3] (Dept of Biochemistry, LKS Faculty of Medicine, HKU[1], Program in Developmental and Stem Cell Biology, The Hospital for Sick Children[2], Department of Molecular Genetics, University of Toronto[3])

**P-205 (FT3-08)** HDAC6 mutations rescue human tau-induced microtubule defects in Drosophila
Ying Xiong[1], ○Kai Zhao[1], Jiaxi Wu[1], Zhiheng Xu[1], Shan Jin[2], Yongqing Zhang[1] (IGDB, CAS[1], College of Life Sciences, Hubei University[2])

**P-206 (OP11-04)** Nemo-like kinase blocks Hedgehog signaling by phosphorylating Gli1 transcription factor in neural progenitor cells and brain tumor.
神経前駆細胞及び脳腫瘍において Nemo-like kinase は転写因子 Gli1 をリン酸化してヘッジホッグシグナルを抑制する
○Tohru Ishitani, Nobuyuki Shimizu, Shizuka Ishitani (Div. of Cell Reg. Sys., Med. Ins. of Bioreg., Kyushu Univ.)

**P-207 (FT7-06)** Lgr4 knockout mice show female hermaphroditism
雌 Lgr4 ノックアウトマウスは仮性半陰陽を示す
○Masae Koizumi[1], Kazunori Oyama[1], Akihiro Nawa[2], Katsuhiko Nishimori[1] (Lab. Mol. Biol., Grad. Sh. of univ. of Tohoku[1], Dep. Obstetrics and Gynecology, Grad. Sch. of Med., Univ. of Ehime[2])

**P-208 (OP17-06)** BMP Signaling Determines XX Germ Cell Fate independently of Retinoic Acid-induced Meiotic Initiation
○Quan Wu[1], Chu-Xia Deng[2], Yumiko Saga[1,3] (SOKENDAI[1], NIDDK[2], NIG[3])

**P-209 (FT7-07)** Identification of a genetic cause of non-regenerative head tissues in the planarian Phagocata kawakatsui
コガタウズムシにおける頭部構造再生条件の探索
○Yui Nishimura[1], Martina Hrouda[1], Eri Kawaguchi[1], Yazawa Shigenobu[2], Osamu Nishimura[2], Takeshi Inoue[1], Kiyokazu Agata[1], Yoshihiko Umesono[1] (Dept. of Biophysics Grad. School of Science, Kyoto Univ.[1], Global COE Program: Evolution and Biodiversity, Division of Biological Sciences, Graduate School of Science, Kyoto University[2])

**P-210 (FT7-08) (SW2-06)** *In vivo* model system to study the genetic program of tissue regeneration
組織再生の遺伝プログラム研究に向けた *in vivo* モデルシステムの確立
○Soshiro Kashio[1], Fumiaki Obata[1,2], Liu Zhang[1], Takahiro Chihara[1,2], Masayuki Miura[1,2] (Genetics, Grad Sch Pharm Sci, Univ Tokyo[1], CREST, JST[2])

**P-211 (OP14-01)** Wnt activation in nail epithelium couples nail growth to digit regeneration
マウスにおいて爪表皮での Wnt の活性化が爪の成長と指の再生に必要である
○Makoto Takeo[1], Wei Chin Chou[1], Qi Sun[1], Piul Rabbani[1], Cynthia Loomis[1], Makoto Taketo[2], Mayumi Ito[1] (Dermatology and Cell Biology, NYU[1], Pharmacology, Kyoto Univ.[2])

**P-212 (FT7-09)** JAK/STAT signaling promotes blastemal cell proliferation during leg regeneration in the cricket *Gryllus bimaculatus*
脚再生過程において JAK/STAT シグナルは再生芽細胞の増殖を制御する
○Tetsuya Bando[1], Taro Mito[2], Hideyo Ohuchi[1], Sumihare Noji[2] (Okayama Univ.[1], Tokushima Univ.[2])

**P-213 (FT7-10)** Analysis of the source of ‘blastema survival factor’ and its downstream signaling during the zebrafish fin fold regeneration
ゼブラフィッシュの膜ヒレ再生時における再生芽生存因子の起源とその下流シグナルの解析
○Tomoya Hasegawa, Teruhiro Nakajima, Takashi Ishida, Akira Kudo, Atsushi Kawakami (Tokyo tech)

**P-214 (OP14-02)** Epidermal Wnt/beta-catenin signalling promotes dermal adipocyte differentiation during hair follicle morphogenesis and regeneration
表皮性の Wnt/beta-catenin シグナルが毛包発生と再生時の皮下脂肪の分化を促進する
Giacomo Donati[2,3], ○Hironobu Fujiwara[1,2], Valentina Proserpio[4], Fiona Watt[2,3] (RIKEN CDB[1], Cancer

Research UK Cambridge Resesarch Institute[2], King's College London[3], MRC Laboratory of Molecular Biology[4])

**P-215 (FT7-11) (SW2-07)**
Imaging and characterization of mmp9-expressing cells during zebrafish fin regeneration using the Tol2 BAC transgenic
Tol2 BAC トランスジェニックを用いた、ゼブラフィッシュのひれ再生における mmp9 発現細胞の解析
○Kazunori Ando, Akira Kudo, Atsushi Kawakami (Tokyo Tech)

**P-216 (FT7-12) (SW2-09)**
Critical role of *fibronectin 1b* during zebrafish fin regeneration
ゼブラフィッシュひれ再生における *fibronectin 1b*の機能解析
○Eri Shibata, Emiko Murase, Akira Kudo, Atsushi Kawakami (Tokyo tech)

**P-217 (OP14-03)**
Vascular regeneration in zebrafish caudal fin.
ゼブラフィッシュにおける血管再生機構
○Yoshiko Kametani[1,2], Didier Stainier[2,3], Shinji Takada[1] (OIIB[1], UCSF[2], MPI-HLR[3])

**P-218 (FT7-13) (SW2-05)**
Transient reduction of 5-methylcytosine and 5-hydroxymethylcytosine is caused by active DNA demethylation during regeneration of zebrafish fin
ゼブラフィッシュの尾びれ再生過程では能動的 DNA 脱メチル化による
5- メチルシトシンと 5- ヒドロキシメチルシトシンの一時的な減少が生じる
○Kentaro Hirose[1], Nobuyoshi Shimoda[2], Yutaka Kikuchi[1] (Dep. of Biol. Sci., Grad. Sch, of Sci., Hiroshima Univ.[1], Dep. of Rege. Med., NCGG[2])

**P-219 (FT7-14)**
The analysis on pattern formation of the joint during newt limb regeneration
イモリの四肢再生における関節のパターン形成の解析
○Rio Tsutsumi, Shota Takemura, Miki Hiramaya, Yuko Urata, Wataru Yamashita, Takeshi Inoue, Kiyokazu Agata (Dept. of Biophys., Grad. Sch. of Sci, Kyoto Univ.)

**P-220 (OP14-04)**
Cyclooxygenase-2 signaling regulates osteoclast differentiation during fracture healing in medaka.
Cyclooxygenase-2 シグナルがメダカの骨折修復における破骨細胞分化を制御する
○Kazuhiro Takeyama[1,2], Masahiro Chatani[1], Yoshiro Takano[3], Akira Kudo[1] (Dept. of Biological Information, TokyoTech[1], JSPS Reseach Fellow[2], Sect. of Biostructural Science, Grad. Sch. of TMDU[3])

**P-221 (FT7-15)**
Comprehensive Analysis of Time-course of Gene Expression Pattern during Forelimb Regeneration in Newt *Cynops pyrrhogaster*
アカハライモリの前肢再生過程における遺伝子発現変化の網羅的解析
○Shota Takemura, Rio Tsutsumi, Miki Hirayama, Yuko Urata, Chiaki Michibayashi, Wataru Yamashita, Takeshi Inoue, Kiyokazu Agata (Dept. of Biophys., Grad. of Sci., Kyoto Univ.)

**P-222 (FT7-16)**
Hippo signaling is important for Xenopus limb regeneration
アフリカツメガエルの四肢再生における Hippo 系路の重要性
○Shinichi Hayashi[1], Haruki Ochi[2], Hajime Ogino[2], Koji Tamura[1], Hitoshi Yokoyama[1] (Laboratory of Organ Morphogenesis, Tohoku University[1], Developmental Genomics Research Gruop, NAIST[2])

**P-223 (OP14-05)**
Different cellular contribution of somite-derived tissues to limb regeneration in larval and adult *Xenopus*
ツメガエルの四肢再生において体節由来組織は幼生期と成体期では異なる細胞寄与を示す
Chikashi Nagayama[1], Takashi Ariizumi[2], Koji Tamura[1], ○Hitoshi Yokoyama[1] (Dept. of Dev. Biol., Grad. School of Life Sci., Tohoku Univ.[1], Dept. of Bioresource Sci., College of Agri., Tamagawa Univ.[2])

**P-224 (FT7-17)**
A new regeneration study system in Xenopus laevis; Ectopic blastema induction by nerve deviation and skin wounding
アフリカツメガエル (Xenopus laevis) における新規再生研究系 ; 神経遊走と皮膚損傷による異所再生芽の誘導
○Kazumasa Mitogawa, Miyuki Moriyasu, Ayako Hirata, Aki Makanae, Akira Satoh (RCIS, Okayama Univ)

**P-225 (FT7-18)**
Comparative study of limb regeneration between amphibians and mammals
両生類との比較から探るマウスの四肢再生能
○Shinichirou Miura, Tetsuya Endo (Lab. of Biol., Aichi Gakuin Univ.)

**P-226 (OP14-06)**
The molecular logic for head regenerative and head non-regenerative ability among different planarian species
頭部再生能の異なるプラナリア種の分子基盤
○Yoshihiko Umesono[1,2], Junichi Tasaki[2], Yui Nishimura[2], Martina Hrouda[2], Eri Kawaguchi[2], Shigenobu Yazawa[2], Osamu Nishimura[2], Kazutaka Hosoda[2], Takeshi Inoue[2], Kiyokazu Agata[2] (RIKEN CDB[1], Kyoto Univ. Department of Biophysics[2])

**P-227 (FT7-19)**
Amphibian retinal regeneration is triggered by matrix metalloproteinases
両生類網膜再生初期過程を制御する matrix metalloproteinases の解析
○Hanako Naito[1], Yoko Ueda[1], Takahiko Sato[2], Atsuko Sehara-Fujisawa[2], Masasuke Araki[1] (Dev. Neurobiol. Lab., Dept. of Biol. Sci., Nara Women's Univ.[1], Department of Growth Regulation, Institute for Frontier Medical Sciences, Kyoto Univ.[2])

**P-228 (FT7-20)**
*Rax* and *Pax6* expressions are related to the localization of cell adhesion molecules during retinal regeneration in Xenopus
成体ツメガエル網膜再生における Rax・Pax6 遺伝子の発現パターンと細胞接着分子の動態の解析
○Yoko Ueda[1], Rika Teshigawara[2], Masasuke Araki[1,2] (Graduate school of humanities and science, NWU[1], Dev. Neurobilo. Lab., Dept. of Biol. Sci., NWU[2])

**P-229 (OP14-07)**
Transcriptome analysis to search for genes involved in anteriorization during regeneration of the planarian *Dugesia japonica*
トランスクリプトーム解析によるプラナリアの再生過程における前方化に関わる遺伝子の探索
○Kazutaka Hosoda[1], Osamu Nishimura[2], Shigenobu Yazawa[1], Tetsutaro Hayashi[3], Kiyokazu Agata[1], Yoshihiko Umesono[3] (Dept. of Biophys., Kyoto Univ.[1], GCOE, Kyoto Univ.[2], RIKEN CDB[3])

**P-230 (FT7-21)**
Studies on regeneration of the dopaminergic neuron in newts, *Cynops pyrrhogaster*
アカハライモリを用いたドーパミン神経細胞再生の解析
○Yuko Urata, Wataru Yamashita, Rio Tsutsumi, Shota Takemura, Miki Hirayama, Takeshi Inoue, Kiyokazu Agata (Dept. of Biophys. Grad. Sch. of Sci., Kyoto Univ.)

**P-231 (FT7-22)**
In vitro analysis of the neural stem cells in newt Cynops phyrrhogaster
アカハライモリ神経幹細胞の In vitro 解析
○Wataru Yamashita, Yuko Urata, Chiaki Michibayashi, Rio Tsutsumi, Shota Takemura, Miki Hirayama, Takeshi Inoue, Kiyokazu Agata (Dept. of Biophys. Grad. Sci., Kyoto Univ.)

**P-232 (OP14-08)**
Brain regeneration in *Aeolosoma viride*
○Jiun-Hong Chen, Fei-Man Hsu, Yi-Tze Wu (DLF/IZ, NTU)

**P-233 (FT7-23)**
Lineage tracing analysis of cardiomyocytes in the newt cardiac regeneration by tamoxifen-inducible Cre loxP system.
タモキシフェン誘導型 Cre loxP システムを用いたイモリの心臓再生過程における

細胞系譜の追跡。
○Ayumi Myouga, Naoki Yokotani, Takashi Takeuchi, Toshinori Hayashi (Scl of Life Science, Tottori Univ.)

**P-234 (FT7-24)** What Molecule Triggers Proliferation of Cardiomyocytes during Newt Heart Regeneration?
イモリ心臓再生過程において、心筋細胞の増殖を開始させるトリガーは何か？
Naoki Yokotani[1], Takeshi Inoue[2], Eri Kawaguchi[2], Kiyokazu Agata[2], Takashi Takeuchi[1], ○Toshinori Hayashi[1] (Scl. of Life Science, Tottori Univ.[1], Grad. Scl. Science., Kyoto Univ.[2])

**P-235 (OP18-01)** Finding of molecular triggers of axolotl limb regeneration.
ウーパールーパー四肢再生における再生惹起因子
Aki Makanae[1], Kazumasa Mitogawa[1], Miyuki Moriyasu[1], Ayako Hirata[1], ○Akira Satoh[1,2] (RCIS[1], JST PRESTO[2])

**P-236 (FT2-17)** Specific isolation of HCN4 positive cardiac pace-making cells derived from embryonic stem cells
ES 細胞由来 HCN4 陽性心臓ペースメーカ細胞の分取と解析
○Kumi Morikawa, Yasuaki Shirayoshi, Ichiro Hisatome (Dept. of Regenerat. Med. & Therapeut., Grad. Sch. of Med. Sci., Tottori Univ.)

**P-237 (OP18-02)** Wnt and Notch signals guide embryonic stem cell differentiation into the intestinal lineages
Wnt シグナルと Notch シグナルが腸上皮細胞への分化を導く
○Soichiro Ogaki, Nobuaki Shiraki, Kazuhiko Kume, Shoen Kume (Kumamoto Univ IMEG Dept. of Stem Cell Biol.)

**P-238 (FT4-10)** Functional Analysis of Drosophila Histone Methyltransferase G9a
ショウジョウバエヒストンメチル基転移酵素 G9a の機能解析
○Kohei Shimaji[1], Shintaro Tanaka[1], Hiroshi Kimura[3], Yasuyuki Ohkawa[4], Tetsuya Sato[5], Mikita Suyama[5], Hideki Yoshida[1,2], Masamitsu Yamaguchi[1,2] (Kyoto Inst. of Tech. Univ.[1], Insect Biomedical Research Center[2], Graduate School of Frontier Biosciences, Osaka Univ.[3], Dept. of Adv. Med. Initiatives, Fac. of Med., Kyushu Univ.[4], Div. of Bioinformatics, Med. Inst. of Bioregulation, Kyushu Univ.[5])

**P-239 (OP18-03)** Antagonistic relationship between H3K27me3 and DNA methylation in the regulation of developmental genes
発生関連遺伝子の発現制御における DNA メチル化と H3K27me3 のアンタゴニズム
○Ryohei Nakamura[1], Taro Saito[2], Wei Qu[2], Jun Yoshimura[2], Shinichi Morishita[2], Yutaka Suzuki[2], Shinichi Hashimoto[2], Tatsuya Tsukahara[1], Hiroyuki Takeda[1] (Dept. Bio. Sci., Grad. Sch. Sci., Univ. Tokyo[1], Dept. Comp. Biol., Grad. Sch. Fro. Sci., Univ. Tokyo[2])

**P-240 (FT4-11)** The histone demethylase jmjd3 stimulates ectopic eye formation by increasing the access of pax6 protein to its target gene
ヒストン脱メチル化因子 jmjd3 は pax6 が標的遺伝子にアクセスするのを助けて異所的な眼形成を促進する
○Norihiro Sudou, Akane Kawaguchi, Haruki Ochi, Hajime Ogino (NAIST)

**P-241 (FT4-12)** The cis-regulatory evolution for developmental robustness and stress response
○Haruki Ochi[1], Akane Kawaguchi[2], Norihiro Sudou[2], Kazuyuki Hoshijima[4], Hajime Ogino[3] (Fac. of Med., Yamagata Univ.[1], Grad. Sch. of Bio. Sci., NAIST[2], Dept. of Animal Bioscience, Nagahama Inst. of Bio-Sci. and Tech.[3], Dep. of Human Genetics, Univ. of Utah[4])

**P-242 (OP09-01)** Screen for modifiers of transcriptional inheritance
転写のエピジェネティック継承の解析
○Tetsuya Muramoto, Masahiro Ueda (RIKEN QBiC)

**P-243 (OP09-02)** Accelerating the Tempo of the Segmentation Clock by Reducing the Number of Introns in the Hes7 Gene
Hes7 遺伝子のイントロン削減による分節時計の加速化
○Yukiko Harima, Yoshiki Takashima, Yuriko Ueda, Toshiyuki Ohtsuka, Ryoichiro Kageyama (IVR, Kyoto Univ.)

**P-244 (FT1-06)** Identification of a novel regulatory element for *Shh* expression in the mouse lung and gut
*Shh*遺伝子の肺と消化管の発現に関与する新規エンハンサーエレメントの同定
○Takanori Amano[1], Nagaharu Tsukiji[2], Toshihiko Shiroishi[1] (NIG[1], Department of Clinical and Laboratory Medicine, Faculty of Medicine, University of Yamanashi[2])

**P-245 (OP09-03)** *armadillo* and *orthodenticle* regulate the traveling of a wave of *hedgehog* expression in the early spider embryo
アルマジロとオルソデンティクルは初期クモ胚においてヘッジホッグ発現波の伝播を制御する
○Hiroki Oda, Yasuko Akiyama-Oda (JT BRH)

**P-246 (OP09-04)** Hipk2 plays essential roles in the Wnt-mediated early developmental events by inducing Dishevelled dephosphorylation and stabilization.
タンパク質リン酸化酵素 Hipk2 は、Dishevelled タンパク質の脱リン酸化と安定化を誘導することにより、Wnt 分子が制御する初期発生イベントにおいて必須の役割を果たす.
○Nobuyuki Shimizu, Tohru Ishitani (Div. of Cell Reg. Sys., Dep. of Immuno. and Neurosci., M.I.B., Kyushu Univ.)

**P-247 (FT1-07)** Estrogen-related receptor beta is necessary to induce Cdx2 gene activation after repression of Oct3/4
Esrrb は Oct3/4 発現減少に伴って生じる Cdx2 の発現上昇の制御に必要である
○Mariko Yamane, Toshimi Sugimoto, Hitoshi Niwa (RIKEN CDB)

**P-248 (OP09-05)** Nipbl and Med12 regulate limb-specific expression of genes cooperatively during vertebrate limb development
脊椎動物四肢発生期において Nipbl と Med12 は肢芽特異的な遺伝子発現を協同的に調節する
○Akihiko Muto[1,2,4], Martha Lopez-Burks[2,4], Yutaka Kikuchi[1], Anne Calof[3,4], Arthur Lander[2,4], Thomas Schilling[2,4] (Dept. Biol. Sci., Hiroshima, Univ.[1], Dept. Dev. Cell Biol., UC Irvine, USA[2], Dept. Anat. Neurobiol, UC Irvine, USA[3], CCBS, UC Irvine, USA[4])

**P-249 (OP09-06)** Hypoxia reduces the toxicity of a metabolic inhibitor via activation of the HIF signalling pathway and reduction of chemical uptake
○I Chen Hung[1,2], Helen Walton[1], Shyh-Jye Lee[2], Ronny van Aerle[1], Megan Resse[1], James Cresswell[1], Rod W. Wilsona[1], Eduarda M. Santos[1] (Biosciences, College of Life and Environmental Sciences, University of Exeter[1], Institute of Zoology, National Taiwan University[2])

**P-250 (FT1-08)** Identification of novel zinc finger genes suppressing precocious specification of the brain fate in brain/palp precursor cells in the *Ciona intestinalis* embryo
カタユウレイボヤ胚の脳―付着突起前駆細胞において、適切な時間まで脳への分化プログラムの開始を抑制するジンクフィンガー遺伝子の同定と解析
○Tatsuro Ikeda, Terumi Matsuoka, Yutaka Satou (Dept. of Zool., Grad. Sch. of Sci., Kyoto Univ.)

**P-251 (OP09-07)**
Cis-acting transcriptional repression establishes a sharp boundary in chordate embryos
Admp 遺伝子は Pinhead 遺伝子によりタンパク質レベルおよび転写レベルで二重の抑制をうけ動物胚の腹側の領域を決定する
○Kaoru Imai[1], Yutaka Daidou[2], Takehiro Kusakabe[2], Yutaka Satou[1] (Kyoto Univ.[1], Konan University[2])

**P-252 (FT1-09)**
Defining the sequence for nuclear localization of C. elegans muscleblind proteins
○Po-Hsuan Chen[1], Bo-Lun Su[1], Li-Chun Wang[1], Hung-Chi Su[2], Kuang-Ming Hsiao[1] (DLS, NCC Univ.[1], DBS, CSM Univ.[2])

**P-253 (OP09-08)**
Four signaling pathways cooperatively specify neural fate in ascidian embryos
ホヤ胚において 4 つのシグナル経路が協調して神経運命決定をする
○Naoyuki Ohta, Yutaka Satou (Kyoto University)

**P-254 (OP06-01)**
Experimental Evodevo of larval skeleton in Echinodermata
棘皮動物の幼生骨片の実験的進化発生学研究
○Hiroyuki Koga, Yoshiaki Morino, Hiroshi Wada (Univ. Tsukuba)

**P-255 (FT1-10)**
Hox gene cluster structure in the genome of *Halocynthia roretzi.*
マボヤの Hox 遺伝子のクラスター構造
○Yuka Sekigami[1], Takuya Kobayashi[1], Ai Omi[1], Tetsuro Ikuta[1], Asao Fujiyama[2], Noriyuki Satoh[3], Hidetoshi Saiga[1] (TMU[1], NIG[2], OIST[3])

**P-256 (OP06-02)**
Regulation of Left-Right Asymmetry in Sea Urchins
Yi-Jyun Luo, Jeff Chieh-fu Peng, ○Yi-Hsien Su (ICOB, Academia Sinica)

**P-257 (OP06-03)**
Nodal signalling determines biradial symmetry in the cnidarian Hydra
刺胞動物ヒドラの分岐形態は Nodal シグナルにより制御される
○Hiroshi Watanabe[1], Heiko Schmidt[2], Bert Hobmayer[3], Suat Özbek[1], Thomas Holstein[1] (COS, Univ. Heidelberg[1], CIBIV[2], Inst. Zool. Univ. Innsbruck[3])

**P-258 (FT1-11)**
Anterior-Posterior Axis formation in Non-rodent Mammals
非齧歯類哺乳動物における前後軸形成機構の解析
○Michio Yoshida[1], Eriko Kajikawa[1], Yoko Suda[1], Daisuke Kurokawa[2], Akira Onishi[3], Tomoyuki Tokunaga[4], Shinichi Aizawa[1] (Body plan, CDB, RIKEN[1], Misaki Marine Biological Station, Graduate School of Science, The University of Tokyo, Japan[2], Transgenic Animal Research Center, National Institute of Agrobiological Sciences, Japan[3], Division of Animal Sciences, National Institute of Agrobiological Sciences, Japan[4])

**P-259 (OP06-04)**
Possible evolutionary origin of cardiac function
心臓機能の進化的起源
○Hiroshi Shimizu[1], Kevin Pang[2], Mark Q Martindale[2] (NIG[1], Kewalo Marine Laboratory, Univ. Hawaii[2])

**P-260 (FT1-12)**
Molecular mechanisms regulating heterochronic development of marsupial cranial neural crest
有袋類における頭部神経堤発生の異時性の分子制御機構
○Yoshio Wakamatsu[1], Tadashi Nomura[2], Noriko Osumi[1], Kunihiro Suzuki[3] (Div. of Dev. Neurosci., Tohoku Univ. Grad. Sch. of Med.[1], Dept. Biol. Dev. Neurobiol., Kyoto Prefectural Univ. Med., Grad. Sch. Med. Sci.[2], Dept. Biol., Nihon Univ., Sch. Dentist. Matsudo[3])

**P-261 (OP06-05)**
Elastin gene subfunctionalization and formation of teleost-specific outflow tract, “bulbus arteriosus”, in fish evolution and development
エラスチン遺伝子の機能分化と真骨魚類においてみられる動脈球（流出路）の発生と進化
○Yuuta Moriyama[1], Jun Takeuchi[1,2], Kazuko Koshiba-Takeuchi[1,2] (Cardiovascular Regeneration, IMCB,

Univ. of Tokyo, Japan[1], Biological Science, Grad. Sch. of Sciences, Univ. of Tokyo, Japan[2])

**P-262 (OP06-06)** Expression of germline markers in three species of amphioxus supports a preformation mechanism of germ cell development in cephalochordates

Qiu-Jin Zhang[1,2], Yi-Jyun Luo[1], Hui-Ru Wu[1], Yen-Ta Chen[1], ○Jr-Kai Yu[1,3] (ICOB, Academia Sinica[1], Fujian Normal University[2], Inst. Ocean., NTU[3])

**P-263 (FT1-13)** Evolutionary divergence of an epithelial linings-specific *Shh* enhancer

上皮特異的な *Shh* エンハンサーの進化的分岐

○Tomoko Sagai[1], Takanori Amano[1], Akiteru Maeno[1], Tetsuaki Kimura[2], Kiyoshi Naruse[2], Toshihiko Shiroishi[1] (Mammal. Genet., NIG[1], Bioresources, NIBB[2])

**P-264 (OP06-07)** Evolutionary background of pluripotency among amniotes ― FGF/ERK-independent proliferation in early embryos ―

鳥類・爬虫類から見る多能性機構の進化

○Shota Nakanoh, Kiyokazu Agata (Kyoto University, Science)

**P-265 (FT1-14)** A conserved molecular and cellular mechanism of lung-bud formation between tetrapods and *Polypterus senegalus*

四肢動物と古代魚ポリプテルス間で保存されている肺芽形成の分子細胞生物学的メカニズム

○Ritsuko Kobayashi, Koji Fujimura, Masatsugu Noda, Norifumi Tatsumi, Masataka Okabe (Dept. of Anat., Jikei Univ. School of Med.)

**P-266 (OP06-08)** Modification of anterior-posterior patterning systems during the fin-to-limb transformation: Insight into the origin of thumbs

対鰭から四肢への形態変化における前後軸形成機構の変更～親指の起源への洞察～

○Koh Onimaru, Mikiko Tanaka (Tokyo Tech.)

**P-267 (OP06-09)** Pax1 and Segmental Development of Pharyngeal Arch

Pax1 が解き明かす咽頭弓分節機構

○Kazunori Okada, Hiroshi Wada (Univ. Tsukuba)

**P-268 (FT1-15)** Developmental roles of siamois-related Gene in a basal Actinopterygian: functional and evolutionary implications

原始的条鰭類ポリプテルスの初期発生における新規 siamois 関連遺伝子の役割

○Masaki Takeuchi[1,2], Shinichi Aizawa[2] (Dep. Med. Eng. Kawasaki Univ. Med. Welf.[1], CDB, RIKEN[2])

**P-269 (OP06-10)** Evolutionary and functional analysis of cis-regulatory elements in mammalian Gsx1 and Gsx2 homeobox genes

哺乳類 Gsx1, Gsx2 ホメオボックス遺伝子シス発現調節因子の進化的および機能的解析

○Kenta Sumiyama (NIG)

**P-270 (FT1-16)** Medaka miR-124 is involved in post-transcriptional regulation of polypyrimidine tract binding protein 1 (PTBP1) in neural development

メダカ miR-124 は神経系発生で PTBP1 の転写調節に関与する

○Yumiko Kato[1], Rie Kusakabe[2], Kunio Inoue[2], Shin Tochinai[3] (Dept. Nat. His. Sci., Grad. Sch. Sci., Hokkaido Univ.[1], Dept. Biol., Grad. Sch. Sci., Kobe Univ.[2], Dept. Nat. His. Sci., Fac. Sci., Hokkaido Univ.[3])

**P-271 (OP06-11)** Role of *Six1* in evolution of vertebrate primary sensory system

脊椎動物体幹部一次感覚神経系の進化における *Six1* の役割

○Kiyoshi Kawakami[1], Hiroshi Yajima[1], Makoto Suzuki[2], Haruki Ochi[3], Keiko Ikeda[4], Shigeru Sato[1], Hajime Ogino[3], Naoto Ueno[2] (Div. Biol., CMM, Jichi Med. Univ.[1], Div. Morpho. NIBB[2], Dev. Genet. NAIST[3], Dep. Biol. Hyogo Med. Col.[4])

**P-272 (FT1-17)** Characterization of Zebrafish internexin neuronal intermediate filament protein, alpha a (inaa), in the developing nervous system

○Meng-Lin Liao, Chung-Liang Chien (DACB, NTU)

**P-273 (OP06-12)** Conserved genetic module for the development of dorsal flat sheet-like structures among Branchiopod crustaceans

鰓脚綱甲殻類に保存された背部平板状構造形成に関与する遺伝子モジュール

Yuki Ishida, Shin-ichi Tokishita, ○Yasuhiro Shiga (Tokyo Univ. Pham. & Life Sci., Sch.of Life Scis.)

**P-274 (FT4-17)** Gr33a modulates mate choice based on age in Drosophila

○Yujia Hu, Yi Han, Lei Xue (SLST, Tongji Univ.)

**P-275 (OP11-05)** Age-dependent apoptosis of select olfactory neurons impairs innate attraction behavior in *Drosophila*

特定の嗅覚受容体神経における加齢依存的なアポトーシスが、老化に伴う個体行動変化を引き起こす

○Takahiro Chihara[1,2], Aki Kitabayashi[1], Michie Morimoto[1], Ken-ichi Takeuchi[1], Kaoru Masuyama[3], Ayako Tonoki[4], Ronald Davis[4], Jing Wang[3], Masayuki Miura[1,2] (Dept. Genetics, Grad. Sch. Pharm. Sci., Univ. Tokyo[1], CREST, JST, Japan[2], Neurobiol. Biol Sci, UCSD, USA[3], Neurosci. The Scripps Florida, USA[4])

**P-276 (OP17-07)** The role of circadian clock gene *per1b* in attention deficit/hyperactvity behaviors

○Han Wang, Jian Huang, Zhaomin Zhong, Mingyong Wang, Yicheng Tan, Xifeng Chen, He Xiong (SUCCC, Soochow Univ.)

**P-277 (FT1-01)** Cellular sensory mechanisms for detecting specific fold-changes in extracellular cues

細胞外シグナルの特定倍変化を検出する細胞センサーのメカニズム

○Ken-ichi Hironaka[1,2], Yoshihiro Morishita[2] (Kyushu Univ.[1], RIKEN CDB[2])

**P-278 (FT1-02)** Fucci vectors for chick embryos

ニワトリ胚のための Fucci ベクター

○Nozomi Onodera[1], Yui Furesawa[2], Isato Araki[2] (UGSA, Iwate Univ.[1], Dept Chem & Bioeng, Fac Eng, Iwate Univ[2])

**P-279 (OP11-06)** A theoretical study of the developmental properties that determine floral organ number

花器官の数はどのような発生過程から決まるのか

○Miho Kitazawa, Koichi Fujimoto (Dept. of Biol. Sci., Grad. Sch. of Sci., Osaka Univ.)

**P-280 (FT1-03) (SW2-10)** Numerical analyses for behaviors of auxin transport pattern on growing fields

オーキシン極性輸送に基づくパターンの成長場における数値解析

○Akiko Nakamasu[1,2], Kimura Seisuke[1], Nobhiko Suematsu[3,4] (Dep. Biores. Env. Sci. KSU.[1], JSPS Reserch Fellow[2], Grad. School. Adv. Math. Sci. Meiji Univ.[3], MIMS, Meiji Univ.[4])

**P-281 (FT1-04)** A theoretical study of mechanical force and cell shape dynamics during cell competition

細胞競合における機械的な力の役割

○Arisu Tsuboi, Koichi Fujimoto (Osaka Univ.)

**P-282 (OP11-07)** Targeted genome modifications using ZFNs and TALENs in the cricket *Gryllus bimaculatus*

フタホシコオロギにおける ZFN, TALEN を用いた標的遺伝子改変

○Takahito Watanabe[1], Hiroshi Ochiai[2], Tetsushi Sakuma[2], Taro Nakamura[1], Taro Mito[1], Takashi Yama-

moto[2], Sumihare Noji[1] (Dept. of Life Systems, Inst. of Tec. and Sci., Univ. of Tokushima[1], Dept. of Math. and Life Sci., Grad. Sch. of Sci., Hiroshima Univ.[2])

**P-283 (FT1-05) (SW2-11)** A theory on the timing of cell fate decision in developing organs
成長組織における細胞運命の決定タイミングに関する理論
○Yoshihiro Morishita[1], Takayuki Suzuki[2] (RIKEN CDB[1], Nagoya Univ.[2])

**P-284 (FT4-13)** Functional characterization of miR-375 and miR-200a of downstream regulation in development of hepatocellular carcinoma
○Cheng-Maw Ho[1,3], Hui-Ling Chen[2], Po-Huang Lee[1,3] (GICM, NTU[1], HRC, NTUH[2], DS, NTUH[3])