

Scientific Programs

Plenary Lectures

May 20 (Fri) 9:00-11:30 Theater Hall

Chairperson: Tetsuya Tabata (Univ. of Tokyo)

- PL-01** 09:00-10:15 Hedgehog Signaling in Development and Disease
○Matthew Scott (Stanford University School of Medicine)

Chairperson: Shinichi Nakagawa (RIKEN ASI)

- PL-02** 10:15-11:30 The development of the Xenopus and the zebrafish retinas
○William Harris (Cambridge University)

Symposia

Symposium 1: Neural development: from circuits to behavior

May 19 (Thu) 9:00-11:30 Theater Hall

Organizer: Akinao Nose (Univ. of Tokyo)

In spite of the great advance in our understanding of the development of the nervous system, surprisingly little is known about how the neural circuits develop and function to generate specific animal behaviors. In this symposium, different approaches and systems to try to tackle this problem will be presented.

Co-organized by: Grants-in-Aid for Scientific Research on Innovative Areas

“Mesoscopic neurocircuitry: towards understanding of the functional and structural basis of brain information processing.”

- S01-01** 09:00-09:30 Optogenetic dissection of the neural circuits that regulate larval locomotion in *Drosophila*
光遺伝学を用いたショウジョウバエ運動回路の機能解剖
○Akinao Nose^{1,2}, Hiroshi Kohsaka², Yoshiaki Nakagawa¹, Kengo Inada¹ (Dept. of Complexity Science and Engineering, Grad. Sch. of Frontier Sciences, Univ. of Tokyo¹, Dept. of Physics, Grad. Sch. of Science, Univ. of Tokyo²)
- S01-02** 09:30-10:00 Analysis of microcircuitry of the *Drosophila* larval brain by serial section electron microscopy
○Volker Hartenstein (Dept. MCDB at UCLA)
- S01-03** 10:00-10:30 Molecular control and physiological implications of adult neurogenesis – insights from the zebrafish model
○Laure Bally-Cuif (ZEN, N&D, INAF)
- S01-04** 10:30-11:00 Microperiodic Organization in Neocortical Layer V
大脳新皮質第V層の微細周期構造
Hisato Maruoka, Kazumasa Kubota, Rumi Kurokawa, Shun Tsuruno, ○Toshihiko Hosoya (RIKEN BSI)
- S01-05** 11:00-11:30 Sex, genes, and videotape: Representation of gender in the brain
○Nirao Shah (Dept. of Anatomy, University of California, San Francisco)

Symposium 2: Morphogenesis based on cell polarization

May 19 (Thu) 9:00-11:30 Room A-1

Organizer: Takaki Miyata (Nagoya Univ.)

All morphogenesis events involve differential gene expression between different tissue regions, and we sometimes take that each region is homogeneously filled with individually monotonous cells like “circles” or “bricks”. However, each cell works very hard, under the influence of microenvironments, to generate, change, or maintain its polarity, and the summing or intermingling of cell polarization efforts may support or even drive the overall morphogenesis. This symposium hopes to be a forum for mutual stimulation between researchers interested in this viewpoint.

- S02-01** 09:00-09:20 Cell behaviors regulated by guidance cues in collective migration of border cells
○Adam Cliffe¹, Minna Poukkula², Rishita Chandede¹, Pernilla Rorth¹ (IMCB¹, Institute of Biotechnology, University of Helsinki²)
- S02-02** 09:20-09:45 Self-organization of the PtdIns lipids signaling system for spontaneous motility in Dictyostelium cells
イノシトールリン脂質シグナル伝達系の自己組織化による細胞の自発的な運動機能の生成
○Masahiro Ueda (Osaka Univ. and JST, CREST)
- S02-03** 09:45-10:10 Cellular aspects of heart formation and LR asymmetric morphogenesis
(P-1092)
○Hinako Kidokoro¹, Koji Tamura², Masataka Okabe³, Gary C. Schoenwolf⁴, Yukio Saijoh¹ (Dept. of Neurobiology & Anatomy, University of Utah¹, Dept. of Developmental Biology & Neurosciences, Tohoku University², Dept. of Anatomy, The Jikei University School of Medicine³)
- S02-04** 10:10-10:40 Pathfinding by the neural crest: polarized migration by specified precursors
○Carol Erickson (UC Davis)
- S02-05** 10:40-11:00 Mechanisms regulating spatial distribution of Purkinje cell dendrites
プルキンエ細胞樹状突起空間パターンの決定機構の解析
○Kazuto Fujishima¹, Ryota Horie², Kansai Fukumitsu¹, Atsushi Mochizuki², Mineko Kengaku¹ (iCeMS, Kyoto Univ.¹, ASI, RIKEN²)
- S02-06** 11:00-11:30 Polarity is destiny
○Henrik Semb (Lund Stem Cell Center)

Symposium 3: Cutting-edge approaches to quantitative understanding of developmental biology

May 19 (Thu) 9:00-11:30 Room B-1

Organizers: Kazuki Horikawa (NIG)

Tatsuo Shibata (Riken CDB)

One of the major goal of developmental biology is to unveil unique properties of genetic program designed through evolution. Since this hidden property is not easily accessible by classical approaches, interdisciplinary studies involving the quantitative imaging, data-driven modeling and model-guided experimental validation are highly effective. In this symposium, leading scientists with cutting-edge technology, philosophy and both will give talks on such approaches. We welcome every audience being interested in the latest technology for bio-imaging, reconstruction of the cellular network, data-driven modeling and model-guided experimental design, with hoping to share the breakthrough toward the next stage of developmental biology.

Co-organized by: “Logic of Biological Pattern Formation”, Grant-in-Aid for Scientific Research on Innovative Areas, MEXT, Japan

- S03-01** 09:10-09:35 Autoluminescent imaging tools for combining use with optogenetic technology
光遺伝学的技術との併用を可能にする自動発光型イメージングツール
○Takeharu Nagai (RIES, Hokudai)
- S03-02** 09:35-10:00 Live imaging of the whole mouse embryo during gastrulation
○Shigenori Nonaka (NIBB)
- S03-03** 10:00-10:25 On-Chip Cellomics Technology for Constructive Understanding of Deterministic Mechanism in Higher Complexity of Living Systems
高次階層の生命システムでの決定論的機構の構成的理解のためのオンチップセルミクス技術
○Kenji Yasuda^{1,2}, Tomoyuki Kaneko¹, Fumimasa Nomura¹, Hyonchol Kim², Hideyuki Terazono², Masahito Hayashi² (IBB, TMDU¹, KAST²)
- S03-04** 10:25-10:55 Polarization of the *C. elegans* zygote by flow-based triggering of a pattern forming system
○Nathan Goehring (MPI-CBG)
- S03-05** 10:55-11:20 Molecular bases of Zebrafish skin pattern formation
ゼブラフィッシュの体表模様形成機構の分子基盤
○Masakatsu Watanabe, Shigeru Kondo (Graduate School of Frontier Biosciences)

Symposium 4: Development of extended phenotypes

May 21 (Sat) 9:00-11:30 Theater Hall

Organizers: Takema Fukatsu (AIST)

Sponsor Nyholm (Univ. of Connecticut)

Developmental processes are not necessarily autonomous, but often drastically affected by external factors, which may be not only abiotic (= environmental) but also biotic (= organismal). The most striking cases of the latter are represented by morphogenesis, sex differentiation, regeneration, etc. induced by interactions with other organisms, which are so-called “extended phenotypes” sensu Dawkins (1982). Here we present such impressive developmental phenomena as symbiont-induced organogenesis in a squid, symbiont-induced sex reversal in a butterfly, gall formation as insect-induced plant morphogenesis, and sealing and healing of plant wound induced by a social aphid, intending to provide a primer to discuss the interface between developmental biology and symbiosis.

- S04-01** 09:10-09:50 Shedding light on establishing and maintaining specificity in a squid/vibrio symbiosis
○Spencer Nyholm (Department of Molecular and Cell Biology, University of Connecticut)
- S04-02** 09:50-10:20 Morphological and physiological manipulation of host plants by gall-inducing insects
ゴール形成昆虫による寄主植物の形態的および生理的変化
○Makoto Tokuda (Kyushu Univ.)
- S04-03** 10:20-10:50 Gall repair and regeneration by soldier aphids
兵隊アブラムシによるゴールの修復・再生現象
○Mayako Kutsukake (AIST)
- S04-04** 10:50-11:20 Endosymbiont-mediated sex determination
○Daisuke Kageyama (NIAS)

Symposium 5: Active participation of cell death in development

May 21 (Sat) 9:00-11:30 Room A-1

Organizer: Masayuki Miura (Univ. of Tokyo)

- S05-01** 09:00-09:30 Physiological significance of apoptosis in early brain development
脳初期発生過程におけるアポトーシスの生理的意義
○Yoshifumi Yamaguchi^{1,2}, Keiko Nonomura¹, Naomi Shinotsuka¹, Kiwamu Takemoto^{3,4}, Masayuki Miura^{1,2} (Dept. Genet. Pharma. Univ. of Tokyo¹, CREST², Yokohama City Univ.³, PRESTO⁴)
- S05-02** 09:30-10:00 Integrins function as engulfment receptor in the removal of apoptotic cells in *C. elegans*
○Yi-Chun Wu (NTU)
- S05-03** 10:00-10:30 Apoptosis and autoimmunity
アポトーシスと自然免疫
○Shigekazu Nagata (Dept. Med. Chem., Grad. Sch. Med., Kyoto Univ.)
- S05-04** 10:30-11:00 Non-Autonomous and Context-Dependent Control of Apoptosis by Deregulated Hedgehog Signaling
○Andreas Bergmann, Tian Ding, Yun Fan, Audrey E. Christiansen (The University of Texas M. D. Anderson Cancer Center, Department of Biochemistry and Molecular Biology)

- S05-05** 11:00-11:30 Apoptotic Force: Biophysical Investigation of Active Mechanical Function of Cell Death in Tissue Dynamics during *Drosophila* Morphogenesis
 アポトーシス力（りょく）：ショウジョウバエ形態形成における細胞死の力学的寄与
 ○Yusuke Toyama^{1,2,3} (DBS, NUS¹, MBI, NUS², TLL³)

Symposium 6: Genetic control of morphogenesis

May 21 (Sat) 9:00-11:30 Room B-1

Organizers: Shigeo Hayashi (Riken CDB)

Bon-chu Chung (IMB, Academia Sinica)

Morphogenesis is a complex process involving a multiple layers of control by transcriptional, post-transcriptional and epigenetic regulations. In this symposium, we have invited scientists working on a variety of systems to discuss recent advance in the field.

- S06-01** 09:00-09:30 The Fused/Smurf complex controls the fate of *Drosophila* germline stem cells by generating a gradient BMP response
 Laixin Xia¹, Shunji Jia², Shoujun Huang¹, Qinmiao Sun¹, Anming Meng², ○Dahua Chen¹ (IOZ, CAS¹, College of Life Sciences, Tsinghua University,²)
- S06-02** 09:30-10:00 Sox10 mutation affects enteric neural crest cell migration
 ○Mai Har Sham¹, Mei Zhang¹, Carly Leung¹, Kit Hang Chu¹, Chun Ning Chang¹, Vincent Lui², Paul Tam² (Department of Biochemistry, LKS Faculty of Medicine, The University of Hong Kong¹, Department of Surgery, The University of Hong Kong.²)
- S06-03** 10:00-10:30 Development boundaries among mouse optic neuroepithelium
 Youjoung Kim¹, Nam-Suk Kim¹, Eun Jung Lee¹, Greg Lemke², Kyung Hwa Kang¹, ○Jin Woo Kim¹ (KAIST¹, Salk Institute²)
- S06-04** 10:30-11:00 A small peptide gene *polished rice* is essential for trichome formation and metamorphosis in *Drosophila*
 ショウジョウバエの細胞突起形成と変態を制御する小さなペプチド遺伝子
 ○Yuji Kageyama (Okazaki Inst. Integrative Biosci.)
- S06-05** 11:00-11:30 Role of chromatin organizer SATB1 in the Wnt signaling pathway
 Praveena Ramanujam², Rakesh Mishra³, ○Sanjeev Galande^{1,2} (IISER¹, NCCS², CCMB³)

Symposium 7: Systems approaches for developmental biology

May 21 (Sat) 13:30-16:00 Room A-1

Organizer: Hiroshi Asahara (National Center for Child Health and Development)

Masanao Sato (NIBB)

Now is an exciting time when new strategies and paradigms, including systems biology, combining multiple post genomic approaches and high throughput assays, are available to researchers in Developmental biology field. In this symposium, we've prepared reviews and introductions of these developing HOT topics in systems developmental biology. This should provide us a chance to update our knowledge of new waves in science and medicine, and to apply them to our own specific research fields.

- S07-01** 13:30-14:00 System dynamics during development of *Drosophila* primordial germ cells revealed by a time-resolved transcriptome analysis
時系列mRNA発現プロファイリングによって明らかになったショウジョウバエ始原生殖細胞発生過程におけるシステム動態
○Masanao Sato^{1,2}, Shuji Shigenobu¹, Satoru Kobayashi^{1,2} (NIBB¹, OIIB²)
- S07-02** 14:00-14:30 A genome-wide approach for understanding developmental mechanisms of the early ascidian embryo
ゲノムワイドなアプローチによるホヤ初期胚の発生プログラムの研究
○Yutaka Satou (Dept.of Zool., Grad.Sch.of Sci., Kyoto Univ.)
- S07-03** 14:30-15:00 Understanding and reconstituting mammalian germ cell specification
生殖系列決定機構の理解と再構成
○Mitinori Saitou^{1,2} (Kyoto Univ.¹, CREST²)
- S07-04** 15:00-15:30 Linking transcription factor occupancy and chromatin state to gene expression during embryonic development
○Eileen E. Furlong (EMBL)
- S07-05** 15:30-16:00 A Systems Approach Reveals that the Locomotive Systems Development and Homeostasis Network
システムアプローチによる運動器の発生と維持機構の解明
○Hiroshi Asahara^{1,2,3,4} (NRICH¹, TMD², CREST³, TSRI⁴)

Symposium 8: On the critical issues in EvoDevo

May 21 (Sat) 13:30-16:00 Room B-1

Organizers: Hiroshi Wada (Univ. of Tsukuba)

Daisuke Kurokawa (Univ. of Tokyo)

Recent progress of EvoDevo gave us the nice framework of the idea how evolutionary changes in developmental system lead the diversification of morphology. On the other hand, we also encountered unexpected findings, and some new issues arose in the field. In this symposium, by discussing the following issues, we try to figure out the problems remained to be elucidated. 1) How can we reconcile the unexpected complexity in the genome or gene set of basal metazoa such as sponges or cnidarians with their simple bodyplan? 2) How can we understand the evolution of cis-regulatory elements? Do they behave as real existence? 3) How can we reconcile the variation of early development of vertebrates with the presence of highly similar phylotypic stage?

- S08-01** 13:30-14:00 The zootypic genome and the origin of the pan-metazoan developmental toolkit
○Bernard Degnan (Centre for Marine Science, School of Biological Sciences, The University of Queensland)

- S08-02** 14:00-14:25 Body plan of soft-bodied microfossils from the beginning of the Cambrian diversification in China
中国カンブリア紀の動物多様化初期に認められる軟部微化石のボディプラン
○Kinya Yasui¹, Xiaoyong Yao², Jian Han² (MBL, Hiroshima Univ.¹, Early Life Inst. & Dept. Geol., Northwest Univ.²)
- S08-03 (P-1027)** 14:25-14:40 The molecular entity of positional information revealed by ChIP-sequence analysis for Lim1 and Otx2 in the head organizer and its application for evolutionary analysis
頭部オーガナイザーにおける Lim1 と Otx2 の ChIP-sequence 解析から明らかになった位置情報の分子実体とその進化解析への応用
○Yuuri Yasuoka¹, Norihiro Sudou¹, Yutaka Suzuki², Shuji Takahashi³, Yoshikazu Haramoto³, Yukiko Tando⁴, Kaoru Kubokawa⁵, Makoto Asashima⁶, Sumio Sugano², Masanori Taira¹ (Dept. of Biol. Sci., Grad. Sch. of Sci., Univ. of Tokyo¹, Dept. of Med. Gen. Sci., Grad. Sch. of Fro. Sci., Univ. of Tokyo², CSLS, KOMEX, Univ. of Tokyo³, CAMR, ORI, Univ. of Tokyo⁴, MMBS, Grad. Sch. of Sci., Univ. of Tokyo⁵, Dept. of Life Sci., Grad. Sch. of Arts and Sci., Univ. of Tokyo⁶)
- S08-04** 14:40-14:55 The early embryogenesis of *Polypterus* (bichirs): insights into the origin and evolution of developmental mechanisms in vertebrates
原始的条鰭類ポリプテルスの初期発生：脊椎動物における発生システムの進化を考察する
○Masaki Takeuchi, Maiko Takahashi, Shinichi Aizawa (CDB)
- S08-05** 14:55-15:10 The developmental hourglass model and early divergence of vertebrate embryos
発生砂時計モデルと脊椎動物初期胚の多様性
○Naoki Irie, Shigeru Kuratani (RIKEN CDB)
- S08-06** 15:10-15:35 Towards understanding the role of *cis*-regulatory regions in evolution
進化上でシス制御領域の果たす役割の理解を目指して
○Kenta Nakai (IMSUT)
- S08-07** 15:35-16:00 Evolution of genomic imprinting in mammals
○Fumitoshi Ishino¹, Tomoko Kaneko-Ishino² (Department of Epigenetics, Medical Research Institute, Tokyo Medical and Dental University¹, Tokai University, School of Health Sciences²)

Oral Presentation (in English)

OP01: Neural development and behavior

May 19 (Wed) 13:30-16:00 Room A-1

Chairpersons: Tatsumi Hirata (NIG)

Kunimasa Ohta (Kumamoto Univ.)

- OP01-01 (P-2063)** 13:30-13:45 The sex pheromone perception ability in *Caenorhabditis* nematode is altered by the sexual identity of CEM neurons
○King Chow, Lan Fu, Gus Chan, Tim Fan, Rachel Li (Div. Life Science, HKUST)
- OP01-02 (P-2105)** 13:45-14:00 Projectome mapping of neural circuits in the *Drosophila* brain based on the neuroblast lineages
ショウジョウバエの脳神経回路の幹細胞系譜に基づいた網羅的同定
○Masayoshi Ito, Keita Endo, Kei Ito (IMCB, University of Tokyo)
- OP01-03 (P-1064)** 14:00-14:15 Olfactory Receptor Neuron Identity is Diversified by the *Drosophila* Evi1/Prdm16 Homologue Hamlet that Mediates Chromatin Modification at Notch-Target Loci
ショウジョウバエ Prdm 蛋白 Hamlet による Notch 標的のクロマチン修飾と嗅覚神経細胞クラス分化
○Keita Endo¹, MD Rezaul Karim², Alena Krejci³, Emi Kinameri², Hiroaki Taniguchi², Matthias Siebert², Kei Ito¹, Sarah Bray³, Adrian Moore² (IMCB, Univ. of Tokyo¹, RIKEN BSI², Dept. of PDN, Univ. of Cambridge³)
- OP01-04 (P-2078)** 14:15-14:30 Evolutionarily conserved protein Dogi is required for neurite branching and targeting by interacting with microtubule motor regulator Glued in *Drosophila* olfactory projection neurons
微少管モーター蛋白質制御因子 Glued と結合する新規分子 Dogi は神経突起の枝分かれおよびターゲティングに必要である
○Chisako Sakuma¹, Liqun Luo⁴, Masayuki Miura^{1,3}, Takahiro Chihara^{1,2,4} (Dept Genetics, Grad Sch Pharm Scis, Univ. Tokyo¹, PRESTO, JST, Japan², CREST, JST, Japan³, HHMI, Dept. Biology, Stanford Univ. USA⁴)
- OP01-05 (P-2065)** 14:30-14:45 Formation of glycinergic synapse in zebrafish development
ゼブラフィッシュにおけるグリシン作動性シナプスの形成
○Hiromi Hirata (NIG)
- OP01-06 (P-1062)** 14:45-15:00 Genetic dissection of the hindbrain by the Gal4-UAS system in zebrafish
ゼブラフィッシュ Gal4 トラップ法による後脳の遺伝学的解剖
○Kazuhide Asakawa^{1,2}, Gembu Abe¹, Koichi Kawakami^{1,2} (NIG¹, SOKENDAI²)
- OP01-07 (P-1065)** 15:00-15:15 Altering neural network by blocking axonal navigation with nano-micro structures during development of a vertebrate
ナノ構造物を用いた発生中の脊椎動物の中樞神経内での回路形成改変の試み
Norihiko Yamasaki¹, Yuki Someya¹, Makoto Okada², Shinji Matsui², Toshie Matsushita¹,
○Kohei Hatta¹ (Life Sci, U of Hyogo¹, Adv. Sci. Tech. U of Hyogo²)

- OP01-08 (P-1066)** 15:15-15:30 Semaphorin 3A causes the conversion of axons of developing spinal commissural interneurons to dendrites by the induction of functional Cav2.3 channels
Makoto Nishiyama¹, Kazunobu Togashi¹, Melanie von Schimmelmann¹, Shin-ichi Maeda², Yoshio Goshima³, Shin Ishii², [○]Kyonsoo Hong¹ (Department of Biochemistry, NYU School of Medicine¹, Department of Systems Science, Graduate School of Informatics, Kyoto University², Department of Molecular Pharmacology and Neurobiology, Yokohama City University School of Medicine³)
- OP01-09 (P-2080)** 15:30-15:45 Cortical representations of olfactory input by trans-synaptic tracing
トランスシナプス標識法による嗅球から嗅覚皮質への神経接続マップの解析
[○]Kazunari Miyamichi, Liqun Luo (HHMI/Stanford)
- OP01-10 (P-2049)** 15:45-16:00 The adherens junction serve as a switch for neurogenesis by facilitating Notch-Delta interaction in the vertebrate CNS
Jun Hatakeyama, [○]Kenji Shimamura (Div. of Brain Morphogenesis, IMEG, Kumamoto Univ.)

OP02: Cell biology/Morphogenesis

May 19 (Wed) 13:30-16:00 Room B-1

Chairpersons: Erina Kuranaga (RIKEN CDB)

Yoshio Wakamatsu (Tohoku Univ.)

- OP02-01 (P-2141)** 13:30-13:45 Prickle and β -TrCP regulate cell adhesion by controlling paraxial protocadherin activity through ubiquitination in *Xenopus* development
Prickle と β -TrCP はツメガエル初期発生において paraxial protocadherin をユビキチン化を介して調節することにより細胞接着を制御する
[○]Masatake Kai, Noriyuki Kinoshita (NIBB)
- OP02-02 (P-1135)** 13:45-14:00 Multiple Wnts orient epithelial stem cells in *C. elegans*
複数の Wnt が線虫の表皮系幹細胞の極性を方向付ける
[○]Yuko Yamamoto^{1,2}, Hisako Takeshita¹, Hitoshi Sawa^{1,3} (RIKEN CDB Lab, for Cell Fate Decision¹, Dep. of Biol., Grad. Sci., Kobe Univ.², NIG³)
- OP02-03 (P-1099)** 14:00-14:15 The *C.elegans* spectraplakins VAB-10 regulates nuclear migration by linking actin and microtubule cytoskeletons in the gonadal distal tip cells
線虫スペクトラプラキンの細胞移動における役割について
[○]Hon-Song Kim¹, Ryoko Murakami^{2,3}, Katsuyuki Tamai², Kiyotaka Ohkura², Sophie Quintin⁴, Michel Labouesse⁴, Hiroshi Sakamoto³, Kiyoji Nishiwaki^{1,2} (Dep. of Biosci., Kwansei-Gakuin Univ.¹, RIKEN, CDB², Sci. and Tech. Kobe Univ.³, Dep. of Cell and Dev. Bio., IGBMC, CNRS/INSERM/Univ.⁴)
- OP02-04 (P-2131)** 14:15-14:30 Cell polarity establishes positional difference in Hippo signaling by altering Angiomotin subcellular distribution in preimplantation mouse embryos
細胞極性による Angiomotin の細胞内分布制御がマウス着床前胚の位置依存的な Hippo 経路活性を確立する
[○]Yoshikazu Hirate¹, Shino Hirahara¹, Atsushi Suzuki², Vernadeth Alarcon³, Yohei Yoshihama⁴, Kazunori Akimoto², Takaaki Hirai⁴, Takeshi Hara⁴, Hitoshi Niwa¹, Fumio Matsuzaki¹, Kazuhiro Chida⁴, Shigeo Ohno², Yusuke Marikawa³, Shinichi Aizawa¹, Akihiko Shimono⁵, Hiroshi Sasaki^{1,6} (RIKEN CDB¹, Yokohama City Univ², Univ of Hawaii³, Univ. of Tokyo⁴, CSI Singapore⁵, IMEG Kumamoto Univ⁶)

- OP02-05 (P-2057)** 14:30-14:45 The role of novel DNA damage repair gene, *Tcof1*, in craniofacial development
新規 DNA 損傷修復遺伝子 *Tcof1* の顎顔面発生における役割
○Daisuke Sakai^{1,2}, Paul Trainor² (NAIST¹, SIMR²)
- OP02-06 (P-1139)** 14:45-15:00 PCP signals regulate neural tube closure through polarized activation of actomyosin cables associated with the adherens junctions
平面内極性シグナルはアドヘレンスジャンクション-アクトミオシンの極性収縮を介して神経管形成を制御する
○Tamako Nishimura, Masatoshi Takeichi (RIKEN CDB)
- OP02-07 (P-1094)** 15:00-15:15 Planar cell chirality contributes to left-right asymmetric epithelial morphogenesis in *Drosophila*
細胞のキラリティによるショウジョウバエ上皮組織の左右非対称的な形態形成
○Reo Maeda^{1,3}, Kiichiro Taniguchi^{1,3}, Tadashi Ando¹, Naotaka Nakazawa¹, Ryo Hatori¹, Mitsutoshi Nakamura¹, Takashi Okumura¹, Kenji Matsuno^{1,2} (Dept. of Biol. Sci./Tec., Tokyo Univ. of Sci.¹, Res. Ins. Sci./Tec., Tokyo Univ. of Sci.², equally contribution³)
- OP02-08 (P-1044)** 15:15-15:30 Mitotic cell rounding accelerates invagination of the *Drosophila* tracheal placode
分裂期進入に伴う細胞球形化がショウジョウバエ胚気管原基の陥入を促進する
○Takefumi Kondo, Shigeo Hayashi (RIKEN CDB)
- OP02-09 (P-1055)** 15:30-15:45 In vitro analysis revealed that direct cell interactions autonomously generate various surface patterns in zebrafish
ゼブラフィッシュ色素細胞培養系を用いた、表面パターン形成機構における細胞間相互作用の解析
○Hiroaki Yamanaka, Yuji Amihama, Shigeru Kondo (FBS, Osaka Univ.)
- OP02-10 (P-2081)** 15:45-16:00 The mechanisms of boundary formation between the stomach and intestine endoderm in chicken embryo
胃/小腸境界形成の分子機構
Kenta Watanabe, ○Kimiko Fukuda (Dept. Biol. Sci. Tokyo Metropol. Univ.)

OP03: Reproduction and gametogenesis/Stem cells and regeneration/Signaling in development

May 20 (Thu) 13:30-16:00 Room A-1

Chairpersons: Motoyuki Ito (Nagoya Univ.)

Akira Nakamura (RIKEN CDB)

- OP03-01 (P-1138)** 13:30-13:45 Secreted Frizzled-related proteins (sFRPs) regulate extracellular distribution of Wnt ligands via interactions with heparan sulfate
分泌性 Frizzled 関連蛋白質 (sFRPs) はヘパラン硫酸を介して細胞外の Wnt リガンドの分布を制御する
○Yusuke Mii¹, Kenichi Nakazato², Atsushi Mochizuki², Masanori Taira¹ (Dept. of Biol. Sci., Grad. Sch. of Sci., Univ. of Tokyo¹, Theor. Biol. Lab., RIKEN ASI²)

- OP03-02 (P-2132)** 13:45-14:00 Lef1 phosphorylation by NLK is essential for Wnt/ β -catenin signaling in neural progenitor cells
NLK による Lef1 のリン酸化は、神経前駆細胞における Wnt/ β カテニンシグナルに必須である
Satoshi Ota¹, Shizuka Ishitani¹, Nobuyuki Shimizu¹, Kunihiro Matsumoto², Motoyuki Itoh^{3,4}, [○]Tohru Ishitani¹ (Div. of Cell Reg. Sys., Med. Ins. of Bioreg., Kyushu Univ.¹, Group of Signal Trans., Lab. of Cell Reg., Div. of Biol. Sci., Grad. Sch. of Sci., Nagoya Univ.², Unit on Nervous Dev. Sys., Div. of Biol. Sci., Grad. Sch. of Sci., Nagoya Univ.³, Inst. for Adv. Res., Nagoya Univ.⁴)
- OP03-03 (P-1160)** 14:00-14:15 Tsukushi is involved in the neuronal stem/progenitor cells proliferation as a Wnt signaling inhibitor
Tsukushi は Wnt シグナル阻害因子として神経幹 / 前駆細胞の増殖を制御する
[○]Kunimasa Ohta¹, Ayako Ito^{1,2}, Hideaki Tanaka^{1,2} (Dept. of Dev. Neurobiol., Kumamoto Univ. Grad. Sch. of Life Sci.¹, Global COE, Kumamoto University²)
- OP03-04 (P-2163)** 14:15-14:30 Essential roles of Smad4 in directional progression from neural stem cells to committed neural progenitors in the postnatal mouse brain
Motoko Niida, Mathew Chempanal, [○]Yasuhide Furuta (UT MDACC)
- OP03-05 (P-2038)** 14:30-14:45 Regulation of Zebrafish Embryonic Cell Migration and Patterning by Steroids
[○]Bon-chu Chung (IMB, Acad Sinica)
- OP03-06 (P-2151)** 14:45-15:00 Conserved distal signaling pathways regulating appendage outgrowth
[○]Liang Ma, Congxing Lin, Yan Yin (Wash U)
- OP03-07 (P-2102)** 15:00-15:15 Roles of Epiprofin in hair follicle development
毛根発生における転写因子エピプロフィンの役割
[○]Takashi Nakamura^{1,2}, Yasuo Yoshitomi², Makiko Arakaki¹, Yoshihiko Yamada², Satoshi Fukumoto¹ (Tohoku Univ Grad Sch of Dent¹, LCDB, NIDCR, NIH²)
- OP03-08 (P-1168)** 15:15-15:30 Development of an in vitro chimera-assay to clarify chimera-forming ability for human induced pluripotent stem cells
異種間キメラ胚の体外発生を用いたヒト iPS 細胞のキメラ形成能評価系開発
[○]Hideki Masaki, Yukiko Wakiyama, Tomoyuki Yamaguchi, Hiromitsu Nakauchi (Nakauchi Stem Cell and Organ Regeneration Project, JST)
- OP03-09 (P-2019)** 15:30-15:45 Germ cell formation in cephalochordate amphioxus
Hui-Ru Wu¹, Yen-Ta Chen¹, Yi-Hsien Su¹, Yi-Jyun Luo¹, Linda Holland², [○]Jr-Kai Yu^{1,3} (ICOB AS¹, SIO UCSD², IONTU³)
- OP03-10 (P-1115)** 15:45-16:00 Pgc represses miRNA expression and protects germ plasm RNAs from degradation in *Drosophila* primordial germ cells
Pgc は、ショウジョウバエ始原生殖細胞での miRNA の転写を抑制し、母性 RNA を保護している
[○]Kazuko Hanyu-Nakamura, Kazuki Matsuda, Akira Nakamura (Lab. for Germline Development, RIKEN CDB)

OP04: Regulation of gene expression/Evolution and development/Technology, theoretical approach, systems biology

May 20 (Thu) 13:30-16:00 Room B-1
Chairpersons: Koichi Kawakami (NIG)
Yuji Kageyama (NIBB)

- OP04-01 (P-2035)** 13:30-13:45 Parallel inputs and interlinked feedback loops ensure 99.99% canalization by establishing left and right asymmetry of *Cerl2* around the mouse node
マウスノードでは2種類の入力と連結したフィードバック回路が *Cerl2* の左右非対称性を安定につくる
○Tetsuya Nakamura¹, Aiko Kawasumi¹, Owen Tampilin³, Daisuke Saitoh⁴, Kyosuke Shinohara¹, Atsuko Takamatsu², Atsushi Mochizuki⁴, Hiroshi Hamada¹ (Osaka university¹, Waseda univ.², HHMI³, RIKEN⁴)
- OP04-02 (P-2104)** 13:45-14:00 Modeling lung branching morphogenesis via epithelial-mesenchymal interaction
上皮間葉間相互作用を含んだ肺枝分かれ形成のモデル
○Takashi Miura (Dept. of Anat. & Dev. Biol., Kyoto Univ. Grad. Sch. of Med.)
- OP04-03 (P-2028)** 14:00-14:15 Different modes of dynamic gene expression involved in animal segmentation: oscillating vs. splitting
動物の体節形成に関わるダイナミックな発現：振動モードと分裂モード
Masaki Kanayama^{1,2}, Yasuko Akiyama-Oda¹, Osamu Nishimura^{3,4}, Hiroshi Tarui³, Kiyokazu Agata⁴, ○Hiroki Oda^{1,2} (JT BRH¹, Osaka Univ.², CDB³, Kyoto Univ.⁴)
- OP04-04 (P-2017)** 14:15-14:30 Mesodermal origin of scales and fins of fish - Insight into origin and evolution of mineralized skeleton in vertebrates
魚類の鱗と鰭条は中胚葉に由来する - 脊椎動物における骨格形成の進化と細胞系譜
○Atsuko Shimada¹, Toru Kawanishi¹, Hiroki Yoshihara², Takuya Kaneko¹, Toru Yano², Keiji Inohaya³, Yasuhiro Kamei⁴, Koji Tamura², Hiroyuki Takeda¹ (Dep. Biol. Sci., Grad. Sch. Sci., Univ. Tokyo¹, Dept. Dev. Biol., Grad. Sch. Life Sci., Tohoku Univ.², Dept. Biol. Info., Tokyo Inst. Technol.³, Nat. Inst. Basic Biol.⁴)
- OP04-05 (P-2009)** 14:30-14:45 Lack of $\beta 1$ integrin in the developing mouse notochord results in hemivertebrae
○Kathryn Cheah¹, Shengzhen Guo¹, Sarah Wynn¹, Tiffany Au¹, Attila Aszodi², Reinhard Fassler², Danny Chan¹ (Department of Biochemistry, Li Ka Shing Faculty of Medicine, The University of Hong Kong¹, Max Planck Institute of Biochemistry, Department of Molecular Medicine²)
- OP04-06 (P-2123)** 14:45-15:00 DNA demethylation regulates primordial germ cell-specific gene expression in mouse
DNA 脱メチル化は始原生殖細胞特異的な遺伝子発現を制御する
○Kentaro Mochizuki, Yasuhisa Matsui (CRCBR, IDAC, Tohoku Univ.)
- OP04-07 (P-1021)** 15:00-15:15 Different microRNA arms usage of Hox miRNA miR-10 in animals
○Jerome Hui, Sam Griffiths-Jones, Matthew Ronshaugen (University of Manchester)

- OP04-08 (P-1090)** 15:15-15:30 *MicroRNA-21* expression triggered by heartbeat contributes to cardiac valve formation
心拍に誘導される *MicroRNA-21* は心臓弁形成に関与する
○Toshihiro Banjo¹, Minoru Omi¹, Kota Miyasaka¹, Yasuyuki Kida², Toshihiko Ogura¹
(IDAC, Tohoku Univ.¹, Salk Inst.²)
- OP04-09 (P-1129)** 15:30-15:45 A transgenic RNA interference screen for regulators of nutrient-dependent growth in the fruit fly *Drosophila melanogaster*
ショウジョウバエ RNAi スクリーニングによる栄養依存的成長制御因子の探索
○Naoki Okamoto, Takashi Nishimura (RIKEN, CDB)
- OP04-10 (P-1187)** 15:45-16:00 Femtosecond laser-introduction of bionanomolecules in targeted single cells of living vertebrate embryos
高出力フェムト秒レーザーによる脊椎動物胚の単一細胞へのバイオナノ粒子の物理的導入方法
○Mikiko Tanaka¹, Haruki Ochi², Takanori Iino³, Akihiro Hiraoka³, Yoichiroh Hosokawa³
(Grad. Sch. of Biosci. & Biotechnol., Tokyo Inst. of Technol.¹, Grad. Sch. of Biosci., NAIST², Grad. Sch. of Materials Sci., NAIST³)

Workshops

Workshop 1: Developmental Biology of Tissue Regeneration

May 19 (Thu) 13:30-16:00 Theater Hall

Organizers: Toshinori Hayashi (Tottori Univ.)

Masasuke Araki (Nara Women's Univ.)

Recently we are getting aware that various mammalian tissues or organs have a wider range of regenerative potential at the cellular level, as these tissues are known to contain stem-like cells even in the adult animals. However, in order to regenerate the tissue/ organ demonstrating its proper function, re-construction of highly ordered structures must be essential.

We will discuss the fundamental concepts of tissue restoration in a highly ordered manner, through the comparison of various models of regeneration from a view of developmental biology.

WS01-01 13:00-13:55 Amphibian retinal regeneration — An outstanding animal model for molecular analysis of regeneration —

両生類の網膜再生は再生の分子と細胞機構を研究する優れたモデル実験系である

○Masasuke Araki (Dept. of Biol. Sci., Nara Women's Univ.)

WS01-02 13:55-14:20 Expression of oocyte-type linker histone is required for newt lens transdifferentiation
(P-2167)

○Nobuyasu Maki^{1,2,3,4}, Rinako Suetsugu-Maki³, Shozo Sano⁴, Kenta Nakamura³, Osamu Nishimura⁵, Hiroshi Tarui⁴, Katia Del Rio-Tsonis⁶, Keita Ohsumi⁷, Kiyokazu Agata^{4,5}, Panagiotis Tsonis³ (PREST¹, Inst. of Protein Research, Osaka Univ.², Dept. of Biol, Univ. of Dayton³, RIKEN CDB⁴, Dept. of Biophys., Kyoto Univ.⁵, Dept. of Zool., Miami Univ.⁶, Div. of Biol. Sci., Nagoya Univ.⁷)

WS01-03 14:20-14:45 Scarless wound healing of *Xenopus laevis* -as a prerequisite for epimorphic regeneration-

ツメガエルにおける瘢痕なしの創傷治癒 —付加再生の前提条件として—

○Hitoshi Yokoyama¹, Tamae Maruoka¹, Haruki Ochi², Akio Aruga¹, Takanori Amano³, Toshihiko Shiroishi³, Hajime Ogino², Koji Tamura¹ (Grad. Scho. of Life Sci. Tohoku U.¹, NAIST², NIG³)

WS01-04 14:45-15:10 A mechanism that controls blastema cell proliferation and survival during zebrafish fin fold regeneration
(P-2166)

ゼブラフィッシュ膜ひれ再生における再生芽の増殖と生存の調節

Teruhiro Nakajima, Takashi Ishida, Akira Kudo, ○Atsushi Kawakami (Tokyo Inst.Tech.)

WS01-05 15:10-15:35 What determines differences in cardiac regenerative abilities between mammals and newts ?

哺乳類とイモリでの心臓再生能の違いは何によって決められるのか？

○Takashi Takeuchi, Satoshi Yoshitome, Shoji Tane, Noriko Iwamoto, Yukio Satoh, Naoki Yokotani, Takuya Yokomatsu, Yu Okamoto, Toshinori Hayashi (Sch. of Life Sci., Fac. of Med., Tottori Univ.)

WS01-06 15:35-16:00 Functional redundancy between human SHOX and mouse Shox2 in the regulation of sinoatrial node formation and pacemaking function

○YiPing Chen¹ (Tulane University¹, Tulane University², Tulane University³, Tulane University⁴, Tulane University⁵, Fujian Normal University⁶, Tulane University⁷, Fujian Normal University⁸)

Workshop2: Ciliary biology: essential roles in development and diseases

May 20 (Fri) 13:30-16:00 Theater Hall

Organizers: Yoshihiro Omori (OBI)

Takahisa Furukawa (OBI)

Cilia are microtubule-based organelles that project like “antennae” from the surface of cells and serve a variety of sensory function. In vertebrate development, ciliary function is essential for many biological processes including establishment of left-right asymmetry and proper formation of the central nervous system. Ciliary dysfunction is associated with various human diseases that can be broadly classified as “ciliopathies” including retinitis pigmentosa, polycystic kidney disease, infertility, hydrocephalus, polydactyly and obesity. In this workshop, we focused on both motile and sensory ciliary function and molecular mechanisms of ciliogenesis in the vertebrate model animals. We would like to discuss their work and exchange ideas about recent progress in this field.

- WS02-01** 13:34-13:53 The ciliary signaling in *inv* cystic kidney
inv マウスの嚢胞腎におけるシグナル経路
○Noriyuki Sugiyama, Dai Shiba, Takahiko Yokoyama (KPUM)
- WS02-02** 13:53-14:07 Fibroblast Growth Factor Receptor 1 (FGFR1) function in ciliogenesis during inner ear hair cell development
内耳有毛細胞の感覚毛形成における FGFR1 の役割
○Akira Honda, Tomoko Kita, Yuko Muta, Kazuyo Misaki, Shigenobu Yonemura, Raj Ladher (RIKEN CDB)
- WS02-03** 14:07-14:26 A ciliary kinase Mak and a microtubule-associated protein RP1 antagonistically regulate ciliary length in retinal photoreceptor cells
繊毛キナーゼ Mak と微小管結合タンパク質 RP1 が、網膜視細胞の繊毛の長さを制御する
○Yoshihiro Omori^{1,2,3}, Taro Chaya^{1,3}, Kimiko Katoh¹, Takahisa Furukawa^{1,3} (OBI¹, PRESTO, JST², CREST, JST³)
- WS02-04** 14:26-14:45 Mechanisms of ciliary positioning and orientation in the developing mouse brain
マウス脳内における繊毛の配置と方向を決定するメカニズム
○Kazunobu Sawamoto (Dept Dev Regen Biol, Nagoya City Univ School Med)
- WS02-05** 14:45-14:59 Roles of a seven-pass transmembrane cadherin Celsr1 in multi-ciliated epithelial cells of the mouse oviduct
マウス卵管内の多繊毛上皮細胞における 7 回膜貫通型カドヘリン Celsr1 の役割
○Kouji Komatsu^{1,2}, Dongbo Shi^{2,4}, Mayumi Hirao^{1,2}, Fadel Tissir³, Andre Goffinet³, Tadashi Uemura^{2,4}, Toshihiko Fujimori^{1,2} (NIBB¹, JST, CREST², Inst. of Neuroscience, Univ. of Louvain Med. Sch.³, Grad. Sch. Biostudies, Kyoto Univ.⁴)
- WS02-06 (P-1057)** 14:59-15:18 Dual function of cilia in Kupffer's Vesicle: generation and sensing of nodal flow
クッペル胞繊毛の 2 つの働き：nodal flow をつくり、センスする
○Keiichiro Kamura^{1,2}, Sumito Koshida², Hiroyuki Takeda² (RIKEN CDB¹, Univ. of Tokyo²)

- WS02-07** 15:18-15:37 Synchronized motion of nodal cilia in left-right determination in the mouse embryo
マウス胚左右軸決定におけるノード繊毛の協同性
○Kyosuke Shinohara¹, Atsuko Takamatsu², Aiko Kawasumi¹, Masakazu Hashimoto¹, Satoko Yoshida¹, Takuji Ishikawa³, Hiroshi Hamada¹ (Graduate School of Frontier Biosciences, Osaka University¹, Department of Electrical Engineering and Bioscience, Waseda University², Department of Bioengineering and Robotics, Tohoku University³)
- WS02-08** 15:37-16:00 Identification and Characterization of the Vertebrate Motile Cilium
Semil Choksi, Deepak Babu, Xianwen Yu, Doreen Lau, Pallavi Panse, Noel Wong, Staven Ho, Shubha Vij, ○Sudipto Roy (IMCB)

Satellite Workshop (in Japanese)

SW01: Evolution/Regeneration/Organogenesis/Other

May 18 (Wed) 15:00-18:00 Room A-1

Chairpersons: Hiroki Oda (JT BRH)

Mikiko Tanaka (Tokyo Inst. of Technol.)

- SW01-01 (P-1016)** 15:00-15:10 Development and Evolution of the Lateral Plate Mesoderm: Comparative Analysis of Amphioxus and Lamprey, with Implications for the Acquisition of Paired Fins
ナメクジウオとヤツメウナギの比較解析による側板中胚葉の進化と対鰭の獲得
○Koh Onimaru¹, Eiichi Shoguchi², Shigeru Kuratani³, Mikiko Tanaka¹ (Tokyo Inst. Tech.¹, OIST², CDB, RIKEN³)
- SW01-02 (P-2091)** 15:10-15:20 *zic1* and *zic4* in late embryogenesis mediate patterning for adult dorsoventral trunk structures
発生後期における *zic1* および *zic4* を介した体幹背腹パターン決定機構
○Toru Kawanishi, Yuuta Moriyama, Atsuko Shimada, Hiroyuki Takeda (Dept. Biol. Scis., Grad. Sch. Sci., Univ. Tokyo)
- SW01-03 (P-1041)** 15:20-15:30 Release of blood-vessel adhesion regulates both blood circulation start and angiogenesis in zebrafish
ゼブラフィッシュにおいて血管内皮 - 赤血球の接着解除は血液循環の開始と節間血管の伸長に必要である
○Atsuo Iida (Ins. for Front. Med. Sci., Kyoto University)
- SW01-04 (P-1165)** 15:30-15:40 Ectopically induced limb on a flank possesses non-limb derived muscles in *Ambystoma Mexicanum*
わき腹に誘導された異所肢には四肢由来ではない筋肉組織が存在する。～新しい再生システムを使用した進化的考察～
○Ayako Hirata¹, Aki Makanae¹, Akira Satoh^{1,2} (RCIS, Okayama Univ.¹, JST PRESTO²)
- SW01-05 (P-2174)** 15:40-15:50 What triggers re-proliferation of cardiomyocytes during newt heart regeneration?
イモリの心臓再生過程において、何が心筋細胞の再増殖を引き起こすのか?
○Naoki Yokotani, Toshinori Hayashi, Takashi Takeuchi (Tottori Univ., Sch. Life Sci., Div. Biosignal.)
- SW01-06 (P-2106)** 15:50-16:00 The functional role of Polycomb group proteins Ring1A/B during mammalian limb development
マウス肢形成過程におけるポリコーム群タンパク質 Ring1A/B の役割
○Nayuta Yakushiji-Kaminatsui¹, Takaho A. Endo², Tetsuro Toyoda², Haruhiko Koseki¹ (RCI, RIKEN¹, BASE, RIKEN²)

Chairperson: Takahiro Chihara (Univ. of Tokyo)

- SW01-07 (P-2085)** 16:10-16:20 AP-1 Transcription Factors Regulate the Number of Apoptotic Cells in Developing Chick Limb Buds
肢芽形成過程で細胞死の数を制御する AP-1 転写因子群の作用機序の解明
○Natsuno Suda¹, Daisuke Shirakawa¹, Takehiko Itoh¹, Masashige Bando², Katsuhiko Shirahige², Kohsuke Kataoka³, Cheryll Tickle⁴, Mikiko Tanaka¹ (Tokyo Tech¹, Univ. of Tokyo², NAIST³, UoB⁴)
- SW01-08 (P-2092)** 16:20-16:30 Mutations Affecting Cessation of Gonadal Leader Cell Migration in *C.elegans*
線虫 *C. elegans* 生殖巣形成リーダー細胞の停止異常を示す変異体
○Tetsuhiro Kikuchi, Yukimasa Shibata, Kiyoji Nishiwaki (Dept of Biosci, Grad Sch of Sci and Tech, Kwansei Gakuin Univ)
- SW01-09 (P-1015)** 16:30-16:40 On the Origin of the Vertebrate Pharyngeal Arch; Insight from Expressions and Functions of *Pax1/9*
脊椎動物咽頭弓の起源に関する研究 ; *Pax1/9* の発現と機能からの考察
○Kazunori Okada¹, Hector Escriva², Keiji Inohaya³, Akira Kudo³, Hiroshi Wada¹ (Univ. Tsukuba¹, Observatoire Océanologique de Banyuls sur Mer², Tokyo Insti, Tech³)
- SW01-10 (P-2142)** 16:40-16:50 Jagged2/Notch signaling regulates epithelial organization of pharyngeal pouches in association with Fibronectin
Jagged2/Notch signaling は Fibronectin と関連して咽頭嚢上皮構造の組織化を制御する
○Hiroyuki Takahashi¹, Takashi Akanuma², Shinji Takada¹ (NISS NIBB, OIB, SOKEN-DAI¹, NAIST²)
- SW01-11 (P-2096)** 16:50-17:00 Modification of BMP signaling is essential for the specification of the foregut endoderm in the chicken embryo
BMP シグナルの修飾は前腸内胚葉の領域分化に必要である
○Yui Okayama¹, Wataru Kimura^{1,2}, Sadao Yasugi^{1,3}, Kimiko Fukuda¹ (Dept. Biol., Tokyo Metropol. Univ.¹, Hamamatsu Univ.², Kyoto Sangyo Univ.³)

Chairpersons: Noriyuki Kinoshita (NIBB)
Kimiko Fukuda (Tokyo Metropolitan Univ.)

- SW01-12 (P-2138)** 17:10-17:20 Dermatan sulfate controls skeletal morphogenesis in sea urchin embryos
デルマタン硫酸はウニ胚の骨片形成を制御する
○Mitsuyoshi Kagawa¹, Nobuo Sugiura², Hideto Watanabe², Masaaki Yamaguchi¹ (Div. Life Sci., Grad. Sch. Natural Sic. & Technol., Kanazawa Univ.¹, Instit. Mol. Sci. Med., Aichi Med. Univ.²)
- SW01-13 (P-1142)** 17:20-17:30 Isolated ectoderm is fated to die in early *Xenopus* embryos
ゼノパス外胚葉での自律的アポトーシス
○Hirotaka Kato, Eriko Motomura, Ippei Tanaka, Yusuke Higashi, Ayumi Hourai, Masao Sakai (Chem. and BioSci., Grad. Sch. Sci. and Eng., Kagoshima uni.)
- SW01-14 (P-2008)** 17:30-17:40 Melanosome transfer during skin pigmentation: a novel method to study intercellular signaling between melanocytes and keratinocytes *in vivo*
○Hidetaka Murai, Ryosuke Tadokoro, Ken-ichiro Sakai, Yoshiko Takahashi (NAIST)

- SW01-15 (P-2169)** 17:40-17:50 Generation of intestinal epithelial like cell derived from ES cells
ES細胞を用いた効率的な腸上皮様細胞への分化誘導法の構築
○Soichiro Ogaki¹, Nobuaki Shiraki¹, Kazuhiko Kume¹, Shoen Kume^{1,2} (Kumamoto Univ IMEG Dept. of Stem Cell Biol.¹, GCOE Kumamoto Univ. Kumamoto, Japan²)
- SW01-16 (P-2095)** 17:50-18:00 Lineage specification of gastrointestinal cells by helix-loop-helix transcription factor Id2
転写調節因子 Id2 による消化管上皮細胞の運命決定機構
○Kentaro Mori¹, Harumi Nakamura¹, Kota Tamada^{2,3}, Toru Takumi^{2,3}, Yoshifumi Yokota¹ (Dept. of Mol. Genetics., Sch. of Med., Univ. of Fukui¹, Osaka. Biosci. Inst.², Lab. Integrative Bio., Grad. Sch. of Biomed. Sci., Hiroshima Univ.³)

SW02: Reproduction/Epigenetics/Neural development/Others

May 18 (Wed) 15:00-18:00 Room B-1
Chairperson: Shinichi Nakagawa (RIKEN)

- SW02-01 (P-1119)** 15:00-15:10 *In vitro* production of functional sperm in cultured neonatal mouse testes
新生仔マウス精巣片の器官培養法による精原細胞からの精子産生
○Takuya Sato¹, Kumiko Katagiri¹, Kimiko Inoue², Narumi Ogonuki², Atsuo Ogura², Yoshinobu Kubota¹, Takehiko Ogawa¹ (Dept. of Urology, Yokohama City Univ. School of Med.¹, RIKEN, BRC²)
- SW02-02 (P-1121)** 15:10-15:20 In vitro studies on migratory activity of *Xenopus* primordial germ cells
アフリカツメガエル始原生殖細胞の運動性に関する研究
○Kohei Terayama¹, Kensuke Kataoka², Keisuke Morichika³, Hidefumi Orii¹, Kenji Watanabe¹, Makoto Mochii¹ (Univ. Hyogo¹, IMBA², Univ. Rikkyo³)
- SW02-03 (P-1120)** 15:20-15:30 Germ plasm includes germ cell determinant in *Xenopus*
*Xenopus*生殖細胞質は、生殖細胞運命を決定づける
○Haru Tada, Kenji Watanabe (Grad.Sch.Life Sci, Univ.Hyogo)
- SW02-04 (P-1061)** 15:30-15:40 Developmental roles of muscle-specific microRNAs in medaka
メダカ胚における筋肉特異的 microRNA の発現と機能
○Saori Tani¹, Rie Kusakabe², Kiyoshi Naruse³, Hiroshi Sakamoto⁴, Kunio Inoue⁵ (Dept. Biol., Grad. Sch. Sci., Kobe Univ.¹, Dept. Biol., Grad. Sch. Sci., Kobe Univ.², NIBB³, Dept. Biol., Grad. Sch. Sci., Kobe Univ.⁴, Dept. Biol., Grad. Sch. Sci., Kobe Univ.⁵)

Chairpersons: Tadao Usui (Kyoto Univ.)
Leo Tsuda (NILS)

- SW02-05 (P-1030)** 15:50-16:00 Chromatin structure regulates DNA replication in yeast and *Drosophila* development
クロマチン構造は酵母やショウジョウバエ発生時のDNA複製を制御する
○Hidetugu Kohzaki, Murakami Yota (IVR, Kyoto Univ.)
- SW02-06 (P-2088)** 16:00-16:10 How dose the cell cycle arrest occur in mammalian cardiomyocyte?
どのように心筋細胞の増殖は止まるのか
○Noriko Iwamoto¹, Satoshi Yoshitome², Yukio Satoh¹, Shoji Tane¹, Toshinori Hayashi¹, Takashi Takeuchi¹ (Tottori Univ., Sch. Life Sci., Div. Biosignal.¹, Tottori Univ., Sch. Life Sci., Div. Pathol. Biochem.²)

- SW02-07 (P-1123)** 16:10-16:20 Requirement of Dbf4 expression for DNA replication in mouse zygote
Dbf4 によるマウス受精卵の染色体複製開始機構の解析
○Shin Murai¹, Yukiko Katagiri², Yusuke Fukuda², Mineto Morita², Shigeru Yamashita¹
(Dept of Biochem, Toho Univ, Sch of Med¹, Dept of Obst and Gyn, Toho Univ, Sch of Med²)
- SW02-08 (P-1102)** 16:20-16:30 Functional analysis of histon methylase G9a and GLP in mouse cardiac development
ヒストンメチラーゼ G9a と GLP の心筋特異的欠損マウスにおける心臓形態形成異常の解析
○Tomoyuki Makino¹, Makoto Tachibana², Yoichi Shinkai², Takashi Takeuchi¹ (Tottori Univ., Sch. Life Sci., Div. Biosignal.¹, IVR, Kyoto Univ.²)
- SW02-09 (P-1101)** 16:30-16:40 A H3K27 demethylase, Jmjd3, is essential for *Xenopus* eye development
○Akane Kawaguchi, Haruki Ochi, Norihiro Sudou, Hajime Ogino (NAIST)
- SW02-10 (P-1113)** 16:40-16:50 Long-term Epigenetic Regulation of Region-specific Expression of *zic1/zic4*, Key Regulators of Vertebrate Body Patterning
背腹パターンを制御する転写因子 *Zic* のエピジェネティックな発現制御機構の解析
○Ryohei Nakamura, Tatsuya Tsukahara, Hiroyuki Takeda (Dept. Bio. Sci., Grad. Sch. Sci., Univ. Tokyo)

Chairpersons: Makoto Sato (Kamazawa Univ.)
Hiromi Hirata (NIG)

- SW02-11 (P-1153)** 17:00-17:10 *Fgf8* may function as a nuclear factor
核内 FGF8 の作用機構の解析
○Ayumu Suzuki¹, Hidekiyo Harada², Harukazu Nakamura^{1,2} (Grad., Life Sci. Dic. Tohoku Univ.¹, IDAC²)
- SW02-12 (P-1145)** 17:10-17:20 Rest is dispensable for the proper intrinsic regulations of neuronal gene expressions in the specification of cell fate during neurogenesis in vivo
神経分化抑制遺伝子 Rest は高度に制御された in vivo での神経細胞の運命決定を障害しない
○Hitomi Aoki¹, Akira Hara², Takahiro Kunisada¹, Yasuhiro Yamada^{3,4} (RAMS Gifu¹, Department of Tumor Pathology, Regeneration, and Advanced Medical Science, Gifu University Graduate School of Medicine², PRESTO³, CiRA, iCeMS⁴)
- SW02-13 (P-1075)** 17:20-17:30 Neuronal targeting of synaptic partners are regulated by cell-autonomous function of Meigo, a putative UDP-sugar transporter, in the *Drosophila* olfactory brain center
糖核酸輸送体様分子 Meigo がシナプスパートナーの神経突起ターゲティングを制御する
○Sayaka Sekine¹, Liqun Luo⁴, Masayuki Miura^{1,3}, Takahiro Chihara^{1,2,4} (Dept. Genetics, Grad. Sch. Pharm. Sci, Univ. Tokyo¹, PRESTO, JST², CREST, JST³, HHMI and Dept. Biol. Stanford Univ. USA⁴)

- SW02-14 (P-1019)** 17:30-17:40 Heterochronic shift of Six1 expression drives evolutionary transition of vertebrate primary sensory neurons
脊椎動物体幹部一次感覚神経の進化は Six1 発現時期の変化によってもたらされた
○Hiroshi Yajima¹, Makoto Suzuki², Haruki Ochi³, Keiko Ikeda¹, Shigeru Sato¹, Hajime Ogino³, Naoto Ueno², Kiyoshi Kawakami¹ (Jichi Med Univ¹, NIBB², NAIST³)
- SW02-15 (P-1079)** 17:40-17:50 Phenotypic and molecular heterogeneity in zebrafish lateral line neurons during circuit formation
ゼブラフィッシュ側線系の発生における単一神経細胞の表現型と遺伝子発現の多様性
○Akira Sato, Sumito Koshida, Hiroyuki Takeda (Department of Biological Sciences, Graduate School of Science, University of Tokyo)
- SW02-16 (P-2046)** 17:50-18:00 Involvement of Pax6 in the retinal pigment epithelium development
○Daisuke Nishihara^{1,3}, Akiha Kawasaki-Nishihara^{1,3}, Nagaharu Tsukiji², Harukazu Nakamura¹, Hiroaki Yamamoto³ (Grad. Sch. of Life Scis., Tohoku Univ.¹, Mammal. Genet. Lab., NIG², Fac. of Biosci., NIBST³)

Poster Sessions: May 19 (Thu) P-1001~P-1188

Presentation times: Even-numbered, 16:30-17:30

Odd-numbered, 17:30-18:30

- P-1001** Interactions between signaling pathways and cell adhesion molecules in cell shape dynamics of *Drosophila* wing and haltere
○Anuradha Aritakula, L. S. Shashidhara (Indian Institute of Science Education and Research)
- P-1002** *MicroR-206* Controls Muscle Development in Zebrafish Embryos through Silencing Novel *MicroR-206*-Specific Target Genes
○Wen-Yen Chang, Cheng-Yung Lin, Huai-Jen Tsai (Institute of Molecular and Cellular Biology, National Taiwan University)
- P-1003** Profiling of the extracellular matrix composition in the early mouse embryos
マウス初期胚における細胞外マトリックス蛋白質の局在解析
○Sugiko Futaki¹, Itsuko Nakano¹, Ri-ichiroh Manabe², Ko Tsutsui³, Noriko Ban-Sanzen¹, Kiyotoshi Sekiguchi¹ (IPR Osaka Univ¹, Riken Omics Science Center², Portland Shriners Research Center, OR, USA³)
- P-1004** Transgenic zebrafish model to study translational control mediated by upstream open reading frame of human *chop* gene
○Hung-Chieh Lee, Huai-Jen Tsai (Institute of Molecular and Cellular Biology, College of Life Science, National Taiwan University)
- P-1005** Mechanism of osteoclast activation under hypergravity
加重力環境下における破骨細胞活性化のメカニズム
○Akiko Mantoku, Masahiro Chatani, Issei Kubota, Akira Kudo (Department of Biological Information, Tokyo Institute of Technology)
- P-1006** Temporal and spatial expression patterns of Cdc25 phosphatase isoforms during early *Xenopus* development
アフリカツメガエル胚発生過程における Cdc25 ホスファターゼの発現
Yu-ki Deno, Chihiro Kenmochi, ○Nobushige Nakajo, Hiroyuki Ueno, Noriyuki Sagata (Dept. of Biol., Grad. Sch. of Sci., Kyushu Univ.)
- P-1007** The adaptor protein SH2B3 inhibits neuronal differentiation of PC12 cells and cortical neurons
○Tien-Cheng Wang, Hsun Chiu, Linyi Chen (NTHU)
- P-1008** Epigenetic differentiation of prestalk cells in growing *Dictyostelium* cells
細胞性粘菌の増殖期におけるエピジェネティックな予定柄細胞分化
○Hiroshi Senoo¹, Satoshi Kuwana², Naoko Kogawa², Masashi Fukuzawa^{1,2} (UGAS¹, Faculty of Agriculture and Life Science, Hirosaki University², Faculty of Agriculture and Life Science, Hirosaki University³, UGAS⁴)
- P-1009** Genome-wide Identification and analysis of direct targets of the Hox protein Ultrabithorax in *Drosophila*
○Pavan Agrawal^{1,2}, Farhat Habib², Ramesh Yelagandula¹, L. S. Shashidhara^{1,2} (Centre for Cellular and Molecular Biology¹, Indian Institute of Science Education & Research²)
- P-1010** The *Drosophila* king tubby is a novel molecule to regulate rhodopsin cycle
○Shu-fen Chen, Yu-Chen Tsai, Yu-Shian Li, Seng-Sheen Fan (DLS)

- P-1011** Comprehensive analysis of twelve Wnt genes identified in the genome of the water flea, *Daphnia*
ミジンコゲノム上に見出された 12 種の WNT ファミリー遺伝子群の包括的解析
○Hirotaka Katou, Yasuhiro Shiga (Tokyo Univ of Pharm and Life Sci)
- P-1012** Evolution of *alx* gene and evolution of echinoderm larval skeleton
alx 遺伝子の進化と棘皮動物の幼生骨片の進化
○Hiroyuki Koga, Haruka Fujitani, Mioko Matsubara, Takeshi Hareyama, Norio Miyamoto, Yoshiaki Morino, Hiroshi Wada (Univ. Tsukuba)
- P-1013** microRNA -3906 regulates fast muscle differentiation through silencing the target gene *homer-1* in zebrafish embryos
○Cheng-Yung Lin, Huai-Jen Tsai (Institute of Molecular and Cellular Biology, College of Life Science, National Taiwan University)
- P-1014** Role of the *orthodenticle* gene in an ancestral mode of insect embryogenesis, as revealed by expression and functional analyses in the cricket *Gryllus bimaculatus*
祖先型の胚発生様式をもつ昆虫（コオロギ）における *orthodenticle* の機能
○Aya Nakai, Masato Yoshizaki, Taro Mito, Taro Nakamura, Tetsuya Bando, Hideyo Ohuchi, Sumihare Noji (Dept. of Life Systems, Inst. of Tech. and Sci., Univ. of Tokushima)
- P-1015 (SW01-09)** On the Origin of the Vertebrate Pharyngeal Arch; Insight from Expressions and Functions of *Pax1/9*
脊椎動物咽頭弓の起源に関する研究 ; *Pax1/9* の発現と機能からの考察
○Kazunori Okada¹, Hector Escriva², Keiji Inohaya³, Akira Kudo³, Hiroshi Wada¹ (Univ. Tsukuba¹, Observatoire Océanologique de Banyuls sur Mer², Tokyo Insti, Tech³)
- P-1016 (SW01-01)** Development and Evolution of the Lateral Plate Mesoderm: Comparative Analysis of Amphioxus and Lamprey, with Implications for the Acquisition of Paired Fins
ナメクジウオとヤツメウナギの比較解析による側板中胚葉の進化と対鰭の獲得
○Koh Onimaru¹, Eiichi Shoguchi², Shigeru Kuratani³, Mikiko Tanaka¹ (Tokyo Insti, Tech.¹, OIST², CDB, RIKEN³)
- P-1017** Cancelled
- P-1018** Regionalization and dorso-ventral patterning of the Lamprey telencephalon
円口類ヤツメウナギ終脳発生における D-V パターニングと領域化機構
○Fumiaki Sugahara¹, Shin-Ichi Aota¹, Shigehiro Kuraku², Yasuhiro Murakami³, Yoko Takio-Ogawa¹, Shigeki Hirano⁴, Shigeru Kuratani¹ (RIKEN, CDB¹, Konstanz Univ.², Ehime Univ.³, Niigata Univ.⁴)
- P-1019 (SW02-14)** Heterochronic shift of Six1 expression drives evolutionary transition of vertebrate primary sensory neurons
脊椎動物体幹部一次感覚神経の進化は Six1 発現時期の変化によってもたらされた
○Hiroshi Yajima¹, Makoto Suzuki², Haruki Ochi³, Keiko Ikeda¹, Shigeru Sato¹, Hajime Ogino³, Naoto Ueno², Kiyoshi Kawakami¹ (Jichi Med Univ¹, NIBB², NAIST³)
- P-1020** Evolution of vertebrate muscle: insights from the lamprey
円口類ヤツメウナギから考える筋肉の進化
○Rie Kusakabe¹, Shigehiro Kuraku², Shigeru Kuratani³ (Dept. Biol., Grad. Sch. Sci., Kobe Univ.¹, Dept. Biol., Univ. Konstanz², CDB, RIKEN³)
- P-1021 (OP04-07)** Different microRNA arms usage of Hox miRNA miR-10 in animals
○Jerome Hui, Sam Griffiths-Jones, Matthew Ronshaugen (University of Manchester)

- P-1022** Spatial and temporal expression of single-minded homolog during embryogenesis in water flea, *Daphnia magna*
オオミジンコにおける single-minded ホモログの胚発生過程における発現と機能解析
○Shin-ichi Morita, Shin-ichi Tokishita, Yasuhiro Shiga, Toshihiro Ohta (Tokyo Univ of Pharm & Life Sci)
- P-1023** Robust specification of sensory neurons by dual functions of Charlatan, a *Drosophila* NRSF/REST-like repressor of extramacrochaetae and hairy
感覚神経細胞の形成におけるショウジョウバエ NRSF/REST 様因子 Charlatan の機能解析
Yasutoyo Yamasaki, Young-Mi Lim, ○Leo Tsuda (NCGG)
- P-1024** Comparative anatomy of the diaphragmatic muscle precursor cells in mouse and chick
マウス、ニワトリを用いた横隔膜を形成する筋前駆細胞の比較解剖学的解析
○Norifumi Tatsumi, Masataka Okabe (Dept. of Anat. Jikei Univ. Sch. of Med.)
- P-1025** Imaging of transgenic cricket embryos reveals cell movements consistent with a syncytial patterning mechanism
○Taro Nakamura, Taro Mito, Masato Yoshizaki, Aya Nakai, Hideyo Ohuchi, Sumihare Noji (Dept of Life Systems, Institute of Tech. and Sci., The University of Tokushima)
- P-1026** Analysis of conserved microRNA loci in the Hox cluster in the water flea, *Daphnia magna*
オオミジンコ Hox クラスター内に保存された miRNA 座位の解析
Eisuke Komatsubara, ○Yasuhiro Shiga (Tokyo Univ. Pharm. & Life Sci., Sch. of Life Scis.)
- P-1027 (S08-03)** The molecular entity of positional information revealed by ChIP-sequence analysis for Lim1 and Otx2 in the head organizer and its application for evolutionary analysis
頭部オーガナイザーにおける Lim1 と Otx2 の ChIP-sequence 解析から明らかになった位置情報の分子実体とその進化解析への応用
○Yuuri Yasuoka¹, Norihiro Sudou¹, Yutaka Suzuki², Shuji Takahashi³, Yoshikazu Haramoto³, Yukiko Tando⁴, Kaoru Kubokawa⁵, Makoto Asashima⁶, Sumio Sugano², Masanori Taira¹ (Dept. of Biol. Sci., Grad. Sch. of Sci., Univ. of Tokyo¹, Dept. of Med. Gen. Sci., Grad. Sch. of Fro. Sci., Univ. of Tokyo², CSLS, KOMEX, Univ. of Tokyo³, CAMR, ORI, Univ of Tokyo⁴, MMBS, Grad. Sch. of Sci., Univ. of Tokyo⁵, Dept. of Life Sci., Grad. Sch. of Arts and Sci., Univ. of Tokyo⁶)
- P-1028** Ectopic localization of mitochondrial ATP synthase within ascidian egg myoplasm
ホヤ卵マイオプラズムにおけるミトコンドリア型 ATP 合成酵素の異所的な局在
○Hirokazu Ishii¹, Shourou Sagiike¹, Takahito Nishikata^{1,2} (FIRST, Konan Univ.¹, FIBER, Konan Univ.²)
- P-1029** BMP signaling and the left-right asymmetry in the sea urchin larva
Yi-Jyun Luo, ○Yi-Hsien Su (ICOB, Academia Sinica)
- P-1030 (SW02-05)** Chromatin structure regulates DNA replication in yeast and *Drosophila* development
クロマチン構造は酵母やショウジョウバエ発生時の DNA 複製を制御する
○Hidetugu Kohzaki, Murakami Yota (IVR, Kyoto Univ.)
- P-1031** Convergent evolution of pluteus larvae; Insight from VEGF signaling
VEGF シグナリングから見るプルテウス幼生の収斂進化
○Yoshiaki Morino, Hiroyuki Koga, Hiroshi Wada (Univ. Tsukuba)
- P-1032** Cloning and developmental expression pattern of leucine-rich repeat-containing G protein-coupled receptor 5(LGR5) in the medaka fish, *Oryzias latipes*
メダカ LGR5 遺伝子の同定と発生過程におけるその発現パターンの解析
○Toshio Takahashi¹, Tomonori Deguchi², Takashi Kawasaki², Hiroe Oonishi², Shunsuke Yuba² (Suntory Foun. for Life Sci.¹, Natl. Inst. of Advanced Indus. Sci. and Tech.²)

- P-1033** sPDZD2, a novel modulator of Hedgehog signalling
 °Michelle Tsui, Danny Chan, Kathryn Cheah, Martin Cheung, Kwok Ming Yao (HKU)
- P-1034** Essential role of Dkk3 for head formation by inhibiting Wnt/ β catenin and Nodal/Vg1 signaling pathways in the basal chordate amphioxus.
 ナメクジウオ胚の頭部形成において分泌因子 DKK3 は Wnt/ β catenin, Nodal/Vg1 経路調節を行う
 °Takayuki Onai¹, Ira Blitz², Ken Cho², Linda Holland¹ (UCSD¹, UCI²)
- P-1035** Granzyme G is expressed in the two-cell stage mouse embryo and is required for the maternal-zygotic transition
 グランザイム G は、2 細胞期のマウス胚で表現される母性合子の転換が必要です
 Tung-Chou Tsai¹, William Lin¹, Shang-Hsun Yang², Winston T. K. Cheng³, En-Hui Cheng⁴, Maw-Sheng Lee⁴, Kowit-Yu Chong⁵, °Chuan-Mu Chen¹ (NCHU¹, NCKU², THU³, CSMU⁴, CGU⁵)
- P-1036** Isolation of wild-type iPS cells genetically restored from heterozygous Pkd1-deficient iPS cells in mouse
 マウス iPS 細胞における Pkd1 遺伝子の遺伝的異常の自発的正常化
 °LI-TAO Cheng^{1,2}, Shogo Nagata¹, Kunio Hirano¹, Shinpei Yamaguchi¹, Takashi Tada¹ (Stem Cell Engineering, IFMS, Kyoto Univ.¹, Department of Nephrology, Peking University Third Hospital, Peking University²)
- P-1037** Investigation of the evolutionary background of pluripotency among species
 多能性機構の進化的背景の研究
 °Shota Nakanoh, Kiyokazu Agata (Kyoto University, Science)
- P-1038** Tubulogenesis using Wolffian duct as a model: FGF signals regulate tubular elongation and cell epithelialization as environmental factors
 上皮管構造の形成と伸長の制御機構：ウォルフ管をモデルとした解析
 °Yuji Atsuta, Yoshiko Takahashi (NAIST)
- P-1039** Essential roll of SOX5 in the semicircular canal development of zebrafish
 ゼブラフィッシュ三半規管形成に必須な SOX5 の機能
 Syumpei Tanino^{1,3}, Gembu Abe², Koichi Kawakami², Harukazu Nakamura^{1,3}, °Jun-Ichi Funahashi^{1,3} (Dep. Mol. Neurobiol., IDAC, Tohoku Univ.¹, Div. of Mol. and Dev. Biology, NIG², Dept. of Mol. Neurobiol., Graduate Sch. of Life Science, Tohoku Univ.³)
- P-1040** Effect of cadmium chloride(CdCl₂)on early development of *Xenopus laevis*
 アフリカツメガエルの発生初期段階における塩化カドミウム (CdCl₂) の影響
 °Mamoru Hanatachi, Kouhei Matsuda, Minoru Uchiyama, Norifumi Konno (Graduate school of Science and Engineering, University of Toyama)
- P-1041 (SW01-03)** Release of blood-vessel adhesion regulates both blood circulation start and angiogenesis in zebrafish
 ゼブラフィッシュにおいて血管内皮-赤血球の接着解除は血液循環の開始と節間血管の伸長に必要である
 °Atsuo Iida (Ins. for Front. Med. Sci., Kyoto University)
- P-1042** Role of ROCK in embryogenesis
 ROCK の胎生期の機能解析
 °Hiroshi Kamijo, Yutaka Matsumura, Dean Thumkeo, Yoshihiko Shimizu, Toshimasa Ishizaki, Shuh Narumiya (Dep. Pharm Grad. Sch. of Med., Kyoto Uni.)

- P-1043** Characterization of the medaka (*Oryzias latipes*) primary ciliary dyskinesia mutant, *jaodori*: Redundant and distinct roles of two dynein axonemal intermediate chain 2s(*dnai2s*) in motile cilia
 ダイニン腕構成タンパク質に異常を持つ突然変異体メダカ *jaodori* の解析
 ○Daisuke Kobayashi¹, Norio Iijima², Haruo Hagiwara³, Keiichiro Kamura^{4,5}, Hiroyuki Takeda⁴, Takahiko Yokoyama¹ (Dept Anat Dev Biol Kyoto Pref Univ Med Grad Sch Med Sci¹, Dept Anat Neurobiol, Nippon Med Sch², Dept of Occupational Therapy, Sch Health Sci, Fac Med, Gunma Univ³, Dept Biol Sci, Grad Sch Sci, Univ Tokyo⁴, RIKEN CDB⁵)
- P-1044 (OP02-08)** Mitotic cell rounding accelerates invagination of the *Drosophila* tracheal placode
 分裂期進入に伴う細胞球形化がショウジョウバエ胚気管原基の陥入を促進する
 ○Takefumi Kondo, Shigeo Hayashi (RIKEN CDB)
- P-1045** The role of nucleotide receptors in *Xenopus* development
 ゼノパスの発生過程におけるヌクレオチド受容体の役割を探る
 ○Madoka Masuda^{1,2}, Hiromi Satsuki², Chikara Hashimoto^{1,2} (Dept. Biol., Grad. Sch. Sci., Osaka Univ.¹, BRH²)
- P-1046** A novel medaka mutant Da-2 showing a phenotype similar to Double-anal fin
 新規メダカ変異体 Da-2 は Da と似た表現型を示す
 ○Yusuke Nagao¹, Etsuko Sawatari², Atsushi Shimizu³, Makoto Furutani-Seiki⁴, Svetlana Fedorova², Hiroyuki Takeda⁵, Yuko Wakamatsu², Masahiko Hibi², Hisashi Hashimoto² (Grad. Sch. Sci., Nagoya Univ.¹, Biosci. Biotech. Ctr., Nagoya Univ.², Dept. Mol. Biol., Keio Univ. Sch. Med.³, Dept. Biol. Biochem. Univ. Bath⁴, Grad. Sch. Sci, Univ. Tokyo⁵)
- P-1047** Roles of Autotaxin, a lysophospholipid-generating exoenzyme in neural development in mouse and chick
 脂質産生酵素オートタキシンのマウス・ニワトリ脳形成における役割
 ○Hideyo Ohuchi¹, Seiichi Koike², Hitomi Fukui¹, Yoshifumi Yutoh¹, Kazuko Keino-Masu², Masayuki Masu², S Noji¹ (Inst. of Tech. Sci., Univ. of Tokushima Grad. Sch.¹, Department of Molecular Neurobiology, Institute of Basic Medical Sciences, Graduate School of Comprehensive Human Sciences, University of Tsukuba²)
- P-1048** Gene expression of twinning formation in *Xenopus laevis* embryo
 アフリカツメガエル 2 次胚形成における遺伝子発現について
 ○Eiji Sato¹, Yasuko Onuma², Naoyuki Miura¹, Yuzuru Ito² (Dept.of Biochem., Hamamatsu Univ.Sch.of Med.¹, Research Center for Stem Cell Engineering, National Inst. AIST²)
- P-1049** Transcription factor *Tfap2b* functions in digit morphogenesis downstream of FGF signals from AER
 転写因子 *Tfap2b* は AER からの FGF シグナルの下流で指の形態形成の制御に関与する
 ○Ryohei Seki¹, Shigetoshi Yokoyama², Hiroshi Asahara², Takayuki Suzuki³, Hitoshi Yokoyama¹, Koji Tamura¹ (Grad. Sch. of Life Sci., Tohoku Univ.¹, Department of Systems BioMedicine, National Research Institute for Child Health and Development², Grad. Sch. of Sci., Nagoya Univ.³)
- P-1050** Cancelled
- P-1051** Impaired development of kidney in mice lacking *Lgr4* with reduced expression of the gene for ureteric bud branching
Lgr4 欠損マウスは腎臓の発生不全を示す
 ○Mizuki Sone, Yasuaki Mohri, Kazunori Oyama, Atsushi Akamatsu, Katsuhiko Nishimori (Lab. Mol. Biol., Grad. Sch. of Agr. Sci., Univ. of Tohoku)

- P-1052** Secondary neurulation: Another type of neurulation by mesenchymal-to-epithelial transition
もう一つの神経管 : Secondary neurulation
○Yoshiko Takahashi, Teruaki Kawachi, Eisuke Shimokita (NAIST, Biol. Sci.)
- P-1053** Coordination of cell death and selective adhesion interlocking dorsal and ventral wing edges for zigzag pattern of *Drosophila* wing margin hairs
ショウジョウバエ翅の縁毛のジグザグ配置形成機構 : 背腹境界における細胞死と NEPH1/nephrin ホモログを介した特有の細胞配置
○Masahiko Takemura^{1,2}, Takashi Adachi-Yamada^{1,2,3} (Dept. of Biology, Grad School of Science, Kove Univ.¹, Institute for Biomolecular Science, Gakushuin Univ.², Dept. of Life Science, Fac. of Science, Gakushuin Univ.³)
- P-1054** Mechanical Tension Guides Cell Sorting at the Anteroposterior Compartment Boundary in *Drosophila*
細胞間結合にかかる張力がショウジョウバエの前後コンパートメント境界における細胞の混ざり合いを防ぐ
○Daiki Umetsu¹, Katharina Landsberg¹, Reza Farhadifar², Jonas Ranft², Thomas Widmann¹, Thomas Bittig², Amani Said¹, Benoît Aigouy¹, Suzanne Eaton¹, Frank Jülicher², Christian Dahmann¹ (MPI-CBG¹, MPI-PKS²)
- P-1055 (OP02-09)** In vitro analysis revealed that direct cell interactions autonomously generate various surface patterns in zebrafish
ゼブラフィッシュ色素細胞培養系を用いた、表面パターン形成機構における細胞間相互作用の解析
○Hiroaki Yamanaka, Yuji Amihama, Shigeru Kondo (FBS, Osaka Univ.)
- P-1056** Polycystin-2 mediates flow-derived signal to establish left-right asymmetry at the edge of the node
Polycystin-2 は左右軸形成において、ノード流によってうまれる左右非対称なシグナルを仲介する
○Satoko Yoshida¹, Hidetaka Shiratori¹, Aiko Kawasumi¹, Kyosuke Shinohara¹, Jose Antonio Belo², Junichi Nakai³, Shigenori Nonaka⁴, Hiroshi Sasaki⁵, Ivana Kuo⁶, Barbara Ehrlich⁶, Petra Pennekamp⁷, Bernd Dworniczak⁷, Hiroshi Hamada¹ (Osaka Univ. FBS¹, Instituto Gulbenkian de Ciencia², Saitama Univ. BSI³, NIBB⁴, RIKEN CDB⁵, Yale Univ. School of Medicine⁶, Univ. Hospital Muenster⁷)
- P-1057 (WS02-06)** Dual function of cilia in Kupffer's Vesicle: generation and sensing of nodal flow
クッペル胞繊毛の2つの働き : nodal flow をつくり、センスする
○Keiichiro Kamura^{1,2}, Sumito Koshida², Hiroyuki Takeda² (RIKEN CDB¹, Univ. of Tokyo²)
- P-1058** Expression of *chordin* in inverted embryos of *Xenopus*
アフリカツメガエルにおける反転胚の *chordin* の発現
○Eriko Motomura¹, Tomohiro Narita², Shin-ichiro Nishimatsu², Tsutomu Nhono², Masao Sakai¹ (Grad. Sch. of Sci. and Eng., Kagoshima Univ.¹, Dept. of Mol. and Dev. Biol., Kawasaki Med. Sch.²)

- P-1059** Expression of the actin-binding proteins, coactosin and drebrin, in the developing chick ciliary ganglion
 発達期ニワトリ胚毛様体神経節におけるアクチン結合タンパク質、コアクトシンとドレブリンの発現パターン
 ○Shoko Hososhima^{1,5}, Xubin Hou², Harukazu Nakamura^{3,4}, Toru Ishizuka^{1,4,5}, Hiromu Yawo^{1,4,5} (Molecular and Cellular Neuroscience Laboratory, Department of Developmental Biology and Neuroscience, Tohoku University Graduate School of Life Sciences¹, Laboratory of Neuronal Development Department of Medical and Dental Sciences, Niigata University², Development of molecular neurobiology, Graduate School/Institute of Denelopment, Aging and Cancer, Tohoku University³, Tohoku University Basic and Translational Reseach Center for Global Brain science⁴, CREST, JST⁵)
- P-1060** Roles of apoptosis during early brain morphogenesis; not restricting overall cell number, but ensuring the completion of neural tube closure
 アポトーシスの脳の初期形態形成における役割は、脳全体の細胞数の制限ではなく、神経管閉鎖を確実に完了させることである
 ○Keiko Nonomura¹, Yoshifumi Yamaguchi^{1,2}, Hiroki Yoshida³, Keisuke Kuida⁴, Masayuki Miura^{1,2} (Dept. Genetics, Grad. Sch. Pharm. Scis, Univ. Tokyo¹, CREST, JST², Saga Univ. Med. Sch.³, Millennium: The Takeda Oncology Company⁴)
- P-1061 (SW02-04)** Developmental roles of muscle-specific microRNAs in medaka
 メダカ胚における筋肉特異的 microRNA の発現と機能
 ○Saori Tani¹, Rie Kusakabe², Kiyoshi Naruse³, Hiroshi Sakamoto⁴, Kunio Inoue⁵ (Dept. Biol., Grad. Sch. Sci., Kobe Univ.¹, Dept. Biol., Grad. Sch. Sci., Kobe Univ.², NIBB³, Dept. Biol., Grad. Sch. Sci., Kobe Univ.⁴, Dept. Biol., Grad. Sch. Sci., Kobe Univ.⁵)
- P-1062 (OP01-06)** Genetic dissection of the hindbrain by the Gal4-UAS system in zebrafish
 ゼブラフィッシュ Gal4 トラップ法による後脳の遺伝学的解剖
 ○Kazuhide Asakawa^{1,2}, Gembu Abe¹, Koichi Kawakami^{1,2} (NIG¹, SOKENDAI²)
- P-1063** The *Drosophila* king tubby is a novel molecule to regulate rhodopsin cycle
 ○Shu Chen, Yu-Chen Tsai, Yu-Shian Li, Seng-Sheen Fan (Department of Life Science, Tunghai University)
- P-1064 (OP01-03)** Olfactory Receptor Neuron Identity is Diversified by the *Drosophila* Evl1/Prdm16 Homologue Hamlet that Mediates Chromatin Modification at Notch-Target Loci
 ショウジョウバエ Prdm 蛋白 Hamlet による Notch 標的のクロマチン修飾と嗅覚神経細胞クラス分化
 ○Keita Endo¹, MD Rezaul Karim², Alena Krejci³, Emi Kinameri², Hiroaki Taniguchi², Matthias Siebert², Kei Ito¹, Sarah Bray³, Adrian Moore² (IMCB, Univ. of Tokyo¹, RIKEN BSI², Dept. of PDN, Univ. of Cambridge³)
- P-1065 (OP01-07)** Altering neural network by blocking axonal navigation with nano-micro structures during development of a vertebrate
 ナノ構造物を用いた発生中の脊椎動物の中樞神経内での回路形成改変の試み
 Norihiko Yamasaki¹, Yuki Someya¹, Makoto Okada², Matsui Shinji², Toshie Matsushita¹, ○Kohei Hatta¹ (Life Sci, U of Hyogo¹, Adv. Sci. Tech. U of Hyogo²)
- P-1066 (OP01-08)** Semaphorin 3A causes the conversion of axons of developing spinal commissural interneurons to dendrites by the induction of functional Cav2.3 channels
 Makoto Nishiyama¹, Kazunobu Togashi¹, Melanie von Schimmelmänn¹, Shin-ichi Maeda², Yoshio Goshima³, Shin Ishii², ○Kyonsoo Hong¹ (Department of Biochemistry, NYU School of Medicine¹, Department of Systems Science, Graduate School of Informatics, Kyoto University², Department of Molecular Pharmacology and Neurobiology, Yokohama City University School of Medicine³)

- P-1067** Neural activity regulates proper restitution of the brain function through novel neuropeptide genes in planarian regeneration
 プラナリアの機能的な脳再生に関与する新規神経ペプチドの解析
 °Takeshi Inoue¹, Tomomi Takano², Yoshihiko Umesono^{1,2}, Kiyokazu Agata¹ (Dep. Biophys, Kyoto Univ.¹, CDB, RIKEN²)
- P-1068** Analysis of glial cell sub-lineages in the mouse central nervous system
 マウス中枢神経系におけるグリア亜集団細胞系譜の解析
 °Tetsushi Kagawa¹, Rieko Nomura¹, Takeshi Shimizu², Kimi Araki³, Naoki Takeda⁴, Naomi Nakagata⁵, Ikuo Nobuhisa¹ (MRI, Tokyo Med. Dent. Univ.¹, RCEM, UNIV. SINGAPORE², CARD, KUMAMOTO UNIV.³, CARD, KUMAMOTO UNIV.⁴, CARD, KUMAMOTO UNIV.⁵)
- P-1069** Notch signal inactivation by *Sbno1* is essential for mouse neuronal differentiation
Sbno1 による Notch シグナルの抑制によって皮質ニューロンは分化する
 °Yu Katsuyama¹, Ai Takano², Naoya Ryoyama², Hideaki Imai², Noriko Osumi¹, Masahiko Hibi³, Toshio Terashima² (Tohoku Univ. Grad. Sch. Med.¹, Kobe Univ Grad Sch Med², Biosc Biotech Center, Nagoya Univ³)
- P-1070** Genetic dissection of adult zebrafish brain by *Tol2* transposon mediated Gal4-UAS system and gene trap and enhancer trap method
 °Pradeep Lal^{1,2}, Koichi Kawakami^{1,2} (NIG¹, SOKENDAI²)
- P-1071** The role of *Xnr3* in the neural patterning in *Xenopus*
 ツメガエルの発生初期において *Xnr3* が神経パターンニングに及ぼす影響
 °Mariko Morita¹, Yoshikazu Haramoto^{1,2}, Shuji Takahashi², Makoto Asashima², Tatsuo Michiue¹ (Dept, life sci, grad. school Arts Sci, Univ. Tokyo¹, Grad. school Arts Sci, Univ. Tokyo²)
- P-1072** Zebrafish *Kuririn* is a critical factor for the telencephalic neurogenesis by repressing *Hes*-related gene, *her6*
 ゼブラフィッシュ *Kuririn* は *Hes* 関連遺伝子である *her6* を介した終脳の神経分化に必要である
 °Yoshinari Nakahara¹, Akio Yoshizawa^{1,2}, Toshiaki Izawa², Tohru Ishitani³, Makiko Tsutsumi³, Atsushi Kuroiwa², Motoyuki Itoh³, Yutaka Kikuchi¹ (Department of Biological Science, Graduate School of Science, Hiroshima University¹, Division of Biological Science, graduate School of Science, Nagoya University², Unit on Nervous Development System, Nagoya University³)
- P-1073** Functional analysis of the developmental stage-specifically expressed gene in cortical progenitor cells
 大脳前駆細胞において発生時期特異的に発現する遺伝子の機能解析
 °Mayumi Okamoto¹, Miyata Takaki¹, Fumio Matsuzaki², Ayano Kawaguchi¹ (Department of Anatomy and Cell Biology, Nagoya University¹, Lab. for Cell Asymmetry, CDB, RIKEN²)
- P-1074** Novel retinal fiber pathway in the deep laminae of the developing chick optic tectum
 ニワトリ胚視蓋における網膜繊維の新規経路
 °Minoru Omi¹, Hidekiyo Harada², Harukazu Nakamura^{1,2} (Dept. Mol. Neurobiol., Grad. Sch. Life Sci., Tohoku Univ.¹, Dept. of Mol. Neurobiol., IDAC, Tohoku Univ.²)
- P-1075 (SW02-13)** Neuronal targeting of synaptic partners are regulated by cell-autonomous function of Meigo, a putative UDP-sugar transporter, in the *Drosophila* olfactory brain center
 糖核酸輸送体様分子 Meigo がシナプspartnerの神経突起ターゲティングを制御する
 °Sayaka Sekine¹, Liqun Luo⁴, Masayuki Miura^{1,3}, Takahiro Chihara^{1,2,4} (Dept. Genetics, Grad. Sch. Pharm. Sci, Univ. Tokyo¹, PRESTO, JST², CREST, JST³, HHMI and Dept. Biol. Stanford Univ. USA⁴)

- P-1076** Genetic control for development of cerebellar neurons and neural circuits in zebrafish
ゼブラフィッシュ小脳変異体の解析
○Takashi Shimizu¹, Shuichi Kani², Young-Ki Bae^{2,3}, Koji Tanabe^{2,4}, Ryo Kusuda¹, Masahiko Hibi¹
(Nagoya University¹, RIKEN CDB², Division of Basic and Applied Sciences, Research Institute, National Cancer Center, Korea³, Division of Stem Cell Regulation Research, Osaka University Graduate School of Medicine⁴)
- P-1077** Two modes of tangential cell migration in the developing chick optic tectum
ニワトリ視蓋発生における2種類の接線方向への細胞移動
○Yuji Watanabe^{1,2}, Harukazu Nakamura^{1,2} (Dept. Mol. Neurobiol., Grad. Sch. Life Sci., Tohoku Univ.¹, IDAC²)
- P-1078** A novel RING finger protein, Znfl79, modulates cell cycle exit and neuronal differentiation of P19 embryonal carcinoma cells
○Ping-Chieh Pao¹, Shih-Ting Lin², Yi-Chao Lee^{1,2,3} (IBBT¹, Department of Pharmacology, College of Medicine, National Cheng Kung University, Tainan 70101, Taiwan², Center for Gene Regulation and Signal Transduction Research, National Cheng Kung University, Tainan 70101, Taiwan³)
- P-1079 (SW02-15)** Phenotypic and molecular heterogeneity in zebrafish lateral line neurons during circuit formation
ゼブラフィッシュ側線系の発生における単一神経細胞の表現型と遺伝子発現の多様性
○Akira Sato, Sumito Koshida, Hiroyuki Takeda (Department of Biological Sciences, Graduate School of Science, University of Tokyo)
- P-1080** Hepatitis C Virus Infection and Increased Risk of Stroke: A Population-Based Study
○Chien-Chang Liao, Ta-Liang Chen (DA, TMUH)
- P-1081** A novel protein, Sidetrk1 supports peripheral axon extension in zebrafish primary sensory neurons by facilitating ligand-independent activation of neurotrophin receptors.
○Makoto Aoki, Hiroshi Segawa, Mayumi Naito, Hitoshi Okamoto (DGR, BSI, RIKEN)
- P-1082** DEAD-box RNA helicase is required for development of the digestive organs and brain
DEAD-box RNA へリカーゼは消化器官と脳の発生に必要である
○Shunya Hozumi¹, Ryo Hirabayashi¹, Akio Yoshizawa^{1,2}, Mitsuko Ogata², Tohru Ishitani², Makiko Tsutsumi², Atsushi Kuroiwa², Motoyuki Itoh², Yutaka Kikuchi¹ (Dep. of Biol. Sci., Grad. Sch. of Sci., Hiroshima Univ.¹, Div. of Biol. Sci., Grad. Sch. of Sci., Nagoya Univ.²)
- P-1083** Involvement of *Foxc1* in vascular network formation
終脳血管網形成における *Foxc1* の役割
○Sachiko Iseki, Norisuke Yokoyama, Akihiko Machida, Shigeru Okuhara (SMCE, TMDU)
- P-1084** Changing mechanical specificity of cartilage matrix between fetus and newborn animals
出生前後における関節軟骨マトリックスの力学的特性の変化
○Mikiko Kobayashi-Miura¹, Takashi Miura², Yoshimi Yamaguchi², Tsuyoshi Tanabe¹, Tomoki Aoyama³, Akira Ito³, Hiroki Amono¹, Shinji Imade⁴, Yuji Uchio⁴, Yasuyuki Fujita¹ (Department Public Health¹, Department of Anatomy and Developmental Biology, Graduate School of Medicine, Kyoto University², Department of Human Health Sciences, Graduate School of Medicine, Kyoto University³, Department of Orthopaedic surgery, Shimane University School of Medicine⁴)
- P-1085** Roles of *crip2* during mechano-dependent cardiogenesis
ゼブラフィッシュの心臓形成における *Crip2* の機能解析
○Hidetoshi Osada, Kota Miyasaka, Toshihiko Ogura (IDAC)

- P-1086** Functional studies of mbnl1 in early zebrafish development
 °LiChun Tu¹, Hsiao Kuang-Ming¹, Pan Huichin² (IMB¹, DBS²)
- P-1087** Distribution and function of Oct25-expressing cells in the organogenesis of *Xenopus laevis* embryo
 アフリカツメガエルの器官形成における Oct25 発現細胞の分布と機能の解析
 °Takashi Yamaura¹, Hiroyuki Yaguchi¹, Yuta Katayama¹, Hideo Kubo², Keisuke Morichika¹, Tsutomu Kinoshita¹ (Dept. of Life Sci., Fac. of Sci., Rikkyo Univ.¹, Dept. of Med. Biol., Tokyo Met. Inst. of Med. Sci.²)
- P-1088** The developmental role of phosphatase of regenerating liver in *Drosophila*
 °Hsin-Lun Hsien¹, Chun-Hong Chen³, Zih-Yuan Shen¹, Yu-Di Chang¹, Ming-Der Lin^{1,2} (TCU Taiwan¹, TCU, Taiwan², NHRI, Taiwan³)
- P-1089** How do adult mammalian cardiomyocytes maintain the proliferation arrest?
 どうようにして哺乳類の成体心筋細胞は増殖停止を維持し続けるのでしょうか?
 °Shoji Tane¹, Satoshi Yoshitome², Yukio Satoh¹, Noriko Iwamoto¹, Toshinori Hayashi¹, Takashi Takeuchi¹ (Dev. Biosignal., Sch. Life Sci., Tottori Univ.¹, Dev. Pathol. Biochem., Sch. Life Sci., Tottori Univ.²)
- P-1090 (OP04-08)** *MicroRNA-21* expression triggered by heartbeat contributes to cardiac valve formation
 心拍に誘導される *MicroRNA-21* は心臓弁形成に関与する
 °Toshihiro Banjo¹, Minoru Omi¹, Kota Miyasaka¹, Yasuyuki Kida², Toshihiko Ogura¹ (IDAC, Tohoku Univ.¹, Salk Inst.²)
- P-1091** The Roles of Sox2 and Sox18 in mouse hair type specification
 °Bryan Ho¹, Charles Cheng¹, Keith Leung¹, Peter Koopman², Kathy Cheah¹ (HKU¹, University of Queensland²)
- P-1092 (S02-03)** Cellular aspects of heart formation and LR asymmetric morphogenesis
 °Hinako Kidokoro¹, Koji Tamura², Masataka Okabe³, Gary C. Schoenwolf¹, Yukio Saijoh¹ (Dept. of Neurobiology & Anatomy, University of Utah¹, Dept. of Developmental Biology & Neurosciences, Tohoku University², Dept. of Anatomy, The Jikei University School of Medicine³)
- P-1093** Stem cell markers ABCG2, Bmi-1, Oct-3/4, and Yap in the developing mouse incisor
 °Hyuk-Jae Kwon, Liwen Li, Eizo Nakagawa, Li Zhang, Sung-Won Cho, Han-Sung Jung (YUCD)
- P-1094 (OP02-07)** Planar cell chirality contributes to left-right asymmetric epithelial morphogenesis in *Drosophila*
 細胞のキラリティによるショウジョウバエ上皮組織の左右非対称的な形態形成
 °Reo Maeda^{1,3}, Kiichiro Taniguchi^{1,3}, Tadashi Ando¹, Naotaka Nakazawa¹, Ryo Hatori¹, Mitsutoshi Nakamura¹, Takashi Okumura¹, Kenji Matsuno^{1,2} (Dept. of Biol. Sci./Tec., Tokyo Univ. of Sci.¹, Res. Ins. Sci./Tec., Tokyo Univ. of Sci.², equally contribution³)
- P-1095** TGF-beta signaling pathway using ALK5 may be involved in the heart laterality of blind cavefish (*Astyanax mexicanus*) embryo
 ALK5 を経由する TGF-beta シグナル伝達経路は洞窟魚胚の心臓左右性決定に関与している。
 °Kazue Mogi¹, Kohei Igarashi², Tsuyoshi Kobayashi², Ryuji Toyoizumi^{1,2} (Res. Inst. for Integrated Sci., Kanagawa Univ.¹, Dept. of Biol. Sci., Kanagawa Univ.²)
- P-1096** Investigation of the molecular mechanism that recruit spicule-carrying transport cells to their holding-up points in a freshwater sponge
 カワカイメンの骨片運搬細胞を誘導する骨片配置メカニズムの解明に向けて
 °Yudai Nakata, Kiyokazu Agata, Noriko Funayama (Dept. of Biophys., Graduate School of Science, Kyoto Univ.)

- P-1097** MiR-200b is involved in epithelial–mesenchymal transition through Tgf- β signaling and is required for mammalian palate development
 ○Jeong-Oh Shin¹, Jong-Min Lee¹, Kyoung-Won Cho¹, Sungwook Kwak¹, Min-Jung Lee¹, Kye-Seong Kim², Han-Sung Jung¹ (Division in Anatomy and Developmental Biology, YUCD¹, Department of Anatomy and Cell Biology, College of Medicine, Hanyang University, Seoul, Korea²)
- P-1098** Roles of cell-shape change mediated by Wnt signaling in fin morphogenesis
 ヒレの発生において WNT 経路を介した細胞形態変化が器官のかたちを作る
 ○Tohru Yano^{1,3}, Gembu Abe², Koichi Kawakami², Hitoshi Yokoyama¹, Koji Tamura¹ (Dept. Dev. Biol. and Neurosci., Grad. Sch. Sci., Tohoku Univ.¹, Mol. Dev. Biol., NIG², JSPS³)
- P-1099 (OP02-03)** The *C.elegans* spectraplakins VAB-10 regulates nuclear migration by linking actin and microtubule cytoskeletons in the gonadal distal tip cells
 線虫スペクトラプラキンの細胞移動における役割について
 ○Hon-Song Kim¹, Ryoko Murakami^{2,3}, Katsuyuki Tamai², Kiyotaka Ohkura², Sophie Quintin⁴, Michel Labouesse⁴, Hiroshi Sakamoto³, Kiyoji Nishiwaki^{1,2} (Dep. of Biosci., Kwansei-Gakuin Univ.¹, RIKEN, CDB², Sci. and Tech. Kobe Univ.³, Dep. of Cell and Dev. Bio., IGBMC, CNRS/INSERM/Univ.⁴)
- P-1100** Functional alteration of the Gbx2 transcription factor during zebrafish brain development
 ゼブラフィッシュ胚発生に伴う Gbx2 の脳形成制御機能の変化
 ○Yukiko Nakayama, Zhe Wang, Maiko Kanai, Hiroshi Kikuta, Kyo Yamasu (Div. Life Sci., Grad. School Sci. Eng., Saitama Univ.)
- P-1101 (SW02-09)** A H3K27 demethylase, Jmjd3, is essential for *Xenopus* eye development
 ○Akane Kawaguchi, Haruki Ochi, Norihiro Sudou, Hajime Ogino (NAIST)
- P-1102 (SW02-08)** Functional analysis of histone methylase G9a and GLP in mouse cardiac development
 ヒストンメチラーゼ G9a と GLP の心筋特異的欠損マウスにおける心臓形態形成異常の解析
 ○Tomoyuki Makino¹, Makoto Tachibana², Yoichi Shinkai², Takashi Takeuchi¹ (Tottori Univ., Sch. Life Sci., Div. Biosignal.¹, IVR, Kyoto Univ.²)
- P-1103** *ftz-fl* and *blimp-1* are required for the pupal development in *Drosophila*
 ○Abdelrahman Sultan¹, Hitoshi Ueda^{1,2} (Grad. Sch. of Nat. Sci. and Tech., Okayama University¹, Dep. of Bio., Fac. of Sci., Okayama Univ.²)
- P-1104** Three-dimensional cellular vertex model for epithelial morphogenesis
 上皮形態形成シミュレーションのための三次元細胞頂点モデル
 ○Sangwoo Lee, Yoshihiro Morishita (Kyushu Univ.)
- P-1105** Postembryonic development of the lateral line neuromasts in zebrafish
 ゼブラフィッシュ側線器官の後胚発生
 ○Hironori Wada^{1,2}, Koichi Kawakami^{2,3} (PRESTO, JST¹, NIG², SOKENDAI³)
- P-1106** Class III POU factors directly regulate *Otx2* expression by binding to the forebrain and mid-brain enhancer
 クラス III POU 転写因子による *Otx2* 遺伝子の転写制御機構
 ○Fumitaka Inoue¹, Maiko Takahashi¹, Daisuke Kurokawa^{1,2}, Nobuyoshi Takasaki³, Tomomi Ohmura¹, Kyo Yamasu⁴, Shinichi Aizawa¹ (RIKEN, CDB¹, MMBS, Univ. Tokyo², RCMG, AIST³, Div. Life Sci., Grad. Sch. Sci. Eng., Saitama Univ.⁴)

- P-1107** Regulatory mechanisms of ecdysteroid-inducible *Blimp-1* encoding a transcriptional repressor in the timer system to determine the prepupal period in *Drosophila melanogaster*
 キイロショウジョウバエの前蛹期間を決めるタイマー機構における *Blimp-1* の遺伝子発現制御
 °Kazutaka Akagi¹, Hitoshi Ueda^{1,2} (Grad. Sch. of Nat. Sci. and Tech., Okayama Univ.¹, Dept. of Bio., Fac. of Sci., Okayama Univ.²)
- P-1108** Genome-wide prediction of POU/SOX factor dependent regulatory modules involved in the developmental processes
 °Munazah Andrabi, Hisato Kondoh (FBS)
- P-1109** Epigenetic regulation of gene expressions during leg regeneration in the two-spotted cricket, *Gryllus bimaculatus*
 フタホシコオロギの脚再生におけるエピジェネティックな遺伝子発現制御
 °Yoshimasa Hamada, Tetsuya Bandou, Yuuji Matsuoka, Taro Nakamura, Taro Mito, Hideyo Ohuchi, Sumihare Noji (Univ. of Tokushima, Fac. of Eng. Dept. of Bio. Sci. and Tech.)
- P-1110** Gene silencing by the dynamics of polycomb-group protein complexes
 ポリコーム群ダイナミクスによる遺伝子抑制
 °Kyoichi Isono, Haruhiko Koseki (RIKEN RCI)
- P-1111** Effects of a high-fat diet on gene expression in epididymal white fat and interscapular brown fat
 °Hyeng-soo Kim, Sanggyu Lee (KNU)
- P-1112** Failure of C/EBP α and GATA-1 mediated down-regulation of DACH1 enhances HOXA9 activity in MLL-AF9 mediated myeloid leukemia
 °Jaewoong Lee, Sanggyu Lee (School of Life Science and Biotechnology, Kyungpook National University)
- P-1113 (SW02-10)** Long-term Epigenetic Regulation of Region-specific Expression of *zic1/zic4*, Key Regulators of Vertebrate Body Patterning
 背腹パターンを制御する転写因子 *Zic* のエピジェネティックな発現制御機構の解析
 °Ryohei Nakamura, Tatsuya Tsukahara, Hiroyuki Takeda (Dept. Bio. Sci., Grad. Sch. Sci., Univ. Tokyo)
- P-1114** Analysis of the transcriptional regulation mechanisms of *Fgf10* gene responsible for the mesenchyme-AER interaction in the vertebrate limb development
 肢芽の組織間相互作用を担う *Fgf10* 転写調節機構の解明
 °Yoichi Shiraishi, Hiroaki Higuchi, Shigeki Yamamoto, Mie Horano, Atsushi Kuroiwa (Div. of Biol. Sci., Grad. Sch. of Sci., Nagoya Univ.)
- P-1115 (OP03-10)** Pgc represses miRNA expression and protects germ plasm RNAs from degradation in *Drosophila* primordial germ cells
 Pgc は、ショウジョウバエ始生殖細胞での miRNA の転写を抑制し、母性 RNA を保護している
 °Kazuko Hanyu-Nakamura, Kazuki Matsuda, Akira Nakamura (Lab. for Germline Development, RIKEN CDB)
- P-1116** The role of heparan sulfate proteoglycans during *Drosophila* oogenesis
 ショウジョウバエ卵形成過程におけるヘパラン硫酸プロテオグリカンの役割
 °Yoshiki Hayashi¹, Satoru Kobayashi¹, Hiroshi Nakato² (Okazaki Institute for Integrative Bioscience, NIBB¹, Dept. of GCD, Univ. of Minnesota²)

- P-1117** Derivation of in vitro spermatogenesis competent cells from mouse ES cells without transgenic markers
 マーカ―遺伝子非組換えマウス ES 細胞に由来する EG 様細胞の雄性生殖系列細胞へのインビトロ分化
 ○Yoshiyasu Ito (NIAS)
- P-1118** Analysis of molecular mechanisms of gamete recognition and membrane fusion in Dictyostelium
 細胞性粘菌配偶子における識別と融合機構の解析
 Kentaro Saeki, ○Marina Okamoto, Shinichi Kawakami, Akiko Otsuka, Hideko Urushihara (University of Tsukuba)
- P-1119 (SW02-01)** *In vitro* production of functional sperm in cultured neonatal mouse testes
 新生仔マウス精巣片の器官培養法による精原細胞からの精子産生
 ○Takuya Sato¹, Kumiko Katagiri¹, Kimiko Inoue², Narumi Ogonuki², Atsuo Ogura², Yoshinobu Kubota¹, Takehiko Ogawa¹ (Dept. of Urology, Yokohama City Univ. School of Med.¹, RIKEN, BRC²)
- P-1120 (SW02-03)** Germ plasm includes germ cell determinant in *Xenopus*
*Xenopus*生殖細胞質は、生殖細胞運命を決定づける
 ○Haru Tada, Kenji Watanabe (Grad.Sch.Life Sci, Univ.Hyogo)
- P-1121 (SW02-02)** In vitro studies on migratory activity of *Xenopus* primordial germ cells
 アフリカツメガエル始原生殖細胞の運動性に関する研究
 ○Kohei Terayama¹, Kensuke Kataoka², Keisuke Morichika³, Hidefumi Orii¹, Kenji Watanabe¹, Makoto Mochii¹ (Univ. Hyogo¹, IMBA², Univ. Rikkyo³)
- P-1122** Neuregulins are essential in spermatogonial proliferation and meiosis initiation in neonatal mouse testis
 ○Jidong Zhang¹, Ko Eto¹, Sebnem Kesaf¹, Asuka Honmyou¹, Kazuki Nakao², Hiroshi Kiyonari², Choji Taya³, Shin-ichi Abe¹ (GSST,Kumamoto University¹, CDB², Laboratory of Mouse Model for Human Heritable Diseases, The Tokyo Metropolitan Institute of Medical Science, Tokyo Metropolitan Organization for Medical Research³)
- P-1123 (SW02-07)** Requirement of Dbf4 expression for DNA replication in mouse zygote
 Dbf4 によるマウス受精卵の染色体複製開始機構の解析
 ○Shin Murai¹, Yukiko Katagiri², Yusuke Fukuda², Mineto Morita², Shigeru Yamashita¹ (Dept of Biochem, Toho Univ, Sch of Med¹, Dept of Obst and Gyn, Toho Univ, Sch of Med²)
- P-1124** Essential Roles of Androgen Signaling in Wolffian Duct Stabilization and Epididymal Cell Differentiation
 ウォルフ管雄性化過程と精巣上体上皮分化過程におけるアンドロゲンシグナルの分子機構の解析
 ○Aki Murashima¹, Shinichi Miyagawa^{1,7}, Yukiko Ogino^{1,7}, Hisayo Nishida-Fukuda^{1,8}, Kimi Araki², Takahiro Matsumoto^{3,9}, Takehito Kaneko^{2,10}, Kazuya Yoshinaga⁴, Ken-Ichi Yamamura², Takeshi Kurita⁵, Shigeaki Kato³, Anne Moon⁶, Gen Yamada¹ (IMEG, Kumamoto Univ.¹, IRDA, Kumamoto Univ.², IMCB, Univ. of Tokyo³, Graduate School of Health Science, Kumamoto Univ.⁴, Feinberg School of Medicine, Northwestern Univ.⁵, Program in Molecular Medicine, University of Utah⁶, NIBB⁷, Department of Biochemistry and Molecular Genetics, Ehime Univ.⁸, Institute of Health Biosciences, University of Tokushima⁹, ILA, Kyoto Univ.¹⁰)
- P-1125** ECLP regulates primary cilia formation and cilia-related signals in mouse embryo
 ECLP はマウス胚における一次繊毛形成と繊毛関連シグナルを制御する
 ○Yanick Botilde, Satoko Yoshida, Hiroshi Hamada (FBS)

- P-1126** A Deubiquitinating Enzyme for Receptor-Smads
 Receptor-Smad 脱ユビキチン化酵素による TGF β シグナルの制御
 ○Masafumi Inui, Andrea Manfrin, Stefano Piccolo (DIMBM University of Padua)
- P-1127** Analysis of mesenchymal signaling molecules in multiple tooth root formation using LMD method
 Min-A Choi¹, Wern-Joo Sohn¹, Hyeng-Soo Kim¹, Hitoshi Yamamoto², Zae Young Ryoo¹, Sanggyu Lee¹, Myoung-Uk Jin¹, Eui-Kyun Park¹, Hong-In Shin¹, ○Jae-Young Kim¹ (KNU¹, Nihon University²)
- P-1128** A novel cysteine-rich protein Doctor works as a positive regulator of BMP signaling
 CR ドメインを持つ新規タンパク質 Doctor は BMP シグナルの正の調節因子として働く
 ○Yuki Moriyama¹, Shoko Mori¹, Shinya Matsukawa², Yoshihisa Ohata², Hiroki Kuroda^{1,2} (GSTT, Shizuoka Univ.¹, Dept. of Education (Sciences), Shizuoka Univ.²)
- P-1129 (OP04-09)** A transgenic RNA interference screen for regulators of nutrient-dependent growth in the fruit fly *Drosophila melanogaster*
 ショウジョウバエ RNAi スクリーニングによる栄養依存的成長制御因子の探索
 ○Naoki Okamoto, Takashi Nishimura (RIKEN, CDB)
- P-1130** Molecular and cellular dissections for patterned rugae formation in mice
 ○Wern-Joo Sohn¹, Hitoshi Yamamoto², Ki-Jeong Kwon¹, Sanggyu Lee¹, Zae Young Ryoo¹, Hong-In Shin¹, Yong-Chul Bae¹, Han-Sung Jung³, Jae-Young Kim¹ (KNU¹, Nihon University², Yonsei University³)
- P-1131** Sedlin and Sedlin-like proteins together have essential functions in yolk-sac visceral endoderm and embryonic development
 ○Caleb Chan¹, Julian Tanner¹, Danny Chan¹, Keith Luk², Kathryn Cheah¹ (Dept of Biochemistry and CRDG, HKU¹, Dept of Orthopaedics & Traumatology, HKU²)
- P-1132** Monosaccharide *O*-fucose modification of Notch contributes to the folding of the Notch receptor in *Drosophila*
 Notch の *O*-フコース単糖修飾は Notch 受容体のフォールディングに寄与する
 ○Akira Ishio¹, Tomonori Ayukawa¹, Naoki Aoyama¹, Tetsuya Okajima², Kenji Matsuno¹ (Dept. Biol. Sci / Tec., Tokyo Univ. Sci.¹, Nagoya University Graduate School of Bioagricultural Sciences, Department of Applied Molecular Biosciences²)
- P-1133** The role of bFGF-p120ctn signaling in regulating axonal filopodial formation during neuromuscular junction development
 ○Pan Li, Cheng Chen, Raghavan Madhavan, H.Benjamin Peng (H.K.U.S.T.)
- P-1134** A Role for Soluble Inositol Polyphosphates in Cell proliferation, Cell Division and Apoptosis in the Development of *Drosophila*
 ○Man-Kin Tsui¹, Man-Ying Tin², Andrew Seeds³, John York² (Developmental Signaling Unit, OIST¹, HHMI², Janelia Farm³)
- P-1135 (OP02-02)** Multiple Wnts orient epithelial stem cells in *C. elegans*
 複数の Wnt が線虫の表皮系幹細胞の極性を方向付ける
 ○Yuko Yamamoto^{1,2}, Hisako Takeshita¹, Hitoshi Sawa^{1,3} (RIKEN CDB Lab, for Cell Fate Decision¹, Dep. of Biol., Grad. Sci., Kobe Univ.², NIG³)
- P-1136** T-box transcription repressors, XTbx2 and XTbx3, have critical role in ventral ectoderm specification
 ○Gun-Sik Cho, Jin-Kwan Han (POSTECH)

- P-1137** Regulation and function of Notch endosomal trafficking
Koji Kawahashi, [○]Housei Wada, Tadashi Sakata, Shigeo Hayashi (CDB)
- P-1138 (OP03-01)** Secreted Frizzled-related proteins(sFRPs)regulate extracellular distribution of Wnt ligands via interactions with heparan sulfate
分泌性 Frizzled 関連蛋白質 (sFRPs) はヘパラン硫酸を介して細胞外の Wnt リガンドの分布を制御する
[○]Yusuke Mii¹, Kenichi Nakazato², Atsushi Mochizuki², Masanori Taira¹ (Dept. of Biol. Sci., Grad. Sch. of Sci., Univ. of Tokyo¹, Theor. Biol. Lab., RIKEN ASI²)
- P-1139 (OP02-06)** PCP signals regulate neural tube closure through polarized activation of actomyosin cables associated with the adherens junctions
平面内極性シグナルはアドヘレンスジャンクション-アクトミオシンの極性収縮を介して神経管形成を制御する
[○]Tamako Nishimura, Masatoshi Takeichi (RIKEN CDB)
- P-1140** Isthmin and its relation to FGF signaling during chick embryonic development
[○]Liliana Osorio, Xuewei Wu, Zhongjun Zhou (BCH, HKU)
- P-1141** Analysis of Strawberry Notch1 during mouse development
哺乳類胚発生における Strawberry Notch1 の機能解析
[○]Yusuke Watanabe, Minoru Omi, Toshihiko Ogura (IDAC, Tohoku Univ.)
- P-1142 (SW01-13)** Isolated ectoderm is fated to die in early *Xenopus* embryos
ゼノパス外胚葉での自律的アポトーシス
[○]Hiroataka Kato, Eriko Motomura, Ippei Tanaka, Yusuke Higashi, Ayumi Hourai, Masao Sakai (Chem. and BioSci., Grad. Sch. Sci. and Eng., Kagoshima uni.)
- P-1143** Left-right asymmetry in Smad2/3 phosphorylation in the node of mouse embryo is translated into(correlates with)asymmetry in the lateral plate
マウス胚ノードにおける Smad2/3 リン酸化の左右非対称性は側板中胚葉における Smad2/3 リン酸化の左右非対称性に変換される
[○]Aiko Kawasumi¹, Tetsuya Nakamura¹, Naomi Iwai¹, Kenta Yashiro¹, Yukio Saijoh¹, Jose Belo², Hidetaka Shiratori¹, Hiroshi Hamada¹ (FBS¹, CBME²)
- P-1144** Analysis on the relationship between asymmetric expression of *pax6* in the habenulae and the Nodal pathway in flounder
ヒラメにおける手綱核の左右非対称な *pax6* 発現と Nodal 経路の関係についての解析
[○]Yohei Washio^{1,4}, Daichi Kondo¹, Masato Aritaki², Yuichiro Fujinami³, Daisuke Shimizu³, Hayato Yokoi¹, Tohru Suzuki¹ (Grad.Sch.of Agric.Sci., Tohoku Univ.¹, SNRI, FRA.², Miyako Sta., NCSE., FRA.³, JSPS Research Fellow⁴)
- P-1145 (SW02-12)** Rest is dispensable for the proper intrinsic regulations of neuronal gene expressions in the specification of cell fate during neurogenesis in vivo
神経分化抑制遺伝子 Rest は高度に制御された in vivo での神経細胞の運命決定を障害しない
[○]Hitomi Aoki¹, Akira Hara², Takahiro Kunisada¹, Yasuhiro Yamada^{3,4} (RAMS Gifu¹, Department of Tumor Pathology, Regeneration, and Advanced Medical Science, Gifu University Graduate School of Medicine², PRESTO³, CiRA, iCeMS⁴)

- P-1146** Requirement and functional redundancy of Smad1 and Smad5 in cerebellar granule neurons development
 ○Ka Kui Tong¹, Richard Behringer², Kin Ming Kwan^{1,3} (SLS, CUHK¹, UTMDACC², CCDB, CUHK³)
- P-1147** Analysis of Hes1 function in Hedgehog signaling during mouse retinal development
 マウス網膜発生における Hedgehog シグナルと Hes1 の機能解析
 ○Kiyo Sakagami¹, Kelly Cadenas¹, Takahiro Ohara¹, Ryoichiro Kageyama³, Xiuqian Mu⁴, William Klein⁵, Xianjie Yang^{1,2} (UCLA, JSEI¹, UCLA, MBI², Kyoto Uni. IVR³, SUNY, Buffalo, REI⁴, UT, MD, Anderson, BMB⁵)
- P-1148** HDAC1 regulation of Notch signaling during spinal cord formation
 ○Hidekiyo Harada^{1,2}, Halley Pamela¹, Storey Kate¹ (Univ. of Dundee¹, Tohoku Univ.²)
- P-1149** Mapping a New Upstream Regulator of Pax6 in Neuronal Development
 ○Yalun Zhang¹, Yi Zhang², Youqiang Song³ (HKU¹, Department of Cellular and Molecular Medicine, University of Ottawa², HKU³)
- P-1150** A kinase anchoring protein 11(AKAP11)modulates cell survive and patterning of the neural tube through regulation of hedgehog receptor, Patched1 and transducer, Smoothened
 ○Kazushi Aoto, Paul Trainor (SIMR)
- P-1151** Expression and localization of rdd, a novel secretory protein, in Xenopus embryo
 新規分泌性タンパク質 rdd のツメガエル胚における発現と局在
 Yutaka Mashima¹, Jong-chan Lim¹, Sayaka Kurihara¹, Rie Tamaki¹, Yumi Izutsu², Mitsugu Maéno² (Grad. Sch. Sci., Niigata Univ.¹, Dept. Biol., Fac. Sci., Niigata Univ.²)
- P-1152** Notch signaling regulates the spatial balance of lung epithelial cells
 呼吸器上皮細胞の適切な空間配置は Notch シグナルによって決定する
 ○Mitsuru Morimoto^{1,2}, Yumiko Saga¹, Raphael Kopan² (NIG¹, WashU²)
- P-1153 (SW02-11)** Fgf8 may function as a nuclear factor
 核内 FGF8 の作用機構の解析
 ○Ayumu Suzuki¹, Hidekiyo Harada², Harukazu Nakamura^{1,2} (Grad., Life Sci. Dic. Tohoku Univ.¹, IDAC²)
- P-1154** Constitutively active β -catenin partially rescues the mammary gland defect in mouse embryos lacking *Gli3*
 ○May Yin Lee, Van Quynh Thu Duong, Jacqueline Veltmaat (A*STAR IMCB)
- P-1155** Neuronal versus sensory epithelial fate choice is controlled by Notch signaling in the zebrafish lateral line system
 ゼブラフィッシュの側線において Notch シグナルは神経と感覚上皮の運命決定を制御する
 ○Takamasa Mizoguchi¹, Satoshi Togawa², Motoyuki Itoh^{1,2} (IAR, Nagoya Univ.¹, Divi. of Bio. Sci., Grad. Sch. of Sci., Nagoya Univ.²)
- P-1156** TGF β signaling is essential for sex differentiation of male germ cells
 ○Quan Wu¹, Rie Saba¹, Kohei Kanata², Hiroshi Hamada², Yumiko Saga¹ (NIG¹, Developmental Genetics Group, Graduate School of Frontier Biosciences, Osaka University²)
- P-1157** Muscle-specific overexpression of Akirin1 activates myogenic regulatory factors and IGF2b that leads to muscle hypertrophy in transgenic zebrafish
 Chih-Chi Chen¹, Meng-Chuen Hu¹, Jen-Leih Wu², Yen-Hsing Li², Shao-Yang Hu³, Koichi Kawakami⁴, Hong-Yi Gong¹ (NTOU¹, ICOB, AS², NPUST³, NIG⁴)

- P-1158** A novel Wnt signal modifier, CANCRIN works as a neural crest specifier
新規 Wnt シグナル調節因子 CANCRIN は神経堤細胞の特異化因子として働く
○Sei Kuriyama, Tadahiro Tuji, Masamitsu Tanaka (Akita University)
- P-1159** Analyses of the Role of ERBB4 in Meiotic Initiation using Germ Cell-Specific ErbB4 Dominant Negative Transgenic Mice
○Sebnem Kesaf¹, Jidong Zhang¹, Ko Eto¹, Tomosuke Nagano¹, Asuka Honmyou¹, Choji Taya², Shin-ichi Abe¹ (GSST¹, The Tokyo Metropolitan Institute of Medical Science, Tokyo Metropolitan Organization for Medical Research²)
- P-1160 (OP03-03)** Tsukushi is involved in the neuronal stem/progenitor cells proliferation as a Wnt signaling inhibitor
Tsukushi は Wnt シグナル阻害因子として神経幹/前駆細胞の増殖を制御する
○Kunimasa Ohta¹, Ayako Ito^{1,2}, Hideaki Tanaka^{1,2} (Dept. of Dev. Neurobiol., Kumamoto Univ. Grad. Sch. of Life Scis.¹, Global COE, Kumamoto University²)
- P-1161** Isolation of LexA and QF enhancer trap lines expressed in adult intestinal stem cell system in *Drosophila*
ショウジョウバエ小腸幹細胞で発現する LexA・QF エンハンサートラップ系統の作成
○Koji Takeda, Takashi Okumura, Kiichiro Taniguchi, Takashi Adachi-Yamada (Dep. Life Sci. Ful. Sci. Gakushuin Univ.)
- P-1162** Establishment of a transgenic zebrafish line, carrying *fugu oct3/4* promoter-GFP, for monitoring pluripotency of the cells
多能性をモニターする *oct3/4* promoter (トラフグ由来)-GFP トランスジェニックゼブラフィシュの作出
○Kota Abe, Hayato Yokoi, Tohru Suzuki (Grad Schl Agricul Sci, Tohoku Univ)
- P-1163** Analysis of chicken testis regeneration
○Po-liang Cheng, Hsu-Chen Cheng (NCHU)
- P-1164** The LIM-homeobox gene has multiple functions in planarian regeneration
プラナリアの再生過程における LIM-homeobox 遺伝子の包括的な機能解析
○Tetsutaro Hayashi¹, Minako Motoishi¹, Asuka Momiyama¹, Shigenobu Yazawa², Kazu Itomi¹, Chiharu Tanegashima¹, Kiyokazu Agata², Hiroshi Tarui¹ (RIKEN, CDB¹, Dept. of Biophys., Kyoto Univ.²)
- P-1165 (SW01-04)** Ectopically induced limb on a flank possesses non-limb derived muscles in *Ambystoma Mexicanum*
わき腹に誘導された異所肢には四肢由来ではない筋肉組織が存在する。～新しい再生システムを使用した進化的考察～
○Ayako Hirata¹, Aki Makanae¹, Akira Satoh^{1,2} (RCIS, Okayama Univ.¹, JST PRESTO²)
- P-1166** Establishment of authentic rat embryonic stem cells and generation of genetically modified rats
ラット ES 細胞の樹立と遺伝子改変ラットの作製
○Kazushi Kawaharada¹, Hidetaka Nakamoto¹, Masaki Kawamata², Takahiro Ochiya² (DS Pharma Biomedical Co.,Ltd.¹, National Cancer Center Research Institute²)
- P-1167** Effects of ectopic expression of LIM-homeobox transcription factor *lhx2* on *in vitro* differentiation of ESCs/iPSCs
LIM-ホメオボックス転写因子 *lhx2* の強制発現が ES 細胞・iPS 細胞の試験管内分化に及ぼす影響。
○Kenji Kitajima, Takahiko Hara (RINSHOKEN)

- P-1168 (OP03-08)** Development of an in vitro chimera-assay to clarify chimera-forming ability for human induced pluripotent stem cells
異種間キメラ胚の体外発生を用いたヒト iPS 細胞のキメラ形成能評価系開発
○Hideki Masaki, Yukiko Wakiyama, Tomoyuki Yamaguchi, Hiromitsu Nakauchi (Nakauchi Stem Cell and Organ Regeneration Project, JST)
- P-1169** Acquisition of the differentiation capacity in P19 embryonal carcinoma cells through HP1 γ expression
HP1 γ による P19 EC 細胞の分化能の回復
○Kumi Morikawa, Nobuhito Ikeda, Ichiro Hisatome, Yasuaki Shirayoshi (Dept. of Regenerat. Med. & Therapeut., Grad. Sch. of Med. Sci., Tottori Univ.)
- P-1170** A *Drosophila* GATA transcription factor gene, *GATAe*, is required for maintaining adult intestinal stem cells
ショウジョウバエ GATA 転写因子遺伝子 *GATAe* は成虫の中腸幹細胞の維持に必要である
○Takashi Okumura, Takashi Adachi-Yamada (Dept. of Life Science, Gakushuin Univ.)
- P-1171** Gene expression analysis of the neural stem/progenitor cells in adult zebrafish optic tectum after eye removal
眼球除去後のゼブラフィッシュ成魚視蓋神経幹細胞 / 前駆細胞における遺伝子発現の変化
○Hideomi Tanaka^{1,2}, Yoko Ito¹, Hitoshi Okamoto^{1,2}, Toshio Ohshima¹ (Waseda Univ. Dept. of Life Science and Medical Bio-Science¹, Lab. for Developmental Gene Regulation, RIKEN BSI²)
- P-1172** Different responsibility of mammalian germinal stem cell to cell damage stress between growth phase and mature phase
成長期と成熟期の生殖幹細胞の細胞障害ストレス応答における差異
Natusko Iyoda², Mai Akihisa², Yoko Sawada², Michiyo Endo², Satoshi Tateishi³, ○Kentaro Yomogida¹ (IBS¹, Dept. of Food Scis. & Nutrition, Sch. of Human Environ. Scis., Mukogawa Women's University², IMEG³)
- P-1173** Loss of MT1-MMP facilitates iPSCs self-renewal
○Jin Zhou, Zhongjun Zhou (Department of Biochemistry, Faculty of Medicine, The University of Hong Kong)
- P-1174** In-vivo imaging of the fracture healing process in medaka
メダカにおける骨折修復の in-vivo イメージング
○Kazuhiro Takeyama, Masahiro Chatani, Keiji Inohaya, Akira Kudo (Department of Biological Information, Tokyo Institute of Technology)
- P-1175** Regulatory mechanism of blastemal cells mediated by polarity complexes via Dachshous/Fat and Hippo/Salvador/Warts pathway during leg regeneration in *Gryllus bimaculatus*
コオロギ脚再生における極性分子複合体を介した Dachshous/Fat 及び Hippo/Salvador/Warts シグナルによる再生芽細胞の増殖制御
○Tetsuya Bando¹, Yoshimasa Hamada¹, Taro Nakamura², Taro Mito¹, Hideyo Ohuchi¹, Sumihare Noji¹ (Dept. of Life Systems, Univ. of Tokushima¹, VBL. Univ. of Tokushima²)
- P-1176** Molecular basis for the anterior-posterior patterning during planarian regeneration
プラナリア再生過程におけるパターン形成メカニズム
○Yoshihiko Umesono¹, Junichi Tasaki², Shigenobu Yazawa³, Kazu Itomi¹, Kiyokazu Agata² (RIKEN CDB¹, Dept. Biophysics, Kyoto Univ.², gCOE, Kyoto Univ.³)

- P-1177** Colonization of the aganglionic hindgut segment by neural crest stem cells
Lihua Bao¹, Alan Burns², Mai Har Sham³, °Wood Yee Chan¹ (CUHK¹, UCL ICH², HKU³)
- P-1178** Characterization of EpiSC subpopulations with developmental potentials to distinct neural plate domains
神経板の異なった領域への分化特性を持つ EpiSC 群
°Kazunari Matsuda, Makiko Iwafuchi-Doi, Hisato Kondoh (Grad. Sch. of Frontier Biosci., Osaka university)
- P-1179** Analysis of genes required for the maintenance of epithelial stem cell shape in *C. elegans*
RNAi スクリーニングによる線虫の上皮系幹細胞の形態の維持に必要な遺伝子の探索
°Tomomi Takano¹, Noriko Sasakawa¹, Mayumi Shibuya¹, Hitoshi Sawa^{1,2} (RIKEN CDB¹, NIG²)
- P-1180** A Pax3/Dmrt2/Myf5 Regulatory Cascade Functions at the Onset of Myogenesis
骨格筋発生開始期における Pax3/Dmrt2/Myf5 の連続的な制御機構の解明
°Takahiko Sato^{1,2}, Didier Rocancourt², Sólveig Thorsteinsdóttir³, Margaret Buckingham² (CiRA¹, Pasteur Institute², University of Lisbon³)
- P-1181** Nuclear dynamics in chromosome territories and gene loci under *in vitro* differentiation of mouse embryonic stem cells
マウス胚性幹細胞の分化過程における細胞核染色体テリトリーと遺伝子座の動態
°Sho Kawaguchi¹, Daiki Hirano¹, Yoshihiko Hosoi², Masayuki Anzai², Hideyuki Tanabe³, Tasuku Mitani² (Grad. Sch. BOST, Kinki Univ.¹, Inst. Adv. Technol., Kinki Univ.², Dept. ESB, Sch. Adv. Sci., The Grad. Univ. Adv. Studies (Sokendai)³)
- P-1182** Multipotent cell regulation in sea urchins
ウニ多分化能細胞の調節機構
°Mamiko Yajima, Wesse Gary (BioMed MCB department, Brown University)
- P-1183** Methyl-binding domain(MBD)protein applications for hypermethylated genes identification in cloned porcine and cancer cells
クローン豚、がん細胞のメチル化遺伝子の識別のためのメチル結合ドメイン (MBD) タンパク質のアプリケーション
°Chih-Jie Shen¹, Jinyi Cheng², Erh-Hsuan Hsieh², Hsiao-Ling Chen³, Chuan-Mu Chen¹ (NCHU¹, CTUST², DYU³)
- P-1184** The establishment of a screening system for low molecular compounds for β cell inducing activity
膵 β 細胞の分化を促進する低分子化合物スクリーニングシステムの構築
°Masateru Kataoka¹, Daisuke Sakano^{1,2}, Nobuaki Shiraki¹, Kazuhiko Kume¹, Shoen Kume^{1,2} (Dept. of Stem Cell Biol, IMEG., Kumamoto Univ¹, GCOE Kumamoto Univ, Kumamoto Japan²)
- P-1185** High Patronage of Infertility Treatment Among Ghanaian Women
°Ebenezer Frimpong¹ (TSMU¹, N/A²)
- P-1186** In-cell tracking of jazfl by fluorescent nanocrystal, quantum dot
°Shijin Sung, Sanggyu Lee (KNU)

P-1187 (OP04-10) Femtosecond laser-introduction of bionanomolecules in targeted single cells of living vertebrate embryos

高出力フェムト秒レーザーによる脊椎動物胚の単一細胞へのバイオナノ粒子の物理的導入方法

○Mikiko Tanaka¹, Haruki Ochi², Takanori Iino³, Akihiro Hiraoka³, Yoichiro Hosokawa³ (Grad. Sch. of Biosci. & Biotechnol., Tokyo Inst. of Technol.¹, Grad. Sch. of Biosci., NAIST², Grad. Sch. of Materials Sci., NAIST³)

P-1188 Targeted manipulation of genes with zinc finger nucleases in the cricket, *Gryllus bimaculatus* フタホシコオロギにおける zinc finger nuclease を用いた標的遺伝子操作

○Takahito Watanabe¹, Hiroshi Ochiai², Tetsushi Sakuma², Taro Nakamura¹, Taro Mito¹, Hideyo Ohuchi¹, Takashi Yamamoto², Sumihare Noji¹ (Dept. of Life Systems, Inst. of Tec. and Sci., Univ. of Tokushima¹, Dept. of Math. and Life Sci., Grad. School of Sci., Hiroshima Univ.²)

Poster Sessions: May 20 (Fri) P-2001~P-2187

Presentation times: Even-numbered, 16:30-17:30

Odd-numbered, 17:30-18:30

P-2001 Hydrolyzed eggshell membrane immobilized on phosphorylcholine polymer supplies extracellular matrix environment for human dermal fibroblasts

ホスホリルコリンポリマー上に固定化した加水分解卵殻膜はヒト皮膚線維芽細胞にECM環境を与える

○Yoriko Atomi¹, Eri Ohto-Fujita², Tomohiro Konno³, Miho Shimizu², Kazuhiko Ishihara³, Toshihiro Sugitate³, Jun Miyake³, Kotaro Yoshimura⁴, Kaori Taniwaki⁵, Takashi Sakurai⁶, Yukio Hasebe⁵ (Radioisotope Center, Univ. of Tokyo¹, Grad. Sch. of Info. Sci. and Tech., The Univ. Tokyo², Dep. Bioeng., Sch. of Eng., The Univ. Tokyo³, Dep. of Plastic Surgery, Grad. Sch. of Med., The Univ. Tokyo⁴, Almodo Inc.⁵, De. of Life Sci., Grad. Sch. of Arts & Sci., The Univ. Tokyo⁶)

P-2002 RC-RNase induce brain tumor cells death whereas increase the survival rate of tumorigenicity in nude mice

○Mark Chen¹, Giou-Teng Yiang², Chyou-Wei Wei³, Yung-Luen Yu⁴, Yi-Lin Chen⁵, Jaang-Jiun Wang⁶, Ye-Fan Lin³, Sheng-Chuan Hu² (DBHKU¹, Department of Emergency Medicine, Buddhist Tzu-Chi University and General Hospital², Institute of Clinical Nutrition, Hungkuang University³, Graduate Institute of Cancer Biology and Center for Molecular Medicine, China Medical University and Hospital⁴, Graduate Institute of Biotechnology, National Ilan University⁵, Division of Pediatric Infectious Diseases, Emory University School of Medicine⁶)

P-2003 Heat stress induces the co-aggregation of Drosophila P-body components with stress granules in nurse cells

○Szu-Jing Huang¹, Ming-Der Lin^{1,2} (TCU, Taiwan¹, TCU, Taiwan²)

P-2004 Human MOB2 promotes hepatocarcinoma cells migration through Erk signaling pathway

○Cheng-Han Lin, Chen-Po Hu, Seng-Sheen Fan (Department of Life Science, Tunghai University)

P-2005 Mechanical stretching promotes myoblasts differentiation and induces muscle-like macrostructure

筋芽細胞への伸展刺激は筋分化を促進し、細胞の自己組織化を誘導する。

Maiko Ogawa¹, ○Kota Miyasaka¹, Masahiro Shimizu³, Ko-ichiro Miyamoto², Hajime Takeda², Shintaro Yawata², Toshihiko Ogura¹ (IDAC¹, ECEI², IST³)

- P-2006** Spatio-temporal pattern of non-muscle myosin II activity in zebrafish neurulation
 °Makoto Suzuki, Naoto Ueno (NIBB)
- P-2007** TSPYL2 Is Important for G1 Checkpoint Maintenance upon DNA Damage
 Kin Pong Tao, Yick Pang Ching, °Siu Yuen Chan (HKU)
- P-2008 (SW01-14)** Melanosome transfer during skin pigmentation: a novel method to study intercellular signaling between melanocytes and keratinocytes *in vivo*
 °Hidetaka Murai, Ryosuke Tadokoro, Ken-ichiro Sakai, Yoshiko Takahashi (NAIST)
- P-2009 (OP04-05)** Lack of $\beta 1$ integrin in the developing mouse notochord results in hemivertebrae
 °Kathryn Cheah¹, Shengzhen Guo¹, Sarah Wynn¹, Tiffany Au¹, Attila Aszodi², Reinhard Fassler², Danny Chan¹ (Department of Biochemistry, Li Ka Shing Faculty of Medicine, The University of Hong Kong¹, Max Planck Institute of Biochemistry, Department of Molecular Medicine²)
- P-2010** Role of miR-124 in neural development of medaka, *Oryzias latipes*
 メダカの神経系発生過程における miR-124 の機能
 °Yumiko Kato¹, Rie Kusakabe², Kunio Inoue², Shin Tochinnai³ (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-2011** Analysis of Hox genes in *Polypterus senegalus*, a living ancestor model of tetrapods
 ポリプテルス・セネガルの Hox 遺伝子の解析—四肢動物の生きた祖先モデル—
 °Ami Kobayashi¹, Masatsugu Noda², Tsutomu Miyake², Masataka Okabe² (4th year Med. Stud. Jikei Univ. Sch. of Med.¹, Dept. of Anat. Jikei Univ. Sch. of Med.²)
- P-2012** Cancelled
- P-2013** Differential expression patterns of cell-type markers between the cellular slime mold species with or without somatic cell differentiation
 体細胞を分化させない細胞性粘菌における分化マーカーの発現解析
 Hitoshi Saito, °Kurato Mohri, Hidekazu Kuwayama, Hideko Urushihara (Grad. School of Life and Envtl. Sci., Univ. of Tsukuba)
- P-2014** Evolution and function of the Ptr(patchd-related)gene family
 Ptr (patchd-related) 遺伝子群の進化と機能
 °Yoshiro Nakano¹, Naoto Juni², Phillip Ingham³, Masato Umeda² (Hyogo College of Medicine¹, Grad. Sch. Engineering, Kyoto Univ.², IMCB, Singapore³)
- P-2015** Establishing the first gene functional analysis system in sponge: RNAi method in *Ephydatia fluviatilis*
 カワカイメンを用いた RNAi 法による遺伝子機能阻害系の樹立への試み
 °Kazuko Okamoto, Kiyokazu Agata, Noriko Funayama (Dept. Biophys. Grad. Sch. Sci., Kyoto univ.)
- P-2016** Role of p53/p63 in Chondrocyte Re-differentiation Upon Activation of ER Stress
 °Lim Cho Steven Pei¹, Cheuk Wing Chan¹, Kwok Yeung Tsang¹, Alea Mills², Chi Hang Cheung¹, Danny Chan¹ (Dept. of Biochemistry, HKU¹, Cold Spring Harbor Laboratory, New York, USA²)
- P-2017 (OP04-04)** Mesodermal origin of scales and fins of fish - Insight into origin and evolution of mineralized skeleton in vertebrates
 魚類の鱗と鰭条は中胚葉に由来する -脊椎動物における骨格形成の進化と細胞系譜
 °Atsuko Shimada¹, Toru Kawanishi¹, Hiroki Yoshihara², Takuya Kaneko¹, Toru Yano², Keiji Inohaya³, Yasuhiro Kamei⁴, Koji Tamura², Hiroyuki Takeda¹ (Dep. Biol. Sci., Grad. Sch. Sci., Univ. Tokyo¹, Dept. Dev. Biol., Grad. Sch. Life Sci., Tohoku Univ.², Dept. Biol. Info., Tokyo Inst. Technol.³, Nat. Inst. Basic Biol.⁴)

- P-2018** A mammalian conserved element derived from SINE enhances Satb2 expression in projection neurons across corpus callosum
 脳梁形成に関わる Satb2 遺伝子の SINE 由来エンハンサーの機能解析
 ○Kensuke Tashiro¹, Naoki Kobayashi¹, Anne Teissier², Akiko Nakanishi¹, Takeshi Sasaki³, Kuo Yan⁴, Victor Tarabykin⁴, Kenta Sumiyama⁵, Naruya Saitou⁵, Mika Hirakawa⁶, Hidenori Nishihara¹, Alessandra Pierani², Norihiro Okada¹ (Grad. Sch. Biosci. Biotechnol., Tokyo Inst. Technol.¹, Institut Jacques Monod, Université Paris Diderot², Department of Applied Biophysics, Faculty of Agriculture, Tokyo University of Agriculture³, Max Planck Institute for Experimental Medicine⁴, National Institute of Genetics⁵, Bioinformatics Center, Institute for Chemical Research, Kyoto University⁶)
- P-2019 (OP03-09)** Germ cell formation in cephalochordate amphioxus
 Hui-Ru Wu¹, Yen-Ta Chen¹, Yi-Hsien Su¹, Yi-Jyun Luo¹, Linda Holland², ○Jr-Kai Yu^{1,3} (ICOB AS¹, SIO UCSD², IONTU³)
- P-2020** Developmental mechanism for determining the number of digits in chicken limbs
 ニワトリ胚肢芽の予定運命図作成による指の本数決定機構の解析
 ○Naoki Nomura, Hitoshi Yokoyama, Koji Tamura (Grad. Sch. Sci., Tohoku Univ.)
- P-2021** Molecular basis for heterochronic development of marsupial cranial neural crest
 有袋類における頭部神経堤の異時的発生様式の分子基盤
 ○Yoshio Wakamatsu¹, Noriko Osumi¹, Kunihiro Suzuki² (Div. of Dev. Neurosci., Tohoku Univ. Grad. Sch. of Med.¹, Nihon Univ., Sch. of Dent. Matsudo²)
- P-2022** Optic nerve development and brain patterning of lamprey and amphioxus implies the evolutionary origin of form vision
 脊椎動物形態視の進化的起源 —ナメクジウオ・ヤツメウナギの神経発生から—
 ○Daichi Suzuki¹, Yasunori Murakami², Hiroshi Wada¹ (Univ. Tsukuba¹, Grad. Sci. & Eng., Ehime Univ.²)
- P-2023** The mechanosensory paratympanic organ is derived from a distinct neurogenic placode
 ○Paul O'Neill¹, Raj Ladher¹, Clare Baker² (RIKEN CDB¹, University of Cambridge²)
- P-2024** Identification and characterization of steroidogenic enzymes that are involved insect ecdysone biosynthesis
 昆虫のエクジソン生合成に関与する酵素の同定と機能解析
 ○Sora Enya¹, Yuko Shimada-Niwa¹, Tetsuro Shinoda², Ryusuke Niwa¹ (Grad. Sch. Life Environ. Sci., Univ. Tsukuba¹, NIAS²)
- P-2025** A pair of duplicated enhancers controls both a fail-safe regulation for development and adaptation to environmental stress
 ○Haruki Ochi, Chihiro Uchiyama, Akane Kawaguchi, Tomoko Tamai, Hajime Ogino (NAIST)
- P-2026** Long-range interactions in spatio-temporal regulation of Hox genes along the anterior-posterior body axis *Drosophila melanogaster*
 ○Narendra Singh, Rakesh Mishra (CCMB)
- P-2027** Investigation of the germ plasm localization mechanism of Vasa protein
 ○Szu-Chieh Wang¹, Gee-Way Lin³, Chun-Che Chang³, Ming-Der Lin^{1,2} (TCU Taiwan¹, TCU Taiwan², NTU Taiwan³)
- P-2028 (OP04-03)** Different modes of dynamic gene expression involved in animal segmentation: oscillating vs. splitting
 動物の体節形成に関わるダイナミックな発現：振動モードと分裂モード
 Masaki Kanayama^{1,2}, Yasuko Akiyama-Oda¹, Osamu Nishimura^{3,4}, Hiroshi Tarui³, Kiyokazu Agata⁴, ○Hiroki Oda^{1,2} (JT BRH¹, Osaka Univ.², CDB³, Kyoto Univ.⁴)

- P-2029** UCH37, deubiquitinase positively regulates activin/nodal signaling in mesoderm formation of *Xenopus* embryos
 ◯Hyemin Choi, Jin-Kwan Han (POSTECH)
- P-2030** Microtubule-dependent dorsal determination in zebrafish
 ゼブラフィッシュにおける微小管依存性の背側決定機構
 Ryoko Seki, Hiromu Hino, Takashi Shimizu, ◯Masahiko Hibi (Nagoya Univ.)
- P-2031** HpSumf1, the sea urchin *Hemicentrotus pulcherrimus* homolog of sulfatase modifying factor 1, is involved in activation of sulfatases required for control of skeletogenesis
 バフンウニ Sumf1 (HpSumf1) は骨片形成制御に必要なスルファターゼの活性化に関与する
 ◯Tetsushi Sakuma, Kazuya Ohnishi, Kazumasa Fujita, Naoaki Sakamoto, Takashi Yamamoto (Dep. of Math. and Life Sci., Grad. Sch. of Sci., Hiroshima Univ.)
- P-2032** Common molecular features in organizer formation and axial patterning in Eumetazoa
 後生動物の進化上保存されたオーガナイザー形成および体軸パターンニングを制御するシグナル
 ◯Hiroshi Watanabe, Suat Özbek, Luis Alberto Bezares Calderon, Thomas Holstein (Heidelberg Institute of Zoology)
- P-2033** The role of Tbx2 in otic placode formation and invagination
 ◯Jin Jea Sung, Gun-Sik Cho, Wonhee Han, Nam-Hee Kim, Jin-Kwan Han (POSTECH)
- P-2034** Comparative analysis of gene expression patterns in mouse and chick developing epithalamus
 脊椎動物視床発生時における遺伝子発現のマウスーニワトリ間比較解析
 ◯Asuka Suzuki-Hirano^{1,2}, Aya Yoshida¹, Tomomi Shimogori¹ (BSI, RIKEN¹, JSPS Research Fellow²)
- P-2035 (OP04-01)** Parallel inputs and interlinked feedback loops ensure 99.99% canalization by establishing left and right asymmetry of Cerl2 around the mouse node
 マウスノードでは2種類の入力と連結したフィードバック回路が Cerl2 の左右非対称性を安定につくる
 ◯Tetsuya Nakamura¹, Aiko Kawasumi¹, Owen Tampilin³, Daisuke Saitoh⁴, Kyosuke Shinohara¹, Atsuko Takamatsu², Atsushi Mochizuki⁴, Hiroshi Hamada¹ (Osaka university¹, Waseda univ.², HHMI³, RIKEN⁴)
- P-2036** Identification of new cell population required for myogenesis
 筋分化を制御する新規細胞集団の同定
 ◯Yoshitaka Kimura¹, Takahiko Sato², Tomohiro Kurisaki¹, Atuko Sehara-Fujisawa¹ (Institute for Frontier Medical Science, Kyoto university¹, CiRA²)
- P-2037** Integration of segmentation clock and FGF signaling generates segmental pattern of somite
 分節時計と FGF シグナルの統合による、体節の等間隔パターンの形成
 ◯Ryutaro Akiyama, Miwa Masuda, Takaaki Matsui, Yasumasa Bessho (NAIST)
- P-2038 (OP03-05)** Regulation of Zebrafish Embryonic Cell Migration and Patterning by Steroids
 ◯Bon-chu Chung (IMB, Acad Sinica)
- P-2039** Notch signal is long range surviving factor in zebrafish skin pattern formation
 Notch シグナルは、ゼブラフィッシュの模様形成における長距離の活性化機構を担う
 ◯Hiroki Hamada, Masakatsu Watanabe, Shigeru Kondo (FBS)

- P-2040** Phenotypic analyses of zebrafish *shippo-saki-marumari* mutant that shows the defects in skeletal muscle formation
骨格筋形成に異常を示すゼブラフィッシュ *shippo-saki-marumari*変異体の表現型解析
○Kentarō Hirose¹, Ryo Hirabayashi¹, Takamasa Mizoguchi², Toshiaki Izawa², Atsushi Kuroiwa², Yutaka Kikuchi¹ (Dep. of Biol. Sci., Grad. Sch. of Sci., Hiroshima Univ.¹, Dep. of Biol. Sci., Grad. sch. of Sci., Nagoya Univ.²)
- P-2041** Membrane potential shifts caused by direct contact between pigment cells generate the stripe pattern of zebrafish
色素細胞間の接触による膜電位変化はゼブラフィッシュの模様形成に寄与する
○Masafumi Inaba, Masakatsu Watanabe, Shigeru Kondo (FBS)
- P-2042** Analysis of Hox genes' functions in craniofacial morphogenesis using recombinase mediated cassette exchange system that induces ectopic expression of Hox genes
レコンビナーゼカセット変換法による Hox 遺伝子の異所性発現系を用いた頭頸部における Hox 遺伝子の機能解析
○Taro Kitazawa, Kou Fujisawa, Yukiko Kurihara, Yuichiro Arima, Yumiko Kawamura, Takahiro Sato, Yasunobu Uchijima, Hiroki Kurihara (Dept. Physiol. Chem. & Metab., Grad. Sc. of Med., Univ. of Tokyo)
- P-2043** Left-sided expression of *pitx2* at dorsal diencephalon and gut is maintained throughout larval development in flounders for metamorphic morphogenesis
ヒラメでは間脳上部と腸の左特異的 *pitx2*発現が変態期に起こる器官形成のために仔魚発生を通じて維持される
○Daichi Kondo¹, Yuichiro Fujinami⁴, Susumu Uji⁵, Hisashi Hashimoto⁶, Hayato Yokoi², Tohru Suzuki² (Grad.Sch.of Agric.Sci.,Tohoku Univ.¹, Grad.Sch.of Agric.Sci.,Tohoku Univ.², Seikai Natl. Res. Inst.³, Miyako Sta., Natl. Cent. Stock Enhancement⁴, Natl. Res. Inst. Aquaculture⁵, Biosci. Biotech. Cent., Nagoya Univ.⁶)
- P-2044** The Involvement of Xenopus Nectin-like-2 (xNec12) in Convergent Extension movements during Xenopus Gastrulation
○Hyeyoon Lee¹, Jin-Kwan Han² (POSTECH¹, POSTECH²)
- P-2045** Polarized membrane localization of PTEN based on multiple states with different diffusion coefficients revealed by single-molecule imaging
○Satomi Matsuoka, Masahiro Ueda (Graduate School of Frontier Biosciences, Osaka University)
- P-2046 (SW02-16)** Involvement of Pax6 in the retinal pigment epithelium development
○Daisuke Nishihara^{1,3}, Akiha Kawasaki-Nishihara^{1,3}, Nagaharu Tsukiji², Harukazu Nakamura¹, Hiroaki Yamamoto³ (Grad. Sch. of Life Scis., Tohoku Univ.¹, Mammal. Genet. Lab., NIG², Fac. of Biosci., NIBST³)
- P-2047** Conditional knockout of Lgr4 leads to impaired ductal elongation and branching morphogenesis in mouse mammary gland
Lgr4 欠損マウスにおける乳腺の発達不全
○Kazunori Oyama¹, Yasuaki Mohri¹, Mizuki Sone¹, Akihiro Nawa², Katsuhiko Nishimori¹ (Lab. Mol. Biol., Grad. Sch. of Agr. Sci., Univ. of Tohoku¹, Dep.Ob/Gyn, Grad. Sch. of Med, Univ. of Nagoya²)
- P-2048** Somitic Filopodia are Required for Dorsal Aorta Transposition
体節のフィロポディア突起は背側大動脈のトランスポジション現象に必須の役割を果たす
○Yuki Sato, Kei Nagatoshi (Priority Organization for Innovation and Excellence, Kumamoto Univ.)

- P-2049 (OP01-10)** The adherens junction serve as a switch for neurogenesis by facilitating Notch-Delta interaction in the vertebrate CNS
Jun Hatakeyama, [○]Kenji Shimamura (Div. of Brain Morphogenesis, IMEG, Kumamoto Univ.)
- P-2050** Possible Functions of Dpp in gastropod shell formation and shell coiling
巻貝の貝殻形成における Dpp の機能解析
[○]Keisuke Shimizu¹, Isao Sarashina², Hiroyuki Kagi³, Kazuyoshi Endo² (Univ. of Tsukuba, Education¹, Univ. of Tokyo, Earth and Planetary Science², Univ. of Tokyo, Geochemical Research Center³)
- P-2051** Quantification and visualization of SHH signaling activity in the developing chick limb bud
ニワトリ胚肢芽における SHH シグナリングの可視化と物理的定量化
[○]Takayuki Suzuki^{1,2}, Atsushi Kuroiwa¹ (Nagoya university¹, JST PRESTO²)
- P-2052** Metameric pattern of vertebral body/intervertebral disc is correlated with Pax1 expression and is formed irrespectively of rostro-caudal patterning of somites
椎体 / 椎間板の反復構造は Pax1 の発現と関連し、体節の前後パターンに関わらず形成される
[○]Yu Takahashi¹, Yukuto Yasuhiko¹, Yumiko Saga², Shinji Takada³, Jun Kanno¹ (NIHS¹, NIG², OIIB³)
- P-2053** Coordination of apoptosis, proliferation and cell migration in epithelial tissue dynamics during *Drosophila* metamorphosis
[○]Xiang Teng¹, Yusuke Toyama^{1,2,3} (DBS, NUS¹, MBI², TLL³)
- P-2054** N-terminal sequence of Connexin41.8 has a critical role for the skin pattern formation in Zebrafish
ゼブラフィッシュの体表模様形成においてコネキシン 41.8 の N 末配列が重要な働きを持つ
[○]Daisuke Watanabe, Shigeru Kondo, Masakatsu Watanabe (FBS, Osaka Univ.)
- P-2055** Isolation of genes enriched asymmetrically in left or right side in flounder
ヒラメで左右非対称に発現する遺伝子の単離
[○]Hayato Yokoi¹, Daichi Kondo¹, Xiaoming Wu¹, Yuichiro Fujinami², Tohru Suzuki¹ (Marine Life Sci Genet, Grad Schl Agric Sci, Tohoku Univ¹, Miyako Sta, Natl Cent Stock Enhance, Fish Res Agency²)
- P-2056** Function analysis of mechanical force generated by leading edge mesoderm in *Xenopus* gastrulation
先行中胚葉の生み出す伸展刺激の脊索形成における役割
[○]Yusuke Hara^{1,2,3}, Kazuaki Nagayama⁴, Takeo Matsumoto⁴, Makoto Suzuki^{1,2}, Naoto Ueno¹ (SOKENDAI¹, NIBB², JSPS Research Fellow³, Nitech⁴)
- P-2057 (OP02-05)** The role of novel DNA damage repair gene, *Tcofl*, in craniofacial development
新規 DNA 損傷修復遺伝子 *Tcofl* の顎顔面発生における役割
[○]Daisuke Sakai^{1,2}, Paul Trainor² (NAIST¹, SIMR²)
- P-2058** Coordination of mitosis and morphogenesis: Role of a prolonged G2 phase during chordate neural tube closure
細胞分裂と形態形成の協調：神経管閉鎖過程における伸長化した G2 期の役割
[○]Yosuke Ogura¹, Asako Sakaue-Sawano^{2,3}, Masashi Nakagawa⁴, Nori Satoh⁵, Atsushi Miyawaki^{2,3}, Yasunori Sasakura¹ (Shimoda Marine Research Center, Univ. of Tsukuba¹, RIKEN BSI², ERATO, JST³, Grad. Sch. of Life Sci. Univ. of Hyogo⁴, Marine Genomics Unit, OIST⁵)
- P-2059** Distinct functions of PlnA family proteins in the central olfactory projection
嗅覚中枢軸索投射における PlnA ファミリー分子の機能
[○]Takahiko Kawasaki^{1,2}, Tatsumi Hirata^{1,2} (NIG¹, SOKENDAI²)

- P-2060** Analyzing the role of apoptosis and caspase-activation during neural tube closure by using time-lapse imaging in SCAT3 transgenic mice
SCAT3 トランスジェニックマウスを用いたタイムラプスイメージングによる神経管閉鎖でのアポトーシス及びカスパーゼ活性化の生理学的意義の解明
○Naomi Shinotsuka¹, Yoshifumi Yamaguchi^{1,2}, Keiko Nonomura¹, Ayako Yoshida¹, Kiwamu Takemoto³, Masayuki Miura^{1,2} (Dept. Genetics, Grad. Sch. Pharmaceutical Sci., Univ. Tokyo.¹, CREST, JST², Dept. Physiol., Grad. Sch. Med., Yokohama City Univ.³)
- P-2061** Multiple feedback loops achieve robust localization of *wingless* expression in *Drosophila* notum development
多重フィードバックループはショウジョウバエ胸背板原基における *wingless* 発現のロバストな局在化を実現する
○Ken-ichi Hironaka¹, Yoh Iwasa¹, Yoshihiro Morishita^{1,2} (Kyushu Univ.¹, PRESTO JST²)
- P-2062** Requirement of GABAergic interneurons and subplate neurons in neocortical arealization
○Torsten Bullmann, Carina Hanashima (CDB)
- P-2063 (OP01-01)** The sex pheromone perception ability in *Caenorhabditis* nematode is altered by the sexual identity of CEM neurons
○King Chow, Lan Fu, Gus Chan, Tim Fan, Rachel Li (Div. Life Science, HKUST)
- P-2064** Concentric zones, cell migration and neuronal circuits in the *Drosophila* visual center
発生過程のショウジョウバエ視覚中枢を区画化する転写因子群の解析
○Eri Hasegawa¹, Yusuke Kitada^{1,2}, Masako Kaido¹, Rie Takayama¹, Takeshi Awasaki³, Kei Ito², Tetsuya Tabata², Makoto Sato¹ (FSO, Kanazawa Univ.¹, IMCB, Univ. Tokyo², UMass Med³)
- P-2065 (OP01-05)** Formation of glycinergic synapse in zebrafish development
ゼブラフィッシュにおけるグリシン作動性シナプスの形成
○Hiromi Hirata (NIG)
- P-2066** *Drosophila* acyl-CoA synthetase long-chain family member 4 is required for synaptic growth by attenuating BMP signaling
○Yan Huang, Zhihua Liu, Yi Zhang, Di Chen, Yong Q. Zhang (CAS)
- P-2067** The functional analysis of Dmbx1/Atx in the optic tectum of chick embryos
ニワトリ胚視蓋における Dmbx1/Atx の機能解析
○Yousuke Ishikawa, Takuo Akitaya, Araki Isato (Dept Chem & Bioeng, Fac Eng, Iwate Univ)
- P-2068** Leaf extract of *Withania somnifera* induces differentiation and senescence in IMR32 human neuroblastoma cell line
○Hardeep Kataria¹, Navjot Shah², Sunil Kaul², Renu Wadhwa², Gurcharan Kaur¹ (GNDU¹, AIST²)
- P-2069** Foxg1 regulates the onset of projection neuron production in the neocortex
Foxg1 による大脳皮質ニューロンの分化能制御機構
○Takuma Kumamoto¹, Ken-ichi Toma¹, Ken-ichi Mizutani^{1,2}, Carina Hanashima¹ (RIKEN CDB¹, Brain Development and Aging Research Center, Doshisha University²)
- P-2070** Deficiency of Znf179 causes embryonic lethal phenotype associated with defected vasculogenesis
○Shih-Ting Lin¹, Ping-Chieh Pao², Po-Ying Chen¹, Yi-Chao Lee³ (Department of Pharmacology, College of Medicine¹, Institute of Bioinformatics and Biosignal Transduction, College of Bioscience and Biotechnology², Center for Gene Regulation and Signal Transduction Research, National Cheng Kung University³)
- P-2071** Cancelled

- P-2072** A zebrafish corona mutation induces a Bcl2-dependent apoptosis in photoreceptor
ゼブラフィッシュ corona 突然変異は Bcl2 に依存する視細胞死を誘導する
○Yuko Nishiwaki, Shohei Suzuki, Asuka Yoshizawa, Yutaka Kojima, Toshiaki Mochizuki, Ichiro Masai (OIST)
- P-2073** The expression analysis of amyloid precursor protein(APP)mRNA in the optic tectum of chick embryos
ニワトリ胚視蓋におけるアミロイド前駆体タンパク質 (APP) mRNA の発現解析
○Keiko Okudaira, Nozomi Onodera, Isato Araki (Dept Chem & Bioeng, Fac Eng, Iwate Univ)
- P-2074** Distribution of various types of neurons and glial cells in developing chick optic tectum
発生中のニワトリ視蓋における、様々な型のニューロンやグリア細胞の分布
○Nozomi Onodera, Isato Araki (Dept Chem & Bioeng, Fac Eng, Iwate Univ)
- P-2075** SH2B1 β Regulates Brain-Derived Neurotrophic Factor-Induced Neurite Outgrowth
○Chien-Hung Shih, Chien-Jen Chen, Linyi Chen (Institute of Molecular Medicine, National Tsing Hua University, Taiwan)
- P-2076** draxin has a unique role for the guidance of thalamocortical projections
draxin が視床皮質軸索投射にユニークな役割をもつ
○Yohei Shinmyo¹, Md Riyadh¹, Iftekhar Bin Naser¹, Giasuddin Ahmed¹, Mahmud Hossain^{1,2}, Xiaohong Song^{1,2}, Kunimasa Ohta¹, Hideaki Tanaka^{1,2} (Dept. of Dev. Neurobiol., Kumamoto Univ.¹, GCOE Kumamoto Univ. Kumamoto, Japan²)
- P-2077** PCP protein Dachshous is required for dendritic targeting of olfactory projection neurons in *Drosophila*
平面極性分子 Dachshous はショウジョウバエ嗅覚投射神経における樹状突起ターゲティングに必要である
○Misako Okumura¹, Masayuki Miura^{1,3}, Takahiro Chihara^{1,2} (Grad. Sch. Pharm. Sci., Univ. Tokyo¹, PRESTO, JST², CREST, JST³)
- P-2078 (OP01-04)** Evolutionarily conserved protein Dogi is required for neurite branching and targeting by interacting with microtubule motor regulator Glued in *Drosophila* olfactory projection neurons
微少管モーター蛋白質制御因子 Glued と結合する新規分子 Dogi は神経突起の枝分かれおよびターゲティングに必要である
○Chisako Sakuma¹, Liqun Luo⁴, Masayuki Miura^{1,3}, Takahiro Chihara^{1,2,4} (Dept Genetics, Grad Sch Pharm Scis, Univ. Tokyo¹, PRESTO, JST, Japan², CREST, JST, Japan³, HHMI, Dept. Biology, Stanford Univ. USA⁴)
- P-2079** TSPYL2 regulates CREB-Dependent Gene Expression
○Kwun Kit Wong¹, Qi Li², Hiu Ting Wong¹, Ka Hing Tsang¹, Suk King Lai³, Grainne M McAlonan², Ying Shing Chan³, Siu Yuen Chan¹ (Dept. of Paediatrics and Adolescent Medicine, HKU¹, Dept. of Psychiatry, HKU², Dept. of Physiology, HKU³)
- P-2080 (OP01-09)** Cortical representations of olfactory input by trans-synaptic tracing
トランスシナプス標識法による嗅球から嗅覚皮質への神経接続マップの解析
○Kazunari Miyamichi, Liqun Luo (HHMI/Stanford)
- P-2081 (OP02-10)** The mechanisms of boundary formation between the stomach and intestine endoderm in chicken embryo
胃/小腸境界形成の分子機構
Kenta Watanabe, ○Kimiko Fukuda (Dept.Biol. Sci. Tokyo Metropol. Univ.)

- P-2082** Extract of new born chicken heart arrests proliferation of chicken embryonic cardiomyocytes
ニワトリ胚心筋細胞の増殖は孵化後ニワトリの心臓抽出液によって停止する
Keiichi Otsuka, [○]Akio Inoue (Dept. Biol. Grad. Sch. Dci. Osaka Univ.)
- P-2083** Sustained expression of coronary vessel/epicardial progenitor marker genes in the four-chambered chick embryonic heart
ニワトリ胚心臓発生後期における冠動脈・心外膜前駆細胞マーカー遺伝子の発現
[○]Yasuo Ishii, Shigenobu Sugimoto, Sadao Yasugi (Dept. Mol. Biosci., Kyoto Sangyo Univ.)
- P-2084** Genome wide screening of mesenchymal signalling molecules involved in epithelial differentiation during mice palatogenesis
[○]Ki-Jeong Kwon, Wern-Joo Sohn, Hyeng-Soo Kim, Min-A Choi, Young-Rae Ji, Zae Young Ryoo, Sanggyu Lee, Jae-Young Kim (KNU)
- P-2085 (SW01-07)** AP-1 Transcription Factors Regulate the Number of Apoptotic Cells in Developing Chick Limb Buds
肢芽形成過程で細胞死の数を制御する AP-1 転写因子群の作用機序の解明
[○]Natsuno Suda¹, Daisuke Shirakawa¹, Takehiko Itoh¹, Masashige Bando², Katsuhiko Shirahige², Kohsuke Kataoka³, Cheryll Tickle⁴, Mikiko Tanaka¹ (Tokyo Tech¹, Univ. of Tokyo², NAIST³, UoB⁴)
- P-2086** Small eye development caused by ectodermal *Sox2* downregulation in enhancer N4 knock-out mice
*Sox2*遺伝子エンハンサー N4 ノックアウトマウスにおける小眼発生の機構
[○]Masanori Uchikawa, Miho Morishima, Yuka Saigou, Hisato Kondoh (Grad.Sch.of Frontier Biosci., Osaka Univ.)
- P-2087** Small heat shock protein B7(HspB7)is essential for sarcomere assembly in heart development
[○]Yu-Ting Yan¹, Yen-Ling Shih^{1,2}, Pei-Chun Tsai¹, Bih-Ying Yang¹ (IBMS, Academia Sinica¹, IBMB, NYMU²)
- P-2088 (SW02-06)** How dose the cell cycle arrest occur in mammalian cardiomyocyte?
どのように心筋細胞の増殖は止まるのか
[○]Noriko Iwamoto¹, Satoshi Yoshitome², Yukio Satoh¹, Shoji Tane¹, Toshinori Hayashi¹, Takashi Takeuchi¹ (Tottori Univ., Sch. Life Sci., Div. Biosignal.¹, Tottori Univ., Sch. Life Sci., Div. Pathol. Biochem.²)
- P-2089** RBMS3, an RNA-binding protein, mediates the expression of PTF1a through binding to its 3'UTR during pancreas development
Chung-Kuang Lu¹, Yi-Chyi Lai², [○]Ming-Ko Chiang¹ (DLSCCU¹, Department of Microbiology and Immunology, Chung-Shan Medical University²)
- P-2090** Retinoic acid signaling and initiation of mammary gland development
[○]Kyoung-Won Cho¹, Cheryll Tickle², Han-Sung Jung³ (YUCD¹, DBUB², YUCD³)
- P-2091 (SW01-02)** *zic1* and *zic4* in late embryogenesis mediate patterning for adult dorsoventral trunk structures
発生後期における *zic1* および *zic4* を介した体幹背腹パターン決定機構
[○]Toru Kawanishi, Yuuta Moriyama, Atsuko Shimada, Hiroyuki Takeda (Dept. Biol. Scis., Grad. Sch. Sci., Univ. Tokyo)
- P-2092 (SW01-08)** Mutations Affecting Cessation of Gonadal Leader Cell Migration in *C.elegans*
線虫 *C. elegans* 生殖巣形成リーダー細胞の停止異常を示す変異体
[○]Tetsuhiro Kikuchi, Yukimasa Shibata, Kiyoji Nishiwaki (Dept of Biosci, Grad Sch of Sci and Tech, Kwansei Gakuin Univ)

- P-2093** Runx3 is a crucial regulator of alveolar differentiation and lung tumorigenesis in mice
 °Jong-Min Lee¹, Jeong-Oh Shin¹, Kyoung-Won Cho¹, Akihiro Hosoya², Sung-Won Cho¹, Kyeong-Sook Lee³, Hyun-Mo Ryoo⁴, Suk-Chul Bae³, Han-Sung Jung¹ (YUCD¹, Department of Oral Histology, Matsumoto Dental University², Departments of Biochemistry, College of Medicine, Institute of Tumor Research, Chungbuk National University³, Department of Cell and Developmental Biology, School of Dentistry and Dental Research Institute, Seoul National University⁴)
- P-2094** Visualization of cell cycle and cell division in lens using Geminin-mCherry/ H2A-GFP transgenic zebrafish
 Geminin-mCherry/ H2A-GFP トランスジェニックゼブラフィッシュを用いた水晶体における細胞周期、細胞分裂の可視化の試み
 °Toshiaki Mochizuki¹, Shohei Suzuki¹, Asako Sakaue-Sawano², Atsushi Miyawaki², Ichiro Masai¹ (OIST¹, RIKEN BSI²)
- P-2095 (SW01-16)** Lineage specification of gastrointestinal cells by helix-loop-helix transcription factor Id2
 転写調節因子 Id2 による消化管上皮細胞の運命決定機構
 °Kentarō Mori¹, Harumi Nakamura¹, Kota Tamada^{2,3}, Toru Takumi^{2,3}, Yoshifumi Yokota¹ (Dept. of Mol. Genetics., Sch. of Med., Univ. of Fukui¹, Osaka. Biosci. Inst.², Lab. Integrative Bio., Grad. Sch. of Biomed. Sci., Hiroshima Univ.³)
- P-2096 (SW01-11)** Modification of BMP signaling is essential for the specification of the foregut endoderm in the chicken embryo
 BMP シグナルの修飾は前腸内胚葉の領域分化に必要である
 °Yui Okayama¹, Wataru Kimura^{1,2}, Sadao Yasugi^{1,3}, Kimiko Fukuda¹ (Dept. Biol., Tokyo Metropol. Univ.¹, Hamamatsu Univ.², Kyoto Sangyo Univ.³)
- P-2097** Gli3 regulates various cellular mechanisms governing mouse embryonic mammary development differentially among the five mammary rudiment pairs
 May Yin Lee^{1,2}, Victor Racine¹, Peter Jagadpramana¹, Li Sun¹, Weimiao Yu¹, Tiehua Du³, Bradley Spencer-Dene⁴, Nicole Rubin⁵, Lendy Le⁵, Delphine Ndiaye⁶, Saverio Bellusci⁵, Klaus Kratochwil⁷, °Jacqueline Veltmaat¹ (A*STAR IMCB¹, NUS², A*STAR BII³, LRI⁴, CHLA⁵, Institut Curie⁶, IMB⁷)
- P-2098** The cluster rearrangement for dissociated *Xenopus* embryonic cells in their reaggregations involves modulation of acto-myosin system in the surface of the clusters
 アフリカツメガエル胚の再構築過程における再配置は、クラスター表面のアクトミオシン系の調節機構が関与している
 °Ayano Harata¹, Takashi Matsuzaki^{1,2}, Setsunosuke Ihara^{1,2} (Div. Res. Life Sci., United Grad. Sch. Agr. Sci., Tottori Uni.¹, Dep. Bio. Sci. Fac. Life and Environ. Sci., Shimane Univ.²)
- P-2099** Watching moving cells as many as possible to understand the mammalian brain development
 哺乳類の脳形成を深く理解するためにできるだけ多くの動く細胞たちを見つめる
 °Takaki Miyata, Akira Sakakibara, Mayumi Okamoto, Ken Sagou, Toshiyuki Sato, Ayano Kawaguchi (Anat. & Cell Biol., Nagoya Univ. Grad. Sch. of Med.)
- P-2100** Endothelin receptor type-A expression defines a distinct subpopulation within the heart field and contributes to chamber myocardium formation
 心形成におけるエンドセリン A 型受容体発現解析による心臓予定領域細胞群同定とエンドセリンシグナルの役割
 °Rieko Asai¹, Yukiko Kurihara¹, Kou Fujisawa¹, Takahiro Sato¹, Yumiko Kawamura¹, Hiroki Kokubo^{2,3}, Kazuo Tonami¹, Koichi Nishiyama¹, Yasunobu Uchijima¹, Sachiko Miyagawa-Tomita⁴, Hiroki Kurihara¹ (Dept. of Phys. Chem. and Metabol., Grad. Sch. of Med., the Univ of Tokyo¹, Div. of MamDev., NIG², Dept. of Genetics, Grad. Univ. Adv. Stud³, Medical Research Institute, Pediatric Cardiology, TWMU⁴)

- P-2101** Progranulin A-mediated MET Signaling Is Essential for Liver Morphogenesis in Zebrafish
 °Yen-Hsing Li^{1,5}, Hung-Chih Chen², Hong-Yi Gong³, Shao-Yang Hu⁴, Ya-Wen Li⁵, Gen-Hwa Lin⁵, Ching-Chun Lin⁵, Wangta Liu⁵, Jen-Leih Wu⁵ (TIGP¹, Research Institute of Biotechnology, Hungkuang University², NTOU³, NPUST⁴, ICOB⁵)
- P-2102 (OP03-07)** Roles of Epiprofin in hair follicle development
 毛根発生における転写因子エピプロフィンの役割
 °Takashi Nakamura^{1,2}, Yasuo Yoshitomi², Makiko Arakaki¹, Yoshihiko Yamada², Satoshi Fukumoto¹ (Tohoku Univ Grad Sch of Dent¹, LCDB, NIDCR, NIH²)
- P-2103** Functional analysis of Wnt/ β -catenin signaling during uterine gland development and its implications for the onset of endometrial malignancy
 °Mylah Villacorte^{1,2}, Kentaro Suzuki¹, Mikita Suyama³, Yasuyuki Ohkawa⁴, Tetsuo Maruyama⁵, Akira Hirasawa⁵, Hiroshi Sasaki⁶, Yukiko Ogino⁷, Shinichi Miyagawa⁷, Naomi Nakagata⁸, Richard Behringer⁹, Gen Yamada¹ (Department of Organ Formation, IMEG, Kumamoto University¹, GCOE, Kumamoto University², Department of Genome Informatics, Center for Genomic Medicine, Graduate School of Medicine, Kyoto University³, Department of Epigenetics, Faculty of Medicine, Kyushu University⁴, Department of Obstetrics and Gynecology, School of Medicine, Keio University⁵, Laboratory for Embryonic Induction, RIKEN Center for Developmental Biology⁶, Okazaki Institute for Integrative Biosciences, National Institutes of Natural Sciences⁷, CARD, Kumamoto University⁸, Department of Genetics, University of Texas M.D. Anderson Cancer Center⁹)
- P-2104 (OP04-02)** Modeling lung branching morphogenesis via epithelial-mesenchymal interaction
 上皮間葉間相互作用を含んだ肺枝分かれ形成のモデル
 °Takashi Miura (Dept.of Anat.& Dev.Biol., Kyoto Univ.Grad.Sch.of Med.)
- P-2105 (OP01-02)** Projectome mapping of neural circuits in the *Drosophila* brain based on the neuroblast lineages
 ショウジョウバエの脳神経回路の幹細胞系譜に基づいた網羅的同定
 °Masayoshi Ito, Keita Endo, Kei Ito (IMCB, University of Tokyo)
- P-2106 (SW01-06)** The functional role of Polycomb group proteins Ring1A/B during mammalian limb development
 マウス肢形成過程におけるポリコーム群タンパク質 Ring1A/B の役割
 °Nayuta Yakushiji-Kaminatsui¹, Takaho A. Endo², Tetsuro Toyoda², Haruhiko Koseki¹ (RCAI, RIKEN¹, BASE, RIKEN²)
- P-2107** A BAC-transgenic mouse model for the long-range enhancer-promoter interaction at the *Shh* locus
 BAC トランスジェニックマウスを用いた *Shh* 遺伝子のエンハンサー・プロモーター相互作用の解析
 °Takanori Amano, Tomoko Sagai, Nagaharu Tsukiji, Toshihiko Shiroishi (NIG)
- P-2108** The study of Plzf gene expression and regulation during neural differentiation
 °I-Han Chen¹, Yi-Hua Lee¹, Po-Ying Chen¹, Yi-Chao Lee^{1,2} (Department of Pharmacology, College of Medicine¹, and Center for Gene Regulation and Signal Transduction Research, National Cheng Kung University²)
- P-2109** Expression pattern of Six genes in the mouse early embryos
 マウス初期胚における Six 遺伝子発現パターン
 °Keiko Ikeda, Shigeru Sato, Hiroshi Yajima, Kiyoshi Kawakami (Biol. Jichi)

- P-2110** Lhx1 is required for the regionalization of the chicken optic vesicle
ニワトリ胚眼胞の領域化には Lhx1 が必要である
○Takumi Kawaue, Akane Mastuyo, Mayumi Okamoto, Junji Inoue, Sayuri Tomonari, Sumihare Noji, Hideyo Ohuchi (Dept. of Life Systems, The Univ. of Tokushima)
- P-2111** Genomic structure of Meis2 and its impact on gene regulation
Meis2 遺伝子の染色体構造とその遺伝子調節との関連
○Takashi Kondo, Kaori Kondo, Haruhiko Koseki (RIKEN, RCAI)
- P-2112** Epigenetic regulation by *winged eye* capable of inducing transformation in *Drosophila*
複眼を翅に改変する遺伝子 *winged eye* によるエピジェネティック制御
○Rumi Nakajima¹, Atsumi Kobayashi¹, Emi Mizutani¹, Tomonori Katsuyama^{1,2}, Hirofumi Furuhashi¹, Shoichiro Kurata¹ (Grad. School Pharm. Sci, Tohoku Univ.¹, ETH Zurich²)
- P-2113** Transcriptional regulation by acetylated-histone-binding protein, BET-1, and histone variant, H2A.z, in the maintenance of cell fates in *C. elegans*
細胞運命の維持における、アセチル化ヒストン結合蛋白 BET-1 とヒストンバリエント H2A,z による転写調節
○Yukimasa Shibata¹, Hitoshi Sawa², Kiyoji Nishiwaki¹ (Kwansei Gakuin Univ. Sci. and Tech.¹, RIKEN CDB²)
- P-2114** Six1 and Six4 homeoproteins are required for sex determination in mouse gonad
Six1 遺伝子と Six4 遺伝子はマウス生殖腺性分化に必須である
○Yuka Fujimoto¹, Satomi Tanaka¹, Yasuka Yamaguchi^{1,2}, Kiyoshi Kawakami³, Ryuichi Nishinakamura^{1,2} (IMEG¹, GCOE, Kumamoto Univ.², Div. of Biol., Jichi Medical Univ.³)
- P-2115** Sex lethal acts autonomously in the primordial germ cells to initiate female fate in *Drosophila*
ショウジョウバエ生殖系列における性決定機構
○Kazuya Hashiyama, Yoshiki Hayashi, Satoru Kobayashi (NIBB)
- P-2116** Comparative approach to the evolution of ‘abortive meiosis’ found in asexual reproduction of the water flea *Daphnia pulex*
ミジンコの単為生殖で起こる「減数しない減数分裂」と有性生殖でみられる「減数分裂」の比較研究に向けて
○Chizue Hiruta¹, Shin Tochirai² (Dept. of Nat. His. Sci., Grad. Sch. of Sci., Hokkaido Univ.¹, Dept. of Nat. His. Sci., Fac. of Sci., Hokkaido Univ.²)
- P-2117** Inhibition of proteasome activity leads to delay of the onset of ZGA gene expression in early mouse embryos
マウス初期胚におけるプロテアソーム活性阻害は、胚性遺伝子の活性化の開始を遅延する
Seung-Wook Shin¹, Mikiko Tokoro¹, Satoshi Nishikawa¹, Yuki Hatanaka¹, Hyang-Heun Lee¹, Natsumi Shimizu¹, Takuji Nishihara^{1,2}, Rie Kato¹, Tomoko Amano¹, ○Kazuya Matsumoto¹ (Graduate School of BOST, Kinki Univ.¹, IVF Namba Clinic²)
- P-2118** Possible involvement of Nemo-like Kinase1 in *Xenopus* oocyte maturation as a kinase that catalyzes Pum1, Pum2 and CPEB phosphorylation required for the translation of dormant mRNAs in oocytes
翻訳制御タンパク質のリン酸化を介した Nemo-like Kinase1 のツメガエル卵成熟への関与
○Ryoma Ota¹, Tomoya Kotani², Masakane Yamashita² (Grad. Sch. of Life Sci., Hokkaido Univ.¹, Dept. of Biol. Sci., Fac. of Sci., Hokkaido Univ.²)

- P-2119** Transcriptional repression in the Germline of *Ciona intestinalis* embryos
カタウレイボヤ胚の生殖系列細胞における転写抑制
○Maki Shirae-Kurabayashi, Akira Nakamura (RIKEN CDB)
- P-2120** Stage-specific Importin13 activity influences meiotic differentiation of germ cells in the mouse
マウス生殖細胞の減数分裂及び着床期マウス胚における Importin13 の核—細胞質間の輸送活性調節による分化制御機構について
Yasuka Yamaguchi², Ryuichi Nishinakamura^{1,2}, Patrick Tam³, ○Satomi Tanaka¹ (IMEG, Kumamoto Univ.¹, G-COE, Kumamoto Univ.², CMRI, Australia³)
- P-2121** Sall4 is required for the suppression of the somatic gene program during mouse germ cell specification through the epigenetic modification
マウス生殖細胞における体細胞遺伝子発現制御機構の解析
○Yasuka Yamaguchi, Takeshi Terabayashi, Satomi Tanaka, Ryuichi Nishinakamura (IMEG)
- P-2122** *Drosophila* Hedls is a P-body component and required for oogenesis
○Ming-Der Lin^{1,2}, Chao-Heng Ni², Jen-Ho Cheng³, Yi-Chun Liu³, Tze-Bin Chou³ (TCU Taiwan¹, TCU, Taiwan², NTU, Taiwan³)
- P-2123 (OP04-06)** DNA demethylation regulates primordial germ cell-specific gene expression in mouse
DNA 脱メチル化は始原生殖細胞特異的な遺伝子発現を制御する
○Kentaro Mochizuki, Yasuhisa Matsui (CRCBR, IDAC, Tohoku Univ.)
- P-2124** Suppression of a *patched* homolog in a small area of the epithelium can stop migration of dorsal-inducing mesenchymal cells in the early spider embryo
オオヒメグモ初期胚で背側を誘導する間充織細胞の移動は上皮細胞における局所的な *patched* 機能抑制により阻害される
○Yasuko Akiyama-Oda, Hiroki Oda (JT Biohistory Res. Hall)
- P-2125** A genome-wide search for novel Hedgehog signaling regulators involved in *Cubitus interruptus* (Ci) processing
ヘッジホッグシグナル経路における転写因子 *Cubitus interruptus* (Ci) のプロセッシングに関わる新規因子のゲノムワイド RNAi スクリーニング
Michiko Arai¹, ○Satoshi Hasegawa¹, Spencer Spratt¹, Yifei Wang², Mary Price¹ (OIST¹, Univ. Sheffield, UK²)
- P-2126** Cadherin-7 joins dorsal-ventral patterning of the chick embryonic spinal cord through sonic hedgehog signaling
カドヘリン-7 はソニックヘッジホッグシグナルを介してニワトリ胚神経管の背腹軸パターン形成に関与している
○Rie Kawano¹, Kunimasa Ohta², Hidekatsu Yoshioka³, Jun-ichi Kadota⁴, Hideaki Tanaka⁵ (Dev. Neurobio. Kumamoto University¹, Dev. Neurobio. Kumamoto University², Matrix Medicine, Oita University³, Internal Medicine II, Oita University⁴, Dev. Neurobio. Kumamoto University⁵)
- P-2127** Identification of Transcription Regulators for Retinal Progenitor-specific Expression of Pax6
○Yeha Kim, Kiyoon Park, Jin Woo Kim (KAIST)
- P-2128** Changing FGF signal specificity during early otic development by heparan sulfate proteoglycan (HSPG)
ヘパラン硫酸プロテオグリカンによる初期内耳発生における FGF シグナル制御機構の解析
○Yuko Muta, Siu-Shan Mak, Akira Honda, Raj Ladher (RIKEN CDB)

- P-2129** FGF signalling through Frs2/3 recruitment is necessary for the development of the auditory sensory epithelium
Frs2/3 を介した FGF シグナルの内耳感覚上皮発生における必要性
○Kazuya Ono, Akira Honda, Tomoko Kita, Raj Ladher (SSD, RIKEN, CDB)
- P-2130** A mechanism coordinating the establishment of the dorsal-ventral and anterior-posterior axes during early *Xenopus* embryogenesis
胚発生初期に背腹と頭尾のパターン形成が調和するしくみ
Kimiko Takebayashi-Suzuki¹, Atsushi Kitayama², Chie Terasaka-Iioka², Naoto Ueno², ○Atsushi Suzuki¹ (Inst.for Amphibian Biol., Hiroshima Univ.Grad.Sch.of Sci.¹, Nat. Inst. for Basic Bio.²)
- P-2131 (OP02-04)** Cell polarity establishes positional difference in Hippo signaling by altering Angiomotin subcellular distribution in preimplantation mouse embryos
細胞極性による Angiomotin の細胞内分布制御がマウス着床前胚の位置依存的な Hippo 経路活性を確立する
○Yoshikazu Hirate¹, Shino Hirahara¹, Atsushi Suzuki², Vernadeth Alarcon³, Yohei Yoshihama⁴, Kazunori Akimoto², Takaaki Hirai⁴, Takeshi Hara⁴, Hitoshi Niwa¹, Fumio Matsuzaki¹, Kazuhiro Chida⁴, Shigeo Ohno², Yusuke Marikawa³, Shinichi Aizawa¹, Akihiko Shimono⁵, Hiroshi Sasaki^{1,6} (RIKEN CDB¹, Yokohama City Univ², Univ of Hawaii³, Univ. of Tokyo⁴, CSI Singapore⁵, IMEG Kumamoto Univ⁶)
- P-2132 (OP03-02)** Lef1 phosphorylation by NLK is essential for Wnt/ β -catenin signaling in neural progenitor cells
NLK による Lef1 のリン酸化は、神経前駆細胞における Wnt/ β カテニンシグナルに必須である
Satoshi Ota¹, Shizuka Ishitani¹, Nobuyuki Shimizu¹, Kunihiro Matsumoto², Motoyuki Itoh^{3,4}, ○Tohru Ishitani¹ (Div. of Cell Reg. Sys., Med. Ins. of Bioreg., Kyushu Univ.¹, Group of Signal Trans., Lab. of Cell Reg., Div. of Biol. Sci., Grad. Sch. of Sci., Nagoya Univ.², Unit on Nervous Dev. Sys., Div. of Biol. Sci., Grad. Sch. of Sci., Nagoya Univ.³, Inst. for Adv. Res., Nagoya Univ.⁴)
- P-2133** Mind bomb1 is required for trans-endocytosis of Notch into ligand-expressing cells to activate Notch signaling
Notch シグナル伝達活性化において Mind bomb1 はリガンド発現細胞での Notch のトランスエンドサイトーシスに必要である
○Makoto Okano¹, Hiromi Matsuo², Katsuto Hozumi³, Motoyuki Itoh^{1,2} (Divi. of Bio. Sci., Grad. Sch. of Sci., Nagoya Univ.¹, IAR, Nagoya Univ.², Dept. of Immun., Tokai Univ. Sch. of Med.³)
- P-2134** Dynamic Interactions of Nodal Factors and Their Receptors in Zebrafish Embryos
○Yin Wang¹, Xi Wang, Thorsten Wohland, Karuna Sampath (TLL¹, NUS²)
- P-2135** Critical Role for MT1-MMP In The Regulatigon Of FGFR Signaling In Calvarial Osteogenesis
○Zhongjun Zhou, Chan kui Ming, Wong Xavier (hku)
- P-2136** Sensitized RNAi screening for genes required for Wnt-dependent cell polarity
Wnt 依存的な細胞極性形成に必要な遺伝子の Sensitized RNAi スクリーニング
○Hatsumi Okada¹, Tomomi Takano¹, Hitoshi Sawa^{1,2} (RIKEN CDB¹, NIG²)
- P-2137** A FKBP (FK506 Binding protein) enhances BMP signaling during *Xenopus* dorso-ventral patterning
○Inchul Yeo, Jin-Kwan Han (POSTECH)

- P-2138 (SW01-12)** Dermatan sulfate controls skeletal morphogenesis in sea urchin embryos
 デルマタン硫酸はウニ胚の骨片形成を制御する
 °Mitsuyoshi Kagawa¹, Nobuo Sugiura², Hideto Watanabe², Masaaki Yamaguchi¹ (Div. Life Sci., Grad. Sch. Natural Sic. & Technol., Kanazawa Univ.¹, Instit. Mol. Sci. Med., Aichi Med. Univ.²)
- P-2139** Rapamycin treatment causes developmental delay, pigmentation defects, and gastrointestinal malformation on *Xenopus* embryogenesis
 ラパマイシン処理はツメガエルの初期発生において発生の遅れ、色素沈着の阻害、内蔵形成の奇形を引き起こす
 °Yoshihisa Ohata¹, Yuki Moriyama², Shoko Mori², Shinya Matsukawa¹, Hiroki Kuroda^{1,2} (Dept. of Education (Sciences), Shizuoka Univ.¹, GSST, Shizuoka Univ.²)
- P-2140** Controlled cell death of secondary cells in accessory gland of *Drosophila*
 ショウジョウバエ附属腺の発生における細胞死
 °Rumi Sakata, Akihiko Kokuryo, Kiichiro Taniguchi, Takashi Adachi-Yamada (Dept. Life Sci. Fuc. Sci. Gakushuin Univ.)
- P-2141 (OP02-01)** Prickle and β -TrCP regulate cell adhesion by controlling paraxial protocadherin activity through ubiquitination in *Xenopus* development
 Prickle と β -TrCP はツメガエル初期発生において paraxial protocadherin をユビキチン化を介して調節することにより細胞接着を制御する
 °Masatake Kai, Noriyuki Kinoshita (NIBB)
- P-2142 (SW01-10)** Jagged2/Notch signaling regulates epithelial organization of pharyngeal pouches in association with Fibronectin
 Jagged2/Notch signaling は Fibronectin と関連して咽頭嚢上皮構造の組織化を制御する
 °Hiroyuki Takahashi¹, Takashi Akanuma², Shinji Takada¹ (NISS NIBB, OIB, SOKENDAI¹, NAIIST²)
- P-2143** Tbx6-dependent regulation of *Sox2* determines neural versus mesodermal fate in axial stem cells
 °Tatsuya Takemoto¹, Masanori Uchikawa¹, Megumi Yoshida¹, Donald Bell², Robin Lovell-Badge², Virginia Papaioannou³, Hisato Kondoh¹ (Dev.Biol.Gr., Grad.Sch.of Frontier Biosci., Osaka Univ.¹, MRC NIMR², Columbia University³)
- P-2144** Involvement of the *Nk3* class homeobox gene in the regulation of mesoderm gene expression during early *Xenopus* development
 アフリカツメガエル初期発生における中胚葉遺伝子の発現制御に関与する Nk3 クラスホメオボックス遺伝子
 °Minoru Watanabe¹, Takeshi Nishiyama² (Inst. of SAS, The Univ. of Tokushima.¹, Grad. Sch. of IAS., The Univ. of Tokushima.²)
- P-2145** Contradictory roles of β -catenin in developing and mature mouse RPE
 °Youjoung Kim, Seul Gi Lee, Song Hwa Choi, Jin Woo Kim (KAIST)
- P-2146** Regulation of neurite outgrowth by SH2B1 β is mediated by Eps8-IRSp53 complex in PC12 cells and hippocampal neurons
 °Chien-Jen Chen, Chien-Hung Shih, Linyi Chen (Institute of Molecular Medicine, National Tsing Hua University, Hsinchu, Taiwan)

- P-2147** Functional analysis of Akhirin in the dorso-ventral patterning of the embryonic chick and mouse spinal cord
ニワトリ胚とマウス胚脊髄の背腹軸形成における Akhirin の機能解析
○Athary Felemban^{1,2}, Rie Kawano¹, Xiaohong Song^{1,2}, Hideaki Tanaka^{1,2}, Kunimasa Ohta¹ (Dep. Dev. Neurobiol., Grad. Sch. Life Sci., Kumamoto Univ.¹, GCOE, Kumamoto Univ²)
- P-2148** Functional analysis of *Lhx3* in the developing chicken retina
ニワトリ胚網膜の発生過程における Lhx3 の機能解析
○Yuki Ueda, Takumi Kawaue, Sumihare Noji, Hideyo Ohuchi (Univ.of Tokushima)
- P-2149** Phenotypic analyses of Noggin mutant teeth and gene expression patterns suggest a functional redundancy among BMP antagonists during tooth development
○Yanding Zhang, Xuefeng Hu, Yin Wang, Fenglei He, Lu Li, YiPing Chen (Fujian Key Laboratory of Developmental and Neural Biology, College of Life Sciences, Fujian Normal University Fuzhou¹, College of Stomatology, The Fourth Military Medical University², Department of Cell and Molecular Biology, Tulane University³)
- P-2150** Post-translational regulation of Sox9 protein activity in delamination of neural crest cells
○Martin Cheung, Carol Yan, Bolton Chau, Henry So, Alan Chan, Alvis Ng, Kathryn Cheah, James Briscoe (HKU¹, NIMR²)
- P-2151 (OP03-06)** Conserved distal signaling pathways regulating appendage outgrowth
○Liang Ma, Congxing Lin, Yan Yin (Wash U)
- P-2152** Functional analysis of Equarin during eye formation
眼の発生時における Equarin の機能解析
○Xiaohong Song^{1,2}, Athary Felemban¹, Yuya Sato³, Hiroshi Ochiai⁴, Mahmud Hossain^{1,2}, Takashi Yamamoto⁴, Kiyotoshi Sekiguchi³, Hideaki Tanaka^{1,2}, Kunimasa Ohta¹ (Dept. Dev. Neurobio., Grad. Sch. Life Sci., Kumamoto Univ.¹, GCOE, Kumamoto Univ², Institute for Protein Research, Osaka Univ³, Grad Sch of Sci, Hiroshima Univ⁴)
- P-2153** Type IIA Procollagen: A Positive Regulator of Nodal Signaling During Embryogenesis
○Yuan Gao¹, Alan Leung¹, Sandra Wong¹, Danny Chan^{1,2}, Patrick Tam^{3,4}, Kathryn Cheah^{1,2} (HKUBIO-CHEM¹, Centre for Reproduction, Development and Growth, The University of Hong Kong², Embryology Unit, Children's Medical Research Institute, The University of Sydney³, Sydney Medical School, The University of Sydney⁴)
- P-2154** Interaction between SHH and BMP signaling regulates inner ear development along the dorsoventral axis
○Sho Ohta¹, Gary Schoenwolf² (UOU SOM Neuro & Anat¹, UOU SOM Neuro & Anat²)
- P-2155** The role of mesenchymal FGFR1 signaling during craniofacial development in mice
○David Herrmann¹, Shuofei Cheng², Katrin Driller¹, Juha Partanen³, Annette Neubueser¹ (ALU-IDDB¹, Institut de Recherches Cliniques de Montreal 110², Institute of Biotechnology, Viikki Biocenter, 00014-University of Helsinki³)
- P-2156** FGF signaling in mouse olfactory development
○Rebekka Goetz¹, Thorsten Kurz², Juha Partanen³, Annette Neubueser¹ (ALU-IDDB¹, Zentrum für Biosystemanalyse, Genomics Facility, Albert-Ludwigs University Freiburg², Institute of Biotechnology, Viikki Biocenter, University of Helsinki³)
- P-2157** *Hoxb5* regulates Neural Crest Cell development through *Sox9* and *FoxD3*
○Ka Man Kam¹, Martin Cheung², Paul Tam¹, Vincent Lui¹ (Department of Surgery, HKU¹, Department of Biochemistry, HKU²)

- P-2158** Genetic analysis of Mi-2/NURD complex in transdetermination of *Drosophila* imaginal disc
ショウジョウバエの器官改変頻度を上昇させる Mi-2/NURD 複合体の解析
○Thanh Quang Nguyen¹, Tatsuro Minami¹, Hirofumi Furuhashi¹, Tomonori Katsuyama^{1,2}, Yoshiteru Oshima¹, Shoichiro Kurata¹ (Grad.School Pharm.Sci, Tohoku Univ¹, ETH Zurich²)
- P-2159** Characterization of mouse epiblast stem cells derived from gastrula-stage embryos
○Yoji Kojima, Joshua Studdert, Kirsten Steiner, Melinda Power, David Loebel, Patrick Tam (CMRI)
- P-2160** A synthetic nanofibrillar matrix that promotes hepatic differentiation of mouse and human ES cells and iPS cells in vitro
ナノファイバーを用いたマウスおよびヒト ES 細胞、iPS 細胞の肝分化誘導法
○Taiji Yamazoe^{1,2,3}, Nobuaki Shiraki^{1,2}, Kazuhiko Kume¹, Shoen Kume^{1,2} (Stem Cell Biology, IMEG, Kumamoto Univ.¹, GCOE, Kumamoto Univ.², Gastroenterol. Hepatol. Kumamoto Univ.³)
- P-2161** Gene Characterization of Germline Stem Cell Niche and Ovarian Somatic Stem Cells in *Drosophila melanogaster*
○Hidenori Watanabe, Hiroshi Uetake, Yuzo Niki (Dept. of Sciences, Ibaraki Univ.)
- P-2162** Cell ablation analysis in the regenerating zebrafish fin: Generation of transgenic zebrafish and the cell ablation using the prodrug and nitroreductase
ゼブラフィッシュのヒレ再生における細胞アブレーション解析：トランスジェニックゼブラフィッシュの作製とプロドラッグおよびニトロリダクターゼを用いた細胞アブレーション
○Kazunori Ando, Nozomi Yoshinari, Akira Kudo, Atsushi Kawakami (Tokyo Inst. Tech.)
- P-2163 (OP03-04)** Essential roles of Smad4 in directional progression from neural stem cells to committed neural progenitors in the postnatal mouse brain
Motoko Niida, Mathew Chempanal, ○Yasuhide Furuta (UT MDACC)
- P-2164** Spatiotemporal Distribution of Proliferating Cardiomyocytes in the Regeneration of Newt Hearts
イモリの心臓再生過程における心筋細胞の増殖パターンの研究
○Toshinori Hayashi¹, Takuya Yokomastu², You Okamoto¹, Takashi Takeuchi¹ (Tottori University, School of Life Sciences¹, RIKEN, CDB²)
- P-2165** Transdifferentiation of neuronal cells from iris pigment epithelial cells
ニワトリ胚虹彩色素上皮細胞の神経細胞分化能
○Tamami Ishikawa¹, Mitsuko Kosaka², Masasuke Araki¹ (Dep. of Biol. Sci., Nara Women's Univ.¹, Human Morphology, Faculty of Medicine, Okayama University²)
- P-2166 (WS01-04)** A mechanism that controls blastema cell proliferation and survival during zebrafish fin fold regeneration
ゼブラフィッシュ膜ひれ再生における再生芽の増殖と生存の調節
Teruhiro Nakajima, Takashi Ishida, Akira Kudo, ○Atsushi Kawakami (Tokyo Inst.Tech.)
- P-2167 (WS01-02)** Expression of oocyte-type linker histone is required for newt lens transdifferentiation
○Nobuyasu Maki^{1,2,3,4}, Rinako Suetsugu-Maki³, Shozo Sano⁴, Kenta Nakamura³, Osamu Nishimura⁵, Hiroshi Tarui⁴, Katia Del Rio-Tsonis⁶, Keita Ohsumi⁷, Kiyokazu Agata^{4,5}, Panagiotis Tsonis³ (PREST¹, Inst. of Protein Research, Osaka Univ.², Dept. of Biol, Univ. of Dayton³, RIKEN CDB⁴, Dept. of Biophys., Kyoto Univ⁵, Dept. of Zool., Miami Univ.⁶, Div. of Biol. Sci., Nagoya Univ.⁷)
- P-2168** Osteogenesis from mouse ES cells
マウス ES 細胞からの骨分化誘導
○Yuki Minamino¹, Yuichi Ohnishi¹, Kenji Kakudo¹, Masami Nozaki² (2nd Dept of Oral and Maxillofacial Surg, ODU¹, Department of Cell Biology, Research Institute for Microbial Diseases, Osaka University²)

- P-2169 (SW01-15)** Generation of intestinal epithelial like cell derived from ES cells
 ES 細胞を用いた効率的な腸上皮様細胞への分化誘導法の構築
 °Soichiro Ogaki¹, Nobuaki Shiraki¹, Kazuhiko Kume¹, Shoen Kume^{1,2} (Kumamoto Univ IMEG Dept. of Stem Cell Biol.¹, GCOE Kumamoto Univ. Kumamoto, Japan²)
- P-2170** A P2X receptor involved in planarian asexual reproduction via regulation of stem cell proliferation in *D. japonica*
 プラナリアの新生細胞における P2X 遺伝子の役割
 Toshihide Sakurai, °Norito Shibata, Kiyokazu Agata (Dept. of Biophys, Kyoto Univ.)
- P-2171** Transplantation of Mesenchymal Stem Cells from Mouse ES Cells into Injured Muscles Promotes Skeletal Muscle Regeneration and Improves Functional Recovery
 マウス ES 細胞由来間葉系幹細胞の損傷筋への移植による筋再生効果
 Nana Ninagawa^{1,2}, Eri Isobe², Rumi Murakami², Mami Kobayashi², °Shigeko Torihashi^{1,2} (Dept. of Health Science, Nagoya Univ. Grad. Sch. of Med.¹, Nagoya Univ. Sch. of Health Sci. Dept of PT.²)
- P-2172** Functional analysis of *grimp* protein during regeneration of *Enchytraeus japonensis* (Enchytraeidae, Oligochaete)
 ヤマトヒメミズ再生における *grimp* タンパクの機能解析
 Shota Noguchi¹, Makoto Takeo^{3,4}, Takashi Ito¹, Kaname Ozawa¹, Yuta Miura¹, Shin Tochinnai³, °Chikako Yoshida-Noro^{1,2} (CIT Nihon Univ.¹, ARISH Nihon Univ.², Fac. Sci. Hokkaido Univ.³, New York Univ. Sch. Med.⁴)
- P-2173** Origin and role of distal visceral endoderm, a group of cells that determines anterior-posterior polarity of the mouse embryo
 マウス胚における前後軸の起源
 °Katsuyoshi Takaoka¹, Masamichi Yamamoto^{1,2}, Hiroshi Hamada¹ (Osaka university FBS¹, Gunma university²)
- P-2174 (SW01-05)** What triggers re-proliferation of cardiomyocytes during newt heart regeneration?
 イモリの心臓再生過程において、何が心筋細胞の再増殖を引き起こすのか？
 °Naoki Yokotani, Toshinori Hayashi, Takashi Takeuchi (Tottori Univ., Sch. Life Sci., Div. Biosignal.)
- P-2175** Blastema induction in aneurogenic state and *Prrx-1* regulation by MMPs and FGFs in *Ambystoma mexicanum* limb regeneration
 MMP と FGF の活性化が有尾両生類の四肢再生反応を誘導する。(神経因子と再生開始に関する知見)
 °Akira Satoh^{1,2}, Aki Makanae¹, Ayako Hirata¹, Yutaka Satou³ (RCIS¹, PRESTO², Kyoto University³)
- P-2176** Kinetic biology on stem cell colonies and their geometrical shapes: why stem cells make round colonies?
 幹細胞コロニー形成の速度論：なぜ幹細胞は丸いコロニーを作るのか？
 °Daisuke Nanba^{1,2}, Fujio Toki^{1,2}, Shigeki Higashiyama^{2,3}, Yann Barrandon⁴, Hiroshi Toki⁵ (Senior Research Fellow Center, Ehime University¹, Ehime Proteo-Medicine Research Center, Ehime University², Department of Biochemistry and Molecular Genetics, Ehime University Graduate School of Medicine³, École Polytechnique Fédérale de Lausanne⁴, Research Center for Nuclear Physics, Osaka University⁵)
- P-2177** Induction of ameloblasts from induced pluripotent stem cells
 iPS 細胞を用いたエナメル芽細胞誘導法の確立
 °Makiko Arakaki, Takashi Nakamura, Tsutomu Iwamoto, Aya Yamada, Satoshi Fukumoto (Tohoku Univ Grad Sch Dent)

- P-2178** Terminal differentiation of notochord cells isolated from *Xenopus* tadpole
 アフリカツメガエル幼生から単離した脊索細胞の最終分化
 ○Makoto Mochii, Kenji Watanabe (Grad. Sch. Life Sci., Univ. Hyogo)
- P-2179** Identification of miRNA players in muscle stem cells based on Pax3 expression
 Pax3 を発現する骨格筋幹細胞における miRNA の同定
 ○Yosuke Hiramuki¹, Takahiko Sato², Atsuko Sehara¹ (Department of Growth Regulation, Institute for Frontier Medical Sciences, Kyoto University¹, CiRA²)
- P-2180** Non-B DNA segment promotes high and stable transcription activity of the transgene in mouse embryonic stem cells
 マウス ES 細胞における非 B 型 DNA 配列による転写活性の促進と安定化
 ○Daiki Hirano¹, Sho Kawaguchi¹, Jun-ichi Tanase², Yoshihiko Hosoi³, Masayuki Anzai³, Takashi Ohyama², Tasuku Mitani³ (Grad. Sch. BOST, Kinki Univ.¹, Dept.Biol., Waseda Univ.², Inst. Adv. Technol., Kinki Univ.³)
- P-2181** Active migration of the GFR α 1-expressing A_{single} spermatogonia in steady-state mouse testis
 成体マウス精巣における GFR α 1 を発現する A_{single}型精原細胞の移動について
 ○Kenshiro Hara¹, Kana Inada¹, Hideki Enomoto², Shosei Yoshida¹ (NIBB¹, RIKEN CDB²)
- P-2182** Possibility of the Yamanaka factor genes expression were regulated by the miR-290 cluster in mouse somatic cells
 miR-290 cluster による体細胞での山中因子発現調節の可能性
 ○Masanori Narahara, Michiyo Masui, Saori Nakai, Nagi Miyamoto, Masaharu Miyake (Fac.of Pharm. Scis., Kobe Gakuin Univ.)
- P-2183** Visualization of oct3/4-expressing cells in medaka
 メダカにおける oct3/4 陽性細胞の可視化
 Tomoko Adachi¹, Ryoko Seki¹, Etsuko Sawatari¹, Masahiko Hibi¹, Tohru Suzuki², ○Hisashi Hashimoto¹ (Biosci.& Biotechnol.Ctr., Nagoya Univ.¹, Grad. Sch. Agr. Sci., Tohoku Univ.²)
- P-2184** Generation of the transgenic medaka for in vivo imaging of cell-cycle
 細胞周期可視化メダカの開発
 ○Tomonori Deguchi¹, Tomohiro Matsumoto^{1,2}, Takashi Kawasaki¹, Shunsuke Yuba¹, Masato Kinoshita³, Asako Sakaue-Sawano^{4,5}, Atsushi Miyawaki^{4,5}, Kiyoshi Naruse⁶ (Health Research Institute, Tissue Engineering Research Group, AIST¹, First Department of Oral and Maxillofacial Surgery, Tsurumi University, School of Dental Medicine², Division of Applied Biosciences, Graduate School of Agriculture, Kyoto University³, Laboratory for Cell Function and Dynamics, Advanced Technology Development Group, Brain Science Institute, RIKEN⁴, Life Function and Dynamics, ERATO, JST⁵, Laboratory of Biore-sources, National Institute for Basic Biology⁶)
- P-2185** A simple method for whole-mount in situ hybridization in *C.elegans* embryos
C.elegans 胚のための簡単なホールマウント in situ ハイブリダイゼーション法
 ○Fumiya Ogata, Hiroya Ishita, Satoshi Takaoka, Isato Araki (Dept Chem & Bioeng, Fac Eng, Iwate Univ)
- P-2186** Targeted mutagenesis of thyroid hormone receptor beta gene by engineered zinc finger nuclease in amphibian embryo
 ○Ken-Ichi Suzuki¹, Keiko Kashiwagi², Hiroshi Ochiai³, Tetsushi Sakuma³, Naoaki Sakamoto³, Akihiko Kashiwagi⁴, Takashi Yamamoto³, Nobuaki Furuno² (CMES¹, Institute of Amphibian Biology, Hiroshima University, Japan², Graduate School of Science, Hiroshima University, Japan³, Sanyo Women's Collage, Japan⁴)

P-2187 Spatio-temporally controlled misexpression of genes using the GAL4/UAS system in the cricket, *Gryllus bimaculatus*

フタホシコオロギ *Gryllus bimaculatus*における、Gal4/UAS システムを用いた遺伝子の時空間的異所性発現

○Koji Matsuda, Taro Nakamura, Tetsuya Bando, Taro Mito, Hideyo Ohuchi, Sumihare Noji (Dept. of Life System, Inst. of Tech. and Sci., Univ. of Tokushima)