Scientific Programs

Plenary Lectures

May 29 (Thu) 9:00-11:30 Room A
Chairperson: Hiroyuki Takeda (Univ. of Tokyo)

PL-01 09:00-10:15 The Molecular Control of Embryogenesis: Insights from Zebrafish

○Alexander Schier (Harvard)

Chairperson: Shosei Yoshida (NIBB)

PL-02 10:15-11:30 Lgr5 Stem Cells in Self-renewal and Cancer

○Hans Clevers (Hubrecht Institute, Royal Netherlands Academy of Arts and Sciences & University Medical Centre Utrecht)

Symposia

Symposium 1: Spain-Japan Joint Symposium: Morphogenesis and Organogenesis

May 28 (Wed) 9:00 ～ 11:40 Room A
Organizers: Yoshiko Takahashi (Kyoto Univ.)
Angela Nieto (Instituto de Neurociencias de Alicante)

This symposium is aimed at promoting relationships between Spanish Society of Developmental Biology and JSDB. From the Spanish side, two senior and two junior scientists will join, and a couple of Japanese junior scientists will also present their researches. The topics we hear in this symposium will cover morphogenesis, organogenesis, and cancer biology. This symposium provides a precious opportunity to both societies to appreciate developmental biology going on in the two countries.

S01-01 09:00-09:30 Reversibility of Epithelial-Mesenchymal Transition in development and disease
○Angela Nieto (Instituto de Neurociencias CSIC-UMH)

S01-02 09:30-09:50 How to convert cardiomyocyte into smooth muscle; Lessons from fish heart evolution
心筋か平滑筋か；真骨魚類の進化から明らかとなった新規細胞運命決定メカニズム
○Yuuta Moriyama, Jun Takeuchi, Kazuko Koshiba-Takeuchi (Division of Cardiovascular Regeneration, IMCB)

S01-03 09:50-10:10 Can we dedifferentiate cells in vivo?
○Maria Abad[1], Lluc Mosteiro[1], Cristina Pantoja[1], Marta Cañamero[1], Teresa Rayón[2], Inmaculada Ors[2], Osvaldo Graña[1], Diego Megías[1], Orlando Domínguez[1], Dolores Martínez[1], Miguel Manzanares[2], Sagrario Ortega[1], Manuel Serrano[1] (CNIO[1], CNIC[2])

S01-04 10:10-10:30 Tubulogenesis using Wolffian duct as a model: Tubule elongation and cell epithelialization are coordinated by FGF signals
ウォルフ管をモデルとした上皮管形成機構の解析：FGF シグナルは管伸長と上皮管腔化の進行をコーディネートする
○Yuji Atsuta, Yoshiko Takahashi (Grad. Sch. of Sci., Kyoto Univ.)

S01-05 10:30-10:50 Spatially restricted distribution of Hedgehog in exovesicles moving along cytonemes
○Ana Gradilla[1], Esperanza Gonzalez[2], Marcus Bischoff[3], Juan Falcon[2], Isabel Guerrero[1] (CBMSO[1], BioGUNE[2], University of St. Andrews, UK[3])

S01-06 10:50-11:10 The maintenance of epithelial architecture by controlling mitotic spindle orientation
細胞分裂軸の制御による上皮構造の維持
○Yuichiro Nakajima, Matthew Gibson (Stowers Institute)

S01-07 11:10-11:40 Cell Competition regulation of tissue homeostasis in Mammals
○Miguel Torres, Cristina Clavería, Cristina Villa del Campo, Giovanna Giovinazzo, Rocío Sierra (CNIC, Spain, Madrid)

Symposium 2: Decoding and Handling the Stem Cell System

May 28 (Wed) 9:00 ～ 11:30 Room B
Organizers: Atsushi Suzuki (Kyusyu Univ.)
Mitsuru Morimoto (RIKEN CDB)

Stem cell systems may have developed to be suitable for the maintenance of tissues and organs in the process of evolution. That is why each stem cell system is individualistic and has distinctive features involved in both the function and the regulation of stem cells. Scientists are challenging to dissect the molecular nature of such diverging stem cell systems and apply the knowledge obtained from the basic research to the development of therapeutic strategies for human diseases. In this symposium, we invite young and energetic scientists who are passionately studying to understand and trying to manipulate the stem cell system. These speakers will present the exciting new findings and discuss the future directions in this field.

S02-01 09:00-09:25 Bidirectional interactions between epidermal stem cells and their niche in skin morphogenesis and regeneration
皮膚形態形成と再生における表皮幹細胞とそのニッチとの双方向性相互作用
○Hironobu Fujiwara (RIKEN CDB)

S02-02 09:25-09:50 Notch signaling contributes to population and regional regulations of the airway epithelial stem and differentiated cells.
Notch シグナルは気道上皮の幹細胞および分化細胞の数的、空間的バランス制御に関わっている
○Mitsuru Morimoto (Lab. for Lung Dev., RIKEN CDB)

S02-03 09:50-10:15 Regulation of stem cell properties in liver development
肝発生における幹細胞の特性制御
○Atsushi Suzuki[1,2] (Div. of Organo. & Regene., Med. Inst. of Bioreg., Kyushu Univ.[1], CREST, JST[2])

S02-04 10:15-10:40 The Self-renewing Mechanism of Intestinal Stem Cell: Niche and Cancer
○Toshiro Sato, Yuki Ohta, Ai Takano, Shoichi Date, Mami Matano, Mariko Shimokawa (Department of Gastroenterology, Keio University School of Medicine)

S02-05 10:40-11:05 Vascularized and functional human liver from an iPSC-derived organ bud transplant
○Takanori Takebe[1,2] (Department of Regenerative Medicine, Yokohama City University[1], PRESTO, Japan Science and Technology Agency[2])

S02-06 11:05-11:30 Chimera formation with non-chimera forming cells
○Hideki Masaki (Center for Stem Cell Biology and Regenerative Medicine, The Institute of Medical Science, The University of Tokyo)

Symposium 3: Cellular Dynamics in Early Mammalian Embryogenesis

May 28 (Wed) 9:00 ～ 11:30 Room C
Organizers: Hiroshi Sasaki (Kumamoto Univ.)
Toshihiko Fujimori (NIBB)

Understanding of early developmental process of mammals has been challenging. Recent integration of molecular genetics, cell biology, live cell imaging and quantitative biology into developmental biology of mouse embryogenesis provided a wide variety of information regarding cellular and molecular behaviors in developing embryos. The scope of this symposium is to share such cutting-edge researches and discuss future perspectives in the field.

S03-01 09:00-09:25 Modulation of early mammalian brain development through local apoptotic elimination of morphogen-producing cells
局所的なアポトーシスによる哺乳類脳初期発生の調節
○Yoshifumi Yamaguchi[1,2], Keiko Nonomura[1], Naomi Shinotsuka[1], Misato Hamachi[1], Yudai Matsumoto[1], Masayuki Miura[1,3] (Dept. Genet. Pharma. The Univ. of Tokyo, Japan[1], PRESTO, JST, Japan[2], CREST, JST, Japan[3])

S03-02 09:25-09:55 Uterine Rbpj is required for embryo-uterine orientation and decidual remodeling via Notch pathway-independent and -dependent mechanisms
Shuang Zhang, ○Haibin Wang (State Key Laboratory of Reproductive Biology, Institute of Zoology, Chinese Academy of Sciences)

S03-03 09:55-10:25 Endosome dynamics and its implication in patterning of mouse early embryo
マウス初期胚のシグナル制御とエンドサイトーシス
○Yoh Wada (ISIR, Osaka Univ.)

S03-04 10:25-10:55 Guts & gastrulation: cell dynamics and the morphogenesis of the early mouse embryo
○Kat Hadjantonakis, Manuel Viotti, Sonja Nowotschin (Memorial Sloan Kettering Cancer Center, New York)

S03-05 10:55-11:10 Quantification of embryo quality by live-cell imaging
○Kazuo Yamagata (Research Institute for Microbial Diseases, Osaka University)

S03-06 11:10-11:27 Dynamics of mammalian preimplantation embryos reconstructed from 4D bio-imaging data
バイオイメージデータからの哺乳類着床前胚の発生ダイナミクスの再構成
○Tetsuya Kobayashi[1], Khayrul Bashar[1], Mitsunori Ozekii[2], Akira Funahashi[2], Kazuo Yamagata[3] (ISS, Univ. Tokyo[1], Keio Univ.[2], Osaka Univ.[3])

11:27-11:30 Closing

Symposium 4: APDBN Symposium: Mechanisms of Morphogen Signaling in Pattern Formation, Organogenesis and Homeostasis

May 30 (Fri) 9:00 ～ 11:30 Room A

Organizers: Xin-hua Lin (Institute of Zoology, Chinese Academy of Sciences)
Philip Ingham (IMCB, Singapore)

Morphogens (including Wnt, Hh, Bmp, and Nodal) are essential intercellular signaling molecules which form concentration gradients and elicit their activities required for embryonic patterning and organogenesis during development. Recent studies have also shown critical roles of morphogens in homeostasis and regeneration. In this symposium, scientists from Asia-Pacific Developmental Biology Network (APDBN) will talk about their recent progresses on the mechanisms of morphogen signaling and the functions of morphgens during development and homeostasis.
Co-organized by Asia-Pacific Developmental Network (APDBN)

S04-01 09:00-09:25 Intracellular transduction of Hedgehog activity in the Zebrafish
Zhonghua Zhao[2], Ashish Maurya[2], Jin Ben[2], Raymond Lee[2], Jayantha Gunaratne[2], Stone Elworthy[3], Freek van Eeden[3], ○Philip Ingham[1,2] (LKCMedicine, Imperial College-NTU[1], IMCB, Singapore[2], MRC CDBG, University of Sheffield[3])

S04-02 09:25-09:50 Decoding Ci: from partial degradation to inhibition
Zhao Zhang, Xiangdong Lv, Jing Feng, ○Yun Zhao (SIBCB, CAS)

S04-03 09:50-10:15 Role of motile and immotile cilia in left-right patterning
左右の決定における繊毛の役割
○Hiroshi Hamada (Osaka University)

S04-04 10:15-10:40 Essential roles of BMP and Hh morphogens in regulating gut stem cell activity and tissue homeostasis
Zhouhua Li[1], Yan Zhang[1], Yueqin Guo[1], Lili Han[1], Lai Shi[1], Huang Xudong[2], ○Xinhua Lin[1,3] (Institute of Zoology, CAS. Beijing. China[1], School of Optometry and Ophthalmology and Eye Hospital, Wenzhou Medical University, Wenzhou 325000, China[2], Division of Developmental Biology, Cincinnati Children's Hospital Medical Center, Cincinnati, OH 45229, USA[3])

S04-05 10:40-11:05 EpCAM Is an Endoderm-Specific Wnt Derepressor that Licenses Liver Development
Huiqiang Lu, Jun Ma, Yun Yang, Wenchao Shi, ○Lingfei Luo (School of Life Sciences, Southwest Univ.)

S04-06 11:05-11:30 Lineage extension chondrocytes and the ontogeny of bone cells.
○Kathryn SE Cheah[1], Liu Yang[1], Kwok Yeung Tsang[1], Hoi Ching Tang[1], Horace Tsang[1], Yingzi Yang[2], Danny Chan[1] (Dept. Biochemistry, University of Hong Kong, Hong Kong[1], National Human Genome Research Institute, National Institutes of Health[2])

Symposium 5: Integrated Approaches Toward Deeper Understanding of Morphogenesis

May 30 (Fri) 9:00 〜 11:30 Room B
Organizers: Koichi Nishiyama (Univ. of Tokyo)
Shinji Ihara (NIG)

Living organisms are built from assemblies of cells that have intrinsic variation in shape and motility in part due to thermal fluctuation of biological macromolecules. In order to understand the mechanism of how orderly shape of organisms is specified reproducibly from random assortment of cells and molecules, investigation not only from biological standpoint, but also from physics and theoretical biology would be effective. It is anticipated that such integrated approaches would eventually lead to reconstitution of biological processes and morphogenesis with defined mechanisms. In this symposium, researchers tackling this challenge with variety of approaches will present their latest works.

09:00-09:05 Short Introduction

S05-01 09:05-09:33 Differential modification of apical-basal polarity as a novel mechanism for the initiation of epithelial folding
○Yu-Chiun Wang (RIKEN CDB)

S05-02 09:33-10:01 Hemodynamic control of vascular remodeling through endothelial cell mechanotransduction
内皮細胞の血流応答を介した血管リモデリング
○Kimiko Yamamoto[1], Joji Ando[2] (System Physiol., Dep. of Biomed. Eng., Grad. Sch. of Med., Univ. of Tokyo[1], Biomed, Eng., Sch. of Med., Dokkyo Med. Univ.[2])

S05-03 10:01-10:29 Intertwined regulatory circuits initiating 2-dimensional patterns of stomata in plant epidermis
○Keiko U. Torii (Howard Hughes Medical Institute and Department of Biology, University of Washington)

S05-04 10:29-10:57 Rich types of repulsive behavior to quinine in Physarum plasmodium
粘菌変形体のキニーネに対する忌避行動の多様性
Itsuki Kunita[1], ○Toshiyuki Nakagaki[1], Kei-ichi Ueda[2], Yasumasa Nishiura[3] (RIES, Hokkaido Univ.[1], Dep. Math., Toyama Univ.[2], WPI, Tohoku Univ.[3])

S05-05 10:57-11:25 Cell type diversification through reconstituted lateral inhibition
側方抑制によって細胞集団が多様化するしくみの再構成
○Miki Ebisuya (RIKEN CDB)

Symposium 6: New Era of Developmental Biology on Plants

May 30 (Fri) 9:00 〜 11:30 Room C
Organizers: Hirokazu Tsukaya (Univ. of Tokyo)
Takashi Araki (Kyoto Univ.)

The fundamental mechanisms of plant development are not yet fully understood. We aims to revolutionize the field of developmental biology through new concepts and a research style that is expected to produce breakthroughs for the understanding of fundamental logics of plant development. Here we introduce our challenges that try to create a new era of discovering novel developmental concepts: logics.
Co-organized by: “Multidimensional Exploration of Logics of Plant Development”, “The Plant Cell Wall as Information Processing System”

09:00-09:05 Opening

S06-01 09:05-09:30 Logics of Leaf Development: How is the meristematic zone positioning determined?
葉の発生ロジック：その分裂組織の位置決めに関する謎
○Hirokazu Tsukaya (Univ. Tokyo)

S06-02 09:30-09:55 Comprehensive genetic analysis of CLV3 downstream pathway in Arabidopsis.
シロイヌナズナの幹細胞活性を制御する CLV3 ペプチドホルモンのシグナル伝達機構の解析
○Shinichiro Sawa (Kumamoto Univ.)

S06-03 09:55-10:20 Developmental Signaling in the Arabidopsis Root Pattern Formation
シロイヌナズナの根のパターン形成における発生シグナル伝達
○Keiji Nakajima[1,2] (Grad. Sch. Biol. Sci., NAIST[1], PRESTO, JST[2])

S06-04 10:20-10:45 Genetic regulation of flower and inflorescence development in rice
イネの花や花序の発生を制御する遺伝的機構
○Hiroyuki Hirano (Dept. Biological Science, Univ. Tokyo)

S06-05 10:45-11:10 Exploring the plant reproductive processes using Arabidopsis and Marchantia
シロイヌナズナとゼニゴケを用いた有性生殖過程の解析
○Takashi Araki (Grad. Sch. Biostudies, Kyoto Univ.)

11:10-11:30 General Discussion

Symposium 7: Theoretical and Experimental Investigation of Morphogen Gradient Formation

May 30 (Fri) 13:30-16:00 Room A
Organizers: Shinji Takada (OIIB)
Isao Matsuo (Osaka Medical Center)

Morphogens have been suggested to provide the positional information to pattern developing tissues in a concentration-dependent manner.During the last two to three decades, molecular genetics has succeeded to identify extracellular signaling molecules that may act as morphogens. Now, we are on a stage where we can expand these excellent fruits of molecular biology by introducing new approaches, such as live imaging techniques and theoretical studies, to uncover dynamics of morphogen diffusion and mechanism by which morphogenic field is established and maintained. This symposium will provide excellent examples of morphogen studies in this new era.
Co-organized by：From Molecules and Cells to Organs: Trans-Hierarchical Logic for Higher-Order Pattern and Structures Analysis and Synthesis of Multidimensional Immune Organ Network

13:30-13:35 Introduction

S07-01 13:35-14:05 Variability and robustness in early embryonic patterning
○Benny Shilo, Neta Degani, Inna Averbukh, Michal Haskel-Ittah, Neta Strasser, Eyal Schejter, Naama Barkai (WIS)

S07-02 14:05-14:27 Interplay between morphogen and cellular competence in the neural tube pattern formation
○Noriaki Sasai, Eva Kutejova, James Briscoe (MRC National Institute for Medical Research)

S07-03 14:27-14:49 The role of heparan sulfate proteoglycans in Drosophila germline stem cell niche.
ショウジョウバエ生殖幹細胞ニッチにおけるヘパラン硫酸プロテオグリカンの役割
○Yoshiki Hayashi[1,2], Arisa Sugiyama[1,2], Satoru Kobayashi[1,2] (Okazaki Institute for Integrative Bioscience, NIBB[1], SOKENDAI[2])

S07-04 14:49-15:11 The extracellular microenvironment modulates biological activity of diffusible growth factors during early mouse embryogenesis
マウス初期胚発生過程において細胞外の微小環境が、拡散性成長因子のシグナル活性を制御している
○Isao Matsuo[1], Ryuji Hiramatsu[2], Chiharu Kimura-Yoshida[1] (Osaka Medical Center and Research Institute for Maternal and Child Health[1], Dept. Safty Res. Blood and Biol. Products, NIID[2])

S07-05 15:11-15:33 Regulation of morphogen diffusion affects spontaneous pattern formation in development
モルフォゲンの拡散調節と発生における自発的パターン形成
○Takashi Miura (Dept. of Anat. & Cell Biol., Kyushu Univ. Grad. Sch. of Med.)

S07-06 15:33-15:55 Visualization of Wnt proteins reveals their local accumulation in developing tissues
Wnt タンパク質の可視化により明らかになった発生組織における局所的集積
Yusuke Mii[1,2,3], Kei Nakayama[1,2,3], Takuma Shinozuka [1,2,3], ○Shinji Takada[1,2,3] (OIIB, NINS[1],

NIBB[2], SOKENDAI[3])

15:55-16:00 Conclusion

Symposium 8: A Contact Point Between Pluripotency and Germness

May 30 (Fri) 13:30-16:00 Room B
Organizers: Satoru Kobayashi (NIBB)
Yasuhisa Matsui (Tohoku Univ.)

Germline is the specialized cell lineage that produces gametes to transmit genetic materials from one generation to the next in sexual reproduction. In certain animals, such as Drosophila, the germline is specified by maternal factors stored in the specialized ooplasm, or germ plasm, while in other groups, including hydra, sea urchin, planaria and mouse, the germline is segregated from pluripotent (multipotent) cells by zygotic mechanism. Some germline genes, vasa and nanos, have been reported to be expressed in the pluripotent cells, as well as in germline, suggesting that these two cell types share a common characteristic. This symposium focuses on a connection between pluripotency and germness in various animals with different mode of germline segregation.

S08-01 13:30-13:45 Germline formation by maternal factors in Drosophila embryos
ショウジョウバエ胚における母性因子による生殖系列の形成
○Satoru Kobayashi (NIBB)

S08-02 13:45-14:00 Germline formation from multipotent stem cells in *Hydra*.
ヒドラにおける多能性幹細胞からの生殖幹細胞の再生
○Chiemi Nishimiya-Fujisawa[1], Satoru Kobayashi[1] (NIBB[1], NIBB[2])

S08-03 14:00-14:30 A broad utilization of germ line molecules in multipotent cells of the sea urchin
○Mamiko Yajima, Gary Wessel (MCB Department, Brown Univ.)

S08-04 14:30-15:00 Germ cell development and regeneration in planarians: implications for understanding parasitic flatworms
Bo Wang, Jim Collins, ○Phillip Newmark (Howard Hughes Medical Institute Department of Cell and Developmental Biology University of Illinois at Urbana-Champaign)

S08-05 15:00-15:20 In vitro germline formation from pluripotent cells in mice
マウス生殖細胞系列の体外培養系での再構築
○Katsuhiko Hayashi[1,2,3], Mitinori Saitou[1,4,5,6] (Kyoto Univ.[1], PRESTO, JST[2], Kyushu Univ.[3], ERATO, JST[4], CiRA, Kyoto Univ.[5], iCeMS, Kyoto Univ.[6])

S08-06 15:20-16:00 Epigenetic barrier between pluripotency and germness in mice
多能性と生殖細胞性を隔てるエピゲノム障壁
○Yasuhisa Matsui, Ikuma Maeda (IDAC, Tohoku Univ.)

Symposium 9: Making Conceptual Breakthroughs in Regenerative Biology and Medicine

May 30 (Fri) 13:30-16:00 Room C
Organizers: Yoshihiko Umesono (Univ. of Hyogo)
Akira Sato (Okayama Univ.)

Regeneration is one of the most intriguing phenomena in postembryonic development, made possible by extraordinary plasticity of cells in response to wounding in a context-dependent manner. “How do planarians regenerate their missing head and tail by activating pluripotent stem cells?” “How do axolotls regenerate their missing limbs and spinal cord?” “Why can newborn mice regenerate their damaged heart, but mice in adulthood cannot?” Unveiling the molecular logics behind these questions will contribute to developing better treatments for damaged tissues and organs, with the assistance of regenerative engineering.

S09-01 13:30-14:00 Why does regenerative ability vary among animal species? - a case study in planarians -
プラナリア種間における頭部再生能の違いに関する解析
○Yoshihiko Umesono (Univ. of Hyogo)

S09-02 14:00-14:30 Deconstructing the complexity of spinal cord regeneration
○Akira Tazaki (CRTD, TU Dresden)

S09-03 14:30-15:00 Transformation from skin wound healing to limb formation by defined factors in urodele amphibians
有尾両生類において皮膚損傷反応を四肢形成（再生）反応に転換させることができる「再生薬」の同定
Aki Makanae, Kazumasa Mitogawa, ○Akira Satoh (Research Core for Interdisciplinary Sciences (RCIS))

S09-04 15:00-15:30 Partial reprograming for heart cell survival
部分的な若返りによる心臓細胞の生存機構
○Jun.K Takeuchi[1,2,3] (IMCB, the University of Tokyo[1], Dept. of Bio. Sci., Grad. Sch. of Sci., U of Tokyo[2], JST PRESTO[3])

S09-05 15:30-16:00 MEMS and microfluidic technologies for reconstructing tissue
MEMS とマイクロ流体技術による組織構築
○Hiroaki Onoe (IIS, The Univ. of Tokyo)

Workshops

Workshop 1: New Genome Technologies in Developmental Biology

May 28 (Wed) 16:00 ～ 19:00 Room A
Chairpersons: Atsuo Kawahara (Yamanashi Univ., RIKEN QBiC)
Takashi Yamamoto (Hiroshima Univ.)

The development of genome editing technologies (TALEN and CRISPR/Cas) and the discovery of a new transposon, Albatross, has enabled us to manipulate a targeted genome modification in various model organisms. In this workshop, we will introduce new genome technologies and their applications in developmental biology.

WS1-01 16:00-16:25 CRISPR/Cas9-mediated genome modifications in zebrafish
ゼブラフィッシュにおける CRISPR/Cas9 によるゲノム編集
○Atsuo Kawahara[1,2], Satoshi Ota[1,2], Yu Hisano[2] (Yamanashi Univ.[1], RIKEN QBiC[2])

WS1-02 16:25-16:40 O-Fucosyltransferase activity of Pofut1 is necessary to regulate correct Notch1 subcellular localization during somitogenesis
Pofut1 糖鎖修飾活性は体節形成時の Notch1 細胞内局在制御に必須である
○Rieko Ajima[1], Yoshiaki Okamura[1,2], Yumiko Saga[1] (NIG[1], KDRI[2])

WS1-03 16:40-16:55 Targeted gene disruptions in the cricket, Gryllus bimaculatus, using CRISPR/Cas9 system
CRISPR/Cas9 システムを用いたコオロギにおける標的遺伝子破壊
○Takahito Watanabe[1], Yuji Matsuka[2], Taro Mito[3], Sumihare Noji[1,3] (CCAIC, Univ. of Tokushima[1], Dept. of Bio. Sci. and Tech., Fact. of Eng., Univ. of Tokushima[2], Dept. of Life Syst., Inst. of Tech. and Sci., Univ. of Tokushima[3])

WS1-04 16:55-17:15 Gene discovery by forward genetics in mammalian system
哺乳動物における順遺伝学による遺伝子解析
○Junji Takeda (Grad. Sch. Med, Osaka Univ.)

WS1-05 17:15-17:30 The largest DNA transposon, *Albatross* -its evolution and application
最大の DNA トランスポゾン *Albatross* - その進化と応用
○Yusuke Inoue[1], Takumi Aikawa[1], Mariko Kondo[2], Shinichi Morishita[3], Kiyoshi Naruse[4], Atsuko Shimada[1], Akihiko Koga[5], Hiroyuki Takeda[1] (Univ. of Tokyo, Grad. Sch. of Sci.[1], Univ. of Tokyo, MMBS[2], Univ. of Tokyo, Dept. of Comp. Biol[3], NIBB, Lab. of Biores.[4], Kyoto Univ., Primate Res. Inst.[5])

WS1-06 17:30-17:45 Evolutionary origin of the turtle shell: insights from a comparative transcriptomics analysis
○Juan Pascual-Anaya, Shigeru Kuratani (RIKEN CDB)

WS1-07 17:45-:18:00 SraTailor: GUI software for visualizing high-throughput sequence read archives
既報の NGS 生データを簡単に可視化するソフトウェア
○Shinya Oki[1], Kazumitsu Maehara[2], Yasuyuki Ohkawa[2], Chikara Meno[1] (Department of developmental Biology, Graduate School of Medical Sciences, Kyushu University[1], Department of Epigenetics, Graduate School of Medical Sciences, Kyushu University[2])

WS1-08 18:00-18:20 Knockout of genes in the chordate Ciona intestinalis
カタユウレイボヤにおける遺伝子ノックアウト
Nicholas Treen[1], Haruka Sasaki[1], Keita Yoshida[1], Akiko Hozumi[1], Tetsushi Sakuma[2],

Takashi Yamamoto[2], ○Yasunori Sasakura[1] (Shimoda Marine Res. Center, Univ. Tsukuba[1], Dept. Math and Life Sci. Grad. Sch. Sci. Hiroshima Univ.[2])

WS1-09 18:20-18:40 TALEN-mediated genome editing is very useful in Iberian ribbed newts (Pleurodeles waltl), an experimental model animal for regeneration
TALEN を介したゲノム編集は、イモリ再生研究の強力なツールとなる
○Toshinori Hayashi[1], Kousuke Sakamoto[1], Tetsushi Sakuma[2], Ayumi Myouga[1], Naoki Yokotani[1], Takeshi Inoue[3], Eri Kawaguchi[3], Kiyokazu Agata[3], Takashi Yamamoto[2], Takashi Takeuchi[1] (School of Life Science, Tottori Univ.[1], Graduate School of Science, Hiroshima Univ.[2], Graduate School of Science, Kyoto Univ.[3])

WS1-10 18:40-19:00 Targeted genome editing using Platinum TALENs
Platinum TALEN を用いた標的遺伝子の編集
○Takashi Yamamoto, Kenichi Suzuki, Tetsushi Sakuma (Dept. of Math. and Sci., Hiroshima Univ.)

Workshop 2: Frontiers in Developmental Biology by Unique Approaches

May 29 (Thu) 16:00 〜 19:00 Room A
Chairpersons: Takayuki Suzuki (Nagoya Univ.)
Tatsuya Takemoto (Univ. of Tokushima)

Recent progresses in technologies such as imaging, big data analysis and genome editing innovate in developmental biology. This workshop introduces researchers that could find a new understanding during embryogenesis using a new approach. They will describe the details that how they think and establish original experimental approaches to promote their science. We propose that speakers and audience equally discuss the new principle of developmental biology actively in the workshop.

WS2-01 16:00-16:18 Specification of the hindlimb position and its diversity in tetrapods
四肢動物における後肢の位置の多様性とその決定機構
○Takayuki Suzuki[1], Yoshiyuki Matsubara[1], Ayumi Hattori[2], Yusuke Watanabe[2], Atsushi Sakai[3], Guojun Sheng[4], Toshihiko Ogura[2], Atsushi Kuroiwa[1] (Div. of Biol. Sci., Nagoya Univ.[1], IDAC, Tohoku University[2], Snake Inst.[3], RIKEN, CDB[4])

WS2-02 16:18-16:36 Visualization of ATP levels in vivo
生体内の ATP 量と変動の可視化
○Masamichi Yamamoto (ASRLD Unit, Gunma Univ.)

WS2-03 16:36-16:54 Epigenetic regulation of mouse sex determination by histone demethylation
ヒストンの脱メチル化によるマウスのエピジェネティックな性決定機構
○Makoto Tachibana (IER, Tokushima Univ.)

WS2-04 16:54-17:12 Transcription factors interfering with dedifferentiation induce cell type-specific transcriptional profiles
初期化を阻害する転写因子が分化を促進する
○Shinji Masui (CiRA, Kyoto Univ.)

WS2-05 17:12-17:30 Pioneer transcription factor FoxA maintains exposed nucleosomal structure at tissue-specific enhancers
パイオニア転写因子 FoxA による組織特異的エンハンサーのクロマチン構造の制御
○Makiko Iwafuchi-Doi[1], Greg Donahue[1], Jason Watts[1], Shaun Mahony[3], Franklin Pugh[3], Dolim Lee[2], Klaus Kaestner[2], Kenneth Zaret[1] (CDB, UPenn[1], IDOM, UPenn[2], Penn State

Univ.[3])

WS2-06 17:30-17:48 Molecular regulation of the basement membrane integrity during chicken gastrulation
ニワトリ原腸陥入において基底膜制御に関わる分子メカニズム
○Yukiko Nakaya[1], Erike W. Sukowati[1], Guojun Sheng[1] (CDB, RIKEN[1], CDB, RIKEN[2])

WS2-07 17:48-18:06 Towards the understanding of horn development in the Japanese rhinoceros beetle
カブトムシの角形成メカニズムの解明をめざして
○Teruyuki Niimi (Grad. Sch. of Bioagr. Sci., Nagoya Univ.)

WS2-08 18:06-18:24 A novel defined factor directly specifies cardiac lineages from pluripotent stem cells and promotes heart regeneration
新規心臓転写因子による直接心臓運命決定と心臓再生
○Yuika Morita[1,2], Yuko Tsukahara[1], Ryuichi Nishinakamura[3], Kazuko Koshiba-Takeuchi[1], Jun K. Takeuchi[1,2,4] (Cardiovas. Reg, IMCB, the Univ. of Tokyo[1], Graduate School of Sciences, the Univ. of Tokyo[2], CARD, Kumamoto Univ[3], JST PRESTO[4])

WS2-09 18:24-18:42 Mechanics of epithelial invagination: morphogenetic forces and stabilization of tissue architecture in *Drosophila* tracheal placode.
ショウジョウバエ気管原基陥入機構：形態形成運動を引き起こす力と組織形態の安定化
○Takefumi Kondo, Shigeo Hayashi (RIKEN CDB)

WS2-10 18:42-19:00 Anisotropic stress orients remodelling of mammalian limb bud ectoderm
異方性応力が肢芽上皮のリモデリングの方向性を決定づける
○Hirotaka Tao[1], Kimberly Lau[1], Haijiao Liu[2], Jun Wen[2], Kendra Sturgeon[1], Natalie Sorfazlian[1], Michael Wong[3], Savo Lazic[1,4], Danyi Li[1,4], Steven Deimling[1], Ian Scott[1,4], Brian Ciruna[1,4], R. Henkelman[3], Trevor Williams[5], Anna-Katerina Hadjantonakis[6], Rodrigo Fernandez-Gonzalez[7], Yu Sun[2], Sevan Hopyan[1,4,8] (Program in Developmental and Stem Cell Biology, The Hospital for Sick Children[1], Department of Mechanical and Industrial Engineering, University of Toronto[2], Mouse Imaging Centre, The Hospital for Sick Children, Toronto Centre for Phenogenomics, Department of Biomedical Physics, University of Toronto[3], Department of Molecular Genetics, University of Toronto[4], Program in Molecular Biology, School of Medicine, University of Colorado[5], Developmental Biology Program, Sloan-Kettering Institute[6], Institute of Biomaterials and Biomedical Engineering, University of Toronto[7], Division of Orthopaedic Surgery, The Hospital for Sick Children and University of Toronto[8])

Oral Presentations (in English)

OP01: Neural Development and Behavior / Technology, Theoretical Approach, Systems Biology

May 27 (Tue) 16:30 〜 19:30 Room A
Chairpersons: Tatsumi Hirata (NIG)
Koichi Kawakami (NIG)

OP01-01 16:30-16:45 NOVEL ROLE OF FGF SIGNALING IN EYE DEVELOPMENT
マウス眼の発生における FGF シグナリングの新たな機能
Takaya Abe[1], Deepa Murali[2], Yui Yamashita[1], ○Yasuhide Furuta[1] (RIKEN CDB[1], UT MDACC[2])

OP01-02 16:45-17:00 Conditional knock-out of mouse Shh and Ptch1 genes during cortical neurogenesis at late gestation
マウス胎生後期終脳皮質形成期における Shh と Ptch1 の遺伝子破壊
○Jun Motoyama (Brain, Doshisha Univ.)

OP01-03 17:00-17:15 Schwann cell precursor-like cells are a novel neuronal origin of the enteric nervous system
腸神経系を形成する新たな細胞ソースの同定
○Toshihiro Uesaka, Hideki Enomoto (NDR/Kobe Univ.)

OP01-04 17:15-17:30 A dual role for Isl1 in promoting striatonigral and repressing striatopallidal genetic programs to specify striatonigral cell identity
○Kuan-Ming Lu[1], Sylvia Evans[2], Shinji Hirano[3], Fu-Chin Liu[1] (INS, NYMU[1], SSP, UCSD[2], DNA, KMS[3])

OP01-05 17:30-17:45 Neural activity regulates restoration of the brain function during head regeneration in planarian
外部刺激による神経活動がプラナリアの脳再生過程において脳機能の回復を制御する
○Takeshi Inoue[1], Tomomi Takano[2], Yoshihiko Umesono[1], Kiyokazu Agata[1] (Dep. of Biophys, Grad. Sch. of Sci., Kyoto Univ.[1], CDB, RIKEN[2])

OP01-06 17:45-18:00 Microtubule associated protein tau (Mapt) affects development and plasticity of dendrites.
○Torsten Bullmann[1], Corina Barbu[2], Max Holzer[2], Thomas Arendt[2] (QBiC, RIKEN[1], PFI, Leipzig Univ.[2])

OP01-07 18:00-18:15 Directional control of the escape locomotion in zebrafish
ゼブラフィッシュ逃避行動におけるロコモーションの方向制御
○Kazuhide Asakawa[1,2], Gembu Abe[1], Koichi Kawakami[1,2] (NIG[1], SOKENDAI[2])

OP01-08 18:15-18:30 Regulation of proneural wave progression by EGF and Notch signalings
EGF と Notch による「分化の波」の制御機構
○Makoto Sato[1], Takashi Miura[2], Masaharu Nagayama[3] (Kanazawa Univ[1], Kyushu University[2], Hokkaido University[3])

OP01-09 18:30-18:45 Determining sensitivity of chemical reaction systems: a function-free approach
化学反応ネットワークの撹乱応答を関数非依存に決定する
○Atsushi Mochizuki[1], Bernold Fiedler[2] (Theor Biol Lab, RIKEN[1], Inst. Math, Free Univ Berlin[2])

OP01-10 18:45-19:00 A Quantitative Approach to Spatial Temporal Dynamics in Developmental Biology

○Kenneth Ho[1], Yukato Tohsato[1], Koji Kyoda[1], Shuichi Onami[1,2] (Lab. Dev. Dyn., RIKEN QBiC[1], NBDC, JST[2])

OP01-11 19:00-19:15 Blue light-mediated manipulation of transcription factor activity in zebrafish embryos

光の ON/OFF で多細胞生物の遺伝子発現を時空間的に制御する新技術 “PICCORO”

Shinji Masuda[2,3], Yuki Nakatani[1], Shukun Ren[2], ○Mikiko Tanaka[1] (Grad. Sch. of Biosci. & Biotechnol., Tokyo Inst. of Technol.[1], CBRI, Tokyo Inst. of Technol.[2], Earth-Life Sci. Inst., Tokyo Inst. of Technol.[3])

OP02: Stem Cells and Regeneration

May 27 (Tue) 16:30 〜 19:30 Room B

Chairpersons: Kunimasa Ohta (Kumamoto Univ.)

Yoshihiko Umesono (Univ. of Hyogo)

OP02-01 16:30-16:45 Redefining the in vivo Origin of Nephron Progenitors Enables Generation of Three-dimensional Kidney Structures from Pluripotent Stem Cells in vitro

腎臓初期発生の新規モデルと多能性幹細胞からの三次元腎臓組織の構築

○Atsuhiro Taguchi, Ryuichi Nishinakamura (IMEG)

OP02-02 16:45-17:00 Tooth regeneration with the cooperative action of osteoclasts and osteoblasts

破骨細胞と骨芽細胞の協調した働きによる歯再生

○Akiko Mantoku, Masahiro Chatani, Keiji Inohaya, Akira Kudo (Tokyo Institute of Technology)

OP02-03 17:00-17:15 Analysis of the reintegration of the regenerated and remaining tissues during limb joint regeneration in newts and frogs

イモリとカエルの四肢関節再生過程で再生部と残存部が調和する仕組みの研究

○Rio Tsutsumi, Takeshi Inoue, Kiyokazu Agata (Dept. of Biophys., Grad. Sch. of Sci, Kyoto Univ.)

OP02-04 17:15-17:30 Laminins function as an ECM niche for trophoblast stem cells

ラミニンは栄養膜幹細胞の ECM ニッチである

○Daiji Kiyozumi[1], Itsuko Nakano[1], Yuya Sato[1], Chisei Shimono[1], Yukimasa Taniguchi[1], Ryoko Sato-Nishiuchi[1], Akio Ozawa[1], Satoshi Tanaka[2], Kiyotoshi Sekiguchi[1] (IPR, Osaka Univ.[1], Univ. of Tokyo[2])

OP02-05 17:30-17:45 Tsukushi maintains the growth and undifferentiated properties of brain neuronal stem/progenitor cells as niche molecule

Tsukushi は脳神経幹細胞の増殖と未分化状態をニッチ分子として制御する

Ayako Ito, Yohei Shinmyo, Naofumi Ito, Rie Kawano, Athary Felemban, Hideaki Tanaka, ○Kunimasa Ohta (Dept. of Dev. Neurobiol., Kumamoto Univ. Grad. Sch. of Life Scis.)

OP02-06 17:45-18:00 Molecular mechanisms of tissue regeneration from adult pluripotent stem cells in planarians

プラナリアにおける全能性幹細胞からの組織再生の分子機構
○Norito Shibata[1], Nobuyoshi Kumagai[1], Tetsutaro Hayashi[2], Kiyokazu Agata[1] (Dept. of Biophys, Kyoto Univ.[1], Bioinformatics Research Unit, ACCC, RIKEN[2])

OP02-07 18:00-18:15 Molecular analysis of grimp, a gene involved in early regeneration of Enchytraeus japonensis (Enchytraeidae, Oligochaete)
ヤマトヒメミミズ再生初期に重要な役割を持つ遺伝子 grimp の分子解析
○Chikako Yoshida-Noro[1,2], Asuka Toshima[1], Ayako Nakayama[1], Yoshikazu Mikami[3], Shin Tochinai[4] (Dep. Appl. Mol. Chem., Nihon Univ.[1], Div. Cell Regen. Transpl., Nihon Univ. Sch. Med.[2], Depart. Pathol. Nihon Univ, Sch. Dent.[3], Fac. Sci. Hokkaido Univ.[4])

OP02-08 18:15-18:30 WOX13-like genes are required for reprogramming of leaf and protoplast cells into stem cells in the moss Physcomitrella patens
ヒメツリガネゴケ WOX13L 遺伝子は葉分化細胞から幹細胞へのリプログラミングに必須である
○Keiko Sakakibara[1,2,3,4], Pascal Reisewitz[5,6], Tsuyoshi Aoyama[1,7], Thomas Friedrich[5], Sayuri Ando[1,2], Yoshikatsu Sato[1,2], Yosuke Tamada[1,7], Tomoaki Nishiyama[2,8], Yuji Hiwatashi[1,7], Tetsuya Kurata[1,2], Masaki Ishikawa[1,2,7], Hironori Deguchi[4], Stefan Rensing[9], Wolfgang Werr[6], Takashi Murata[1,7], Mitsuyasu Hasebe[1,2,7], Thomas Laux[5] (Science, Tokyo Univ.[1], NIBB[2], Hasebe ERATO project[3], Hiroshima Univ.[4], Freiburg University[5], Universität Köln[6], Graduate University for Advanced Studies[7], Kanazawa University[8], University of Marburg[9])

OP02-09 18:30-18:45 Identification of a potential progenitor cell population with clonal proliferation activity in the biliary system in regenerating mouse liver
マウス肝臓の再生過程における胆管系前駆細胞の性状解析
○Kenji Kamimoto[1,2], Kota Kaneko[1,2], Tohru Itoh[1,2], Atsushi Miyajima[1,2] (IMCB, The University of Tokyo[1], Department of Biophysics and Biochemistry, Graduate School of Science, the University of Tokyo[2])

OP02-10 18:45-19:00 Sox5 controls a fate choice during pigment cell development in medaka
Sox5 はメダカ色素細胞発生において細胞運命の決定を制御している
○Yusuke Nagao[1], Tomoko Adachi[2,3], Atsushi Shimizu[4], Ryoko Seki[2], Chikako Inoue[2], Yasuhiro Kamei[5], Ikuyo Hara[5], Tetsuaki Kimura[5], Yoshihito Taniguchi[6], Kiyoshi Naruse[5], Robert Kelsh[3], Yuko Wakamatsu[2], Masahiko Hibi[2], Hisashi Hashimoto[2] (Grad. Sch. Sci., Nagoya Univ.[1], Biosci. Biotech. Ctr., Nagoya Univ.[2], Dept. of Biol. Biochem., Univ. of Bath[3], Iwate Tohoku Medical Megabank Organization, Iwate Med. Univ.[4], NIBB[5], Sch. of Med., Keio Univ.[6])

OP02-11 19:00-19:15 A trophic factor derived from the myeloid cells supports the survival and proliferation of blastema during tissue regeneration in zebrafish
ゼブラフィッシュの組織再生において、ミエロイド系細胞由来の栄養因子が再生芽の増殖と生存を支持する
○Tomoya Hasegawa, Teruhiro Nakajima, Takashi Ishida, Akira Kudo, Atsushi Kawakami (Tokyo tech)

OP02-12 19:15-19:30 Two distinct roles of a planarian yorkie-related gene during regeneration and homeostasis
○Byulnim Hwang[1], Kiyokazu Agata[1], Yoshihiko Umesono[2] (Kyoto Univ.[1], Department of Life systems, Institute of Technology and Science, University of Tokushima[2])

OP03: Signaling in Development

May 27 (Tue) 16:30 〜 19:30 Room C
Chairpersons: Tohru Ishitani (Kyushu Univ.)
Tomoko Yamakawa (Osaka Univ.)

OP03-01 16:30-16:45 Identification of genetic modifiers that interact with *pecanex*, encoding a component of Notch signaling in *Drosophila*
Notch シグナル伝達系構成因子、Pecanex と遺伝的に相互作用する調節遺伝子の網羅的探索
○Tomoko Yamakawa, Yu Atsumi, Shiori Kubo, Kenji Matsuno (Dept. of Biol. Sci., Grad. school of Sci., Osaka Univ.)

OP03-02 16:45-17:00 Functional analysis of lipid metabolism genes affecting developmental signaling pathways
シグナル伝達系における脂質代謝酵素の機能解析
○Takeshi Sasamura[1], Kenji Matsuno[1], Mark Fortini[2] (Dept. Biol. Sci., Grad. Sch. Sci., Osaka Univ.[1], Dept. Biochem, Thomas Jefferson Univ.[2])

OP03-03 17:00-17:15 Hipk2 and PP1c-mediated dephosphorylation of Dishevelled sustains Wnt signal transduction
Hipk2 と PP1c による Dishevelled タンパク質の脱リン酸化は Wnt シグナルの伝達を支える
Nobuyuki Shimizu[1], Shizuka Ishitani[1], Atsushi Sato[2], Hiroshi Shibuya[2], ○Tohru Ishitani[1] (Div. of Cell Reg. Sys., Med. Ins. of Bioreg., Kyushu Univ.[1], ep. of Mol. Cell. Biol., Med. Res. Inst., Tokyo Med. and Dent. Univ.[2])

OP03-04 17:15-17:30 Gli3 repressor is required to mediate the timing of mammalian cochlear hair cell differentiation
○Boshi Wang[1], Elaine Y.M. Wong[1], Hong Huan Hor[1], Chi Chung Hui[2], Mai Har Sham[1] (Department of Biochemistry, Li Ka Shing Faculty of Medicine, The University of Hong Kong, Pokfulam, Hong Kong[1], Program in Developmental and Stem Cell Biology, The Hospital for Sick Children, Toronto, Canada[2])

OP03-05 17:30-17:45 Kinocilia-specific Transport during Inner Ear Hair Cell Development
内耳有毛細胞のキノシリア形成における FGF シグナルの役割
○Akira Honda, Tomoko Kita, Kazuyo Misaki, Reiko Nakagawa, Shigenobu Yonemura, Raj Ladher (RIKEN-CDB)

OP03-06 17:45-18:00 Regulatory mechanisms of the nutrient-dependent expression of a *Drosophila* insulin-like peptide
ショウジョウバエインスリン様ペプチドの栄養依存的発現制御機構
○Naoki Okamoto, Takashi Nishimura (RIKEN, CDB)

OP03-07 18:00-18:15 A genetic screen identifies modifiers of human APP in Drosophila
○Pu Ren, Lei Xue (SLST, Tongji Univ)

OP03-08 18:15-18:30 The canonical Wnt/Wingless signaling mediates JNK induced cell death in *Drosophila*
○Shiping Zhang, Xiaowei Guo, Lei Xue (SLST, Tongji Univ.)

OP03-09 18:30-18:45 The IRAK Homolog Pelle negatively regulates JNK-dependent cell death in Drosophila
○Chenxi Wu, Lei Xue (SLST, Tongi Univ)

OP03-10 18:45-19:00 Oncoprotein Myc suppressed JNK-mediated cell migration in Drosophila
○Xianjue Ma, Jiuhong Huang, Yujun Chen, Lei Xue (SLST, Tongji Univ.)

OP03-11 19:00-19:15 Src42A Modulates Tumor Invasion and Cell Death via Ben/dUev1a-JNK Signaling in Drosophila
○Yingyao Shao, Xianjue Ma, Hongyu Zheng (Shanghai Key Laboratory of Signaling and Disease Research, Tongji Univ.)

OP04: Early Embryogenesis / Evolution and Development

May 28 (Wed) 16:00 ～ 19:00 Room B
Chairpersons: Hiroki Kuroda (Keio Univ.)
Hiroshi Wada (Tsukuba Univ.)

OP04-01 16:00-16:15 Mechanism that determines the mesoderm region through nuclear migration in the ascidian embryo.
○Naohito Takatori, Hidetoshi Saiga (Tokyo Met. Univ.)

OP04-02 16:15-16:30 Analysis of the transcription regulatory mechanism of *Otx* gene in the cells to form the neural tube in two ascidian species, *Halocynthia roretzi* and *Ciona intestinalis*
ホヤの神経管の発生における *Otx* 遺伝子の転写制御機構の比較解析
○Kouhei Oonuma, Naohito Takatori, Hidetoshi Saiga (Dept. Biol. Sci., Tokyo Metropol. Univ.)

OP04-03 16:30-16:45 Origin of the asymmetry in mouse embryo.
マウス胚における非対称性の起源
○Katsuyoshi Takaoka (Osaka University FBS)

OP04-04 16:45-17:00 Mechanism of microtubule-dependent dorsal determination in zebrafish
ゼブラフィッシュにおける微小管依存性背側決定機構
○Hiromu Hino[1], Masahiko Hibi[1,2], Takashi Shimizu[1,2], Ryoko Seki[2], Francisco Pelegri[3] (Grad. Sch. Sci., Nagoya Univ.[1], BBC, Nagoya Univ.[2], Lab. Genetics, UWM[3])

OP04-05 17:00-17:15 NFκB regulates dorsoventral patterning in zebrafish embryos.
NFκB はゼブラフィッシュ初期胚において背腹軸形成を制御する
○Satoshi Anai, Satoshi Ota, Tohru Ishitani (Cell. Reg. Sys., MIB, Kyushu Univ.)

OP04-06 17:15-17:30 A novel role for Sonic Hedgehog signalling in the morphogenesis of Zebrafish spinal cord
○Irene Gutiérrez-Vallejo, Elisa Martí (Instituto de Biología Molecular de Barcelona, CSIC, Parc Científic de Barcelona)

OP04-07 17:30-17:45 The role of Tbx6 in the derivation of mesodermal tissue from the axial stem cells
体軸幹細胞から中胚葉細胞産出における Tbx6/Tbx6L の役割
○Tatsuya Takemoto[1], Hisato Kondoh[2] (Fujii Memorial Inst. of Med. Sci., The Univ. of Tokushima[1], FBS, Osaka Univ.[2])

OP04-08 17:45-18:00 Evolution of early development of lophotrochozoa: insight from lophotrochozoa specific homeobox genes.
冠輪動物特有の新規ホメオボックス遺伝子群から探る初期発生の進化
○Yoshiaki Morino, Naoki Hashimoto, Hiroshi Wada (Univ. of Tsukuba)

OP04-09 18:00-18:15 Functional analysis of the T-box transcription factor Brachyury in coral gastrula embryos
サンゴ原腸胚における T-box 転写因子 Brachyury の機能解析
○Yuuri Yasuoka, Ryo Koyanagi, Chuya Shinzato, Nori Satoh (OIST)

OP04-10 18:15-18:30 Developmental roles and evolution of the bicistronic microRNA precursor, miR-1/miR-133, expressed specifically in muscle tissues
筋肉特異的 microRNA 前駆体 miR-1/miR-133 の機能と進化
○Rie Kusakabe, Saori Tani, Kunio Inoue (Dept. Biol., Grad. Sch. Sci., Kobe Univ.)

OP04-11 18:30-18:45 Quantitative characterization of three distinct modes of stripe formation in a dynamic continuous epithelium of the spider embryo
クモ胚のダイナミックな上皮に見られる 3 つの縞形成様式の定量的特徴付け
Natsuki Hemmmi[1,2], Yasuko Akiyama-Oda[1], ○Hiroki Oda[1,2] (JT BRH[1], Osaka Univ.[2])

OP04-12 18:45-19:00 Anterior-posterior patterning of pectoral fin development in cartilaginous fishes: Insight into the fin-to-limb evolution
軟骨魚類の胸鰭の発生における前後軸パターン形成から得る鰭から四肢への進化への洞察
○Koh Onimaru[1], Shigehiro Kuraku[2], Wataru Takagi[3], Susumu Hyodo[3], Mikiko Tanaka[4] (CRG[1], RIKEN CDB[2], UTokyo[3], Tokyo Tech[4])

OP04-13 19:00-19:15 Independent origins of the tympanic membrane and middle ear in different amniote taxa
哺乳類と双弓類 (爬虫類、鳥類) は、独立に鼓膜と中耳を獲得した
○Taro Kitazawa[1], Masaki Takechi[2,3], Tatsuya Hirasawa[3], Nicolas Narboux-Nême[4], Hideaki Kume[1], Kazuhiro Maeda[5], Sachiko Miyagawa-Tomita[5], Yukiko Kurihara[1], Giovanni Levi[4], Shigeru Kuratani[3], Hiroki Kurihara[1] (Dept. Physiol. Chem. & Metab., Grad. Sc. of Med., Univ. of Tokyo[1], Iwate Medical University[2], CDB[3], Muséum National, d'Histoire Naturelle[4], Tokyo Women's Medical University[5])

OP05: Morphogenesis

May 28 (Wed) 16:00 ～ 19:00 Room C
Chairpersons: Yoshio Wakamatsu (Tohoku Univ.)
Makoto Suzuki (NIBB)

OP05-01 16:00-16:15 Development of the lateral line canal system through a bone remodeling process in zebrafish
ゼブラフィッシュの側線管は骨リモデリングにより形成される
○Hironori Wada[1], Koichi Kawakami[1,2] (NIG[1], SOKENDAI[2])

OP05-02 16:15-16:30 Collective cell movement promotes synchronization of the segmentation clock
細胞の集団的移動は体節時計の同期を促進する
○Koichiro Uriu (Theoretical Biology Laboratory, RIKEN)

OP05-03 16:30-16:45 Cux2 refines the position of limbs along the body axis
○Shogo Ueda[1], Yasuko Kanazawa[1], Natsuno Suda[1], Ryo Yamada[1], Hisanobu Shimamura[1], Masashige Bando[2], Ryuichiro Nakato[2], Katsuhiko Shirahige[2], Mikiko Tanaka[1] (Tokyo Tech.[1], Univ. of Tokyo[2])

OP05-04 16:45-17:00 Local increases in mechanical tension shape compartment boundaries by biasing cell intercalations

細胞間結合にかかる張力が細胞介入にバイアスをかけることによってコンパートメント境界を形成する
○Daiki Umetsu[1,2], Benoit Aigouy[3,4], Maryam Aliee[5,6], Suzanne Eaton[3], Frank Jülicher[5], Christian Dahmann[1] (RIKEN CDB[1], TUD, Germany[2], MPI-CBG, Germany[3], IBDM, France[4], MPI-PKS, Germany[5], Université de Lyon, France[6])

OP05-05 17:00-17:15 The molecular mechanisms of apical constriction during the invagination of the otic placode
○Xiao Rei Sai, Raj Ladher (RIKEN CDB)

OP05-06 17:15-17:30 Cellular machinery involved in heart elongation and looping.
○Hinako Kidokoro[1,4], Koji Tamura[2], Masataka Okabe[3], Gary Schoenwolf[1], Yukio Saijoh[1] (Dept. of Neurobiology & Anatomy, University of Utah, SLC, UT, USA,[1], Dept. of Developmental Biology & Neurosciences, Tohoku University, Sendai, Japan[2], Dept. of Anatomy, The Jikei University School of Medicine, Tokyo, Japan[3], Div. of Biological Science, Nagoya University, Nagoya, Japan[4])

OP05-07 17:30-17:45 Wnt-dependent and –independent roles of Wnt signaling in the formation and migration of germline niche cells in C. elegans
線虫 C. elegans において生殖ニッチ細胞の形成と移動は Wnt 依存的および非依存的な Wnt シグナル経路によって制御されている。
○Shuhei So, Hitoshi Sawa (Multicell. Org. Lab., NIG)

OP05-08 17:45-18:00 Pattern Formation of Epithelial Tube by Mechanical Instability in Murine Epididymal Development
マウス精巣上体の発生過程における上皮管の座屈とパターン形成
○Tsuyoshi Hirashima (Lab of Growth Regulation, Kyoto Univ)

OP05-09 18:00-18:15 Origin of Drosophila trachea and endocrine organs from a segmentally repeated ectodermal precursor
○Carlos Sánchez-Higueras, Sol Sotillos, James Castelli-Gair Hombría (CABD)

OP05-10 18:15-18:30 Anaerobic glucose metabolism regulates neural tube formation
嫌気的グルコース代謝による神経管形成制御
○Daisuke Sakai, Jun Motoyama (Doshisha University)

OP05-11 18:30-18:45 Male-specific ECM regulation underlying looping morphogenesis of *Drosophila*
ショウジョウバエ生殖器の回転形成に関与するオス特異的な ECM 制御
○Emi Maekawa[1], Aimi Tsukioka[1], Ayako Isomura[1], Kazuyo Misaki[2], Shigenobu Yonemura[2], Erina Kuranaga[1] (Laboratory for Histogenetic Dynamics, RIKEN CDB[1], Electron Microscope Laboratory, RIKEN CDB[2])

OP05-11 17:00-17:15 Male-specific ECM regulation underlying looping morphogenesis of *Drosophila*
ショウジョウバエ生殖器の回転形成に関与するオス特異的な ECM 制御
○Emi Maekawa (Laboratory for Histogenetic Dynamics, RIKEN CDB)

OP05-12 18:45-19:00 Periodic contraction of actomyosin network contributes to convergence movements in zebrafish neurulation
周期的なアクトミオシンの収縮はゼブラフィッシュの神経管形成における収斂運動に寄与する

○Makoto Suzuki, Naoto Ueno (NIBB)

OP05-13 19:00-19:15 What principal direct the building-up of the spiculous skeleton of sponges?
カイメンの骨片骨格を組み上げるための基本原理とは何か？
○Noriko Funayama, Kotoe Kawai, Kiyokazu Agata (Dept. of Biophysics, Graduate School of Science, Kyoto Univ.)

OP06: Gene Expression and Epigenetics / Reproduction and Gametogenesis

May 29 (Thu) 16:00 〜 19:00 Room B
Chairpersons: Makoto Kobayashi (Tsukuba Univ.)
Akira Nakamura (Kumamoto Univ.)

OP06-01 16:00-16:15 Genetic analysis of zebrafish time-keeping mechanisms by TALEN and CRISPR/Cas9
○Han Wang (Soochow University)

OP06-02 16:15-16:30 Enhancer sharing and promoter insulation from enhancer activities: spatial and temporal organization of gene regulation around the mouse *Shh* locus
Shh 遺伝子と周辺遺伝子間におけるエンハンサー活性の共有と遮蔽
○Takanori Amano, Tomoko Sagai, Toshihiko Shiroishi (NIG)

OP06-03 16:30-16:45 Polycomb mediates transcriptional activation of Meis2 through promoter-enhancer interaction
ポリコム因子群はプロモーター・エンハンサー間の相互作用を調節することで遺伝子発現活性化に寄与する
○Takashi Kondo[1], Kaori Kondo[1], Haruhiko Koseki[2] (KAST[1], RIKEN-IMS[2])

OP06-04 16:45-17:00 MRG-1 acts as an epigenome interpreter of Lys36 methylation on histone H3 in C. elegans germline development
MRG-1 はヒストン H3K36 メチル化によるエピゲノム情報を読み取り C.elegans の生殖細胞形成に寄与する
○Teruaki Takasaki[1,2], Andreas Rechtsteiner[2], Thea Egelhofer[2], Jeremy Kreher[2], Erina Shigeyama[1], Hiroshi Sakamoto[1], Susan Strome[2] (Kobe University.[1], UC Santa Cruz[2])

OP06-05 17:00-17:15 PRDM14 promotes active DNA demethylation through the TET-mediated base excision repair pathway in embryonic stem cells
PRDM14 による TET- 塩基除去修復経路を介した能動的脱メチル化機構の解明
○Yoshiyuki Seki, Naoki Okashita (K.G. Univ.)

OP06-06 17:15-17:30 The Epigenetic Regulation in Mammalian Heart Regeneration
哺乳類心臓再生におけるエピジェネティク制御機構
○Ryo Nakamura[1,2], Kazuko Koshiba[1,2], Yuko Tsukahara[2], Tetsuo Sasano[3], Yutaro Hori[1,2], Yuki Ando[1,2], Mizuyo Kojima[2], Tetsushi Furukawa[3], Hesham Sadek[4], Jun Takeuchi[1,2,5] (Grad of Sci, Univ of Tokyo[1], IMCB, Univ of Tokyo[2], Medical Res. Inst., TMDU[3], UT Southwestern[4], JST PRESTO[5])

OP06-07 17:30-17:45 Sall4 is essential for mouse primordial germ cell specification by suppressing the somatic cell program
Sall4 は、マウス生殖細胞形成において体細胞遺伝子の抑制に必須である。
○Satomi Tanaka[1], Yasuka Yamaguchi[1], Yasuhisa Matsui[2], Ryuichi Nishinakamura[1] (IMEG, Kumamoto Univ.[1], IDAC, Tohoku Univ.[2])

OP06-08 17:45-18:00 Germ cell sexual differentiation requires Nanos2-mediated dosage control of Dazl in mice
マウス始原生殖細胞の性分化における Nanos2 による Dazl の量的制御
○Yuzuru Kato, Yumiko Saga (NIG)

OP06-09 18:00-18:15 Smad2 and p38 signaling orchestrate the male fate decision of mouse PGC
○Quan Wu, Yumiko Saga (NIG)

OP06-10 18:15-18:30 Peritubular cells expressing CXCL12/FGF5 sustain spermatogonial stem cells in mice
CXCL12/FGF5 発現細胞は精子幹細胞を保持する
○Yu Kitadate[1,2], Aumi Maruyama[1], Rie Ichikawa[1], Masatsugu Ema[3], Fumihiro Sugiyama[4], Satoru Takahashi[5], Takashi Nagasawa[6], Shosei Yoshida[1,2] (NIBB[1], SOKENDAI[2], Research Center for Animal Life Science, Shiga University of Medical Sciences[3], Laboratory Animal Resource Center, University of Tsukuba[4], Department of Anatomy and Embryology, Institute of Basic Medical Sciences, Graduate School of Comprehensive Human Sciences, University of Tsukuba[5], Department of Immunobiology and Hematology, Kyoto University[6])

OP06-11 18:30-18:45 Mitotic regulation in Drosophila spermatogonia is mediated by Notch signaling and a nuclear receptor complex acting in somatic stromal cells
ショウジョウバエ精原細胞の分裂は間質細胞における Notch シグナルと核内受容体複合体の働きにより介在されている
Kohei Kawaguchi[1], Takehiro Kajihara[1], Mizuho Inai[1], Yasushi Hiromi[2], ○Hiroyuki Kose[1] (International Christian University[1], National Institute of Genetics[2])

OP06-12 18:45-19:00 Sperm-derived TRP-3 channel mediates the onset of the fertilization calcium wave in *C. elegans*
精子由来 TRP-3 チャネルは *C. elegans* において受精カルシウム波を開始させる。
○Jun Takayama, Shuichi Onami (RIKEN QBiC)

OP07: Cell Biology / Organogenesis

May 29 (Thu) 16:00 ～ 19:00 Room C
Chairpersons: Shizue Ohsawa (Kyoto Univ.)
Mitsuru Morimoto (RIKEN CDB)

OP07-01 16:00-16:15 Cell chirality in animal morphogenesis
細胞のキラリティによる動物の形態形成
Ryo Hatori, Alice Tsuboi, Mai Adachi, Tomoki Ishibashi, ○Kenji Matsuno (Dept. Biol. Sci., Osaka Univ.)

OP07-02 16:15-16:30 Integration of local and global IKKε signaling regulates polarized cell elongation
IKKε による局所シグナル伝達は細胞伸長過程における細胞極性維持に必要である
○Tetsuhisa Otani, Kenzi Oshima, Akiyo Kimpara, Michiko Takeda, Shigeo Hayashi (RIKEN CDB, Lab for Morphogenetic Signaling)

OP07-03 16:30-16:45 Dissecting the mechanism of cell competition that regulates epithelial homeostasis in *Drosophila*
上皮の恒常性維持を司る細胞競合の遺伝学的解析
○Shizue Ohsawa[1], Kei Kunimasa[1], Tatsushi Igaki[1,2] (Lab. Genetics, Grad. Sch. Biostudies,

Kyoto Univ.[1], PRESTO, JST[2])

OP07-04 16:45-17:00 Cell cycle exit in cardiomyocytes is initiated by p21Cip1 and p27Kip1, and maintained by two inhibitory systems
心筋細胞の細胞周期離脱は p21Cip1 と p27Kip1 によって開始され、その後 2 つの阻害機構により維持される
○Shoji Tane, Hitomi Okayama, Aiko Ikenishi, Yukio Satoh, Takashi Takeuchi (Dev. Biosignal., Sch. Life Sci., Tottori Univ.)

OP07-05 17:00-17:15 An ON-OFF boundary of FGF/Erk signal activity marks the earliest future somite boundary in zebrafish
ゼブラフィッシュにおいて、FGF/ERK シグナルの活性境界は、最も早い予定分析境界を規定する
Ryutaro Akiyama[1,2], Dini Sari[1], Shoichiro Tsuge[1], Miwa Masuda[1,3], Yasumasa Bessho[1], ○Takaaki Matsui[1] (NAIST[1], Univ. Minnesota[2], RIKEN BSI[3])

OP07-06 17:15-17:30 TALEN-mediated gene disruption reveals roles of Mesp transcriptional factors in the segmentation and differentiation of somites in zebrafish development.
ゼブラフィッシュ体節形成における mesp 遺伝子の機能解析
○Taijiro Yabe[1], Chimwar Wanglar[1], Takashi Yamamoto[2], Kazuyuki Hoshijima[3], Shinji Takada[1] (NIBB[1], Hiroshima Univ.[2], The Univ. of Utah[3])

OP07-07 17:30-17:45 E-cadherin-dependent cell adhesion regulates cell migration pattern in the zebrafish lens epithelium
ゼブラフィッシュ水晶体上皮細胞において E-カドヘリン依存的細胞接着が細胞の挙動を制御する
○Toshiaki Mochizuki, Yi-Jyun Luo, Shohei Suzuki, Ichiro Masai (OIST)

OP07-08 17:45-18:00 Functional analysis of the TGF-β pathway in hepatoblasts during mouse hepatic histogenesis
マウス肝組織形成時の肝芽細胞における TGF-β 経路の機能解析
○Yuji Yokouchi[1], Daiki Yoshii[2], Hiroki Takeda[3], Hiroko Suda[2], Yukihiro Inomata[2], Kenichi Yamamura[1] (Div. Developmental Genetics, IRDA, Kumamoto Univ.[1], Dept. Transplantation and Pediatric Surgery, PGSMS, Kumamoto Univ.[2], Div. Transgenic Technology, IRDA, Kumamoto Univ.[3])

OP07-09 18:00-18:15 Dullard prevents excessive TGF-β signaling during endochondral ossification in mice.
Dullard は、マウス内軟骨性骨化において過剰な TGF-β シグナルを妨げる
○Tadayoshi Hayata[1], Yoichi Ezura[1], Makoto Asashima[2], Ryuichi Nishinakamura[3], Masaki Noda[1] (Mol. Pharmacol., MRI, TMDU[1], Research Center for Stem Cell Engineering, AIST[2], Kidney Development, IMEG, Kumamoto Uni.[3])

OP07-10 18:15-18:30 Foxc1 is essential for fetal forebrain angiogenesis
○Thanit Prasitsak, Sachiko Iseki (Mol. Cra. Emb., TMDU)

OP07-11 18:30-18:45 Birth regulates sensory map formation in the brain through serotonin signaling during development
感覚系神経回路形成における出生の機能的意義
Tomohisa Toda[1,2], Daigo Homma[3], Hirofumi Tokuoka[3], Itaru Hayakawa[2], Yukihiko Sugimoto[4], Hiroshi Ichinose[3], ○Hiroshi Kawasaki[1,2] (Grad Sch Med Sci, Kanazawa Univ.[1], Grad Sch Med, Univ of Tokyo[2], Grad Sch Biosci Biotech, Tokyo Inst Tech.[3], Grad Sch

Pharm Sci, Kumamoto Univ.[4])

OP07-12 18:45-19:00 Temtamy Preaxial Brachydactyly Syndrome is caused by loss-of-function of CHSY1, a secreted enzyme required for bone development and digit patterning

○Tian Jing[1], Ling Ling[2], Shboul Mohammad[2], Lee Hane[3], Merriman Barry[3], Hamamy Hanan[4], Reversade Bruno[2] (The College of Life Sciences, Northwest University[1], Institute of Medical Biology, A*STAR, Singapore[2], Department of Human Genetics, David Geffen School of Medicine, University of California, Los Angeles[3], Geneva Foundation for Medical Education and Research[4])

Flash Talks

FT1: Early Embryogenesis / Evolution and Development

May 28 (Wed) 13:30 ～ 14:30 Room A
Chairpersons: Daisuke Kurokawa (Univ. of Tokyo)
Hiroki Oda (JT BRH)

FT01-01 (P150A) 13:30-13:33 Novel white plumage mutation (*EDBRB2; mo*^{w}) suppresses dermal hyperpigmentation in inner organs (Fibromelanosis) in Silky chicken
ウコッケイの過剰色素産生における EDN3-EDNRB2 シグナル伝達系の関与
○Tomoko Adachi[1], Ai Shinomiya[2], Keiji Kinoshita[3], Makoto Mizutani[3], Mikiharu Nakano[3], Yoichi Matsuda[3], Toyoko Akiyama[1] (Dept. Biol., Keio Univ.[1], NIBB[2], Avian Biosci. Res. Center, Nagoya Univ.[3])

FT01-02 (P159B) 13:33-13:36 PRL is involved in the development of mesenchymal cells in Strongylocentrotus purparatus
○Li-Yi Lin[1], Han-Ru Li[2], Ming-Der Lin[1], Yi-Hsien Su[2] (MBHG, Tzu-Chi University, Taiwan[1], ICOB, Academia Sinica, Taiwan[2])

FT01-03 (P164B) 13:36-13:39 Anterior/posterior patterning of the dorsal mesoderm in vertebrates evolved as a novelty from the ancestral chordate mesoderm by heterochronic/heterotopic shifts
脊椎動物背側中胚葉の前後軸パターン形成は祖先的脊索動物のヘテロクロニック及びヘテロトピックシフトによって進化した新規形質である。
○Takayuki Onai[1], Toshihiro Aramaki[2], Hidehiko Inomata[3], Tamami Hirai[1], Shigeru Kuratani[1] (RIKEN CDB[1], Graduate School of Frontier Biosciences, Osaka University[2], Laboratory for Axial Pattern Dynamics, RIKEN Center for Developmental Biology[3])

FT01-04 (P165A) 13:39-13:42 Mechanism and significance of Wnt protein distribution in the mouse spinal cord
マウス神経管における Wnt タンパク質分布の制御と意義
○Takuma Shinozuka[1,2], Ritsuko Takada[2], Shinji Takada[1,2] (Dept. Basic Biology, SOKENDAI[1], NIBB[2])

FT01-05 (P166A) 13:42-13:45 Cell surface epimorphin triggers cardiomyocyte differentiation in embryonal carcinoma P19CL6 cells
細胞膜エピモルフィンは胚性癌細胞 P19CL6 の心筋分化を引き起こす
○Takashi Tagawa, Natsumi Hagiwara, Yohei Hirai (Kwansei Gakuin Univ.)

FT01-06 (P169A) 13:45-13:48 The establishment of the Left-right asymmetry in sea urchin embryo
ウニ胚における左右非対称性決定機構
○Ayumi Takemoto[1], Fumie Shimono[2,3], Tatsuo Miyamoto[4], Akinori Awazu[1], Hiraku Nishimori[1], Takashi Yamamoto[1], Naoaki Sakamoto[1] (Dept. of Math. and Life Sci., Hiroshima Univ.[1], Hiroshima Kokudaiji High Sch.[2], Edu. Proj. for Excit. Sci. Hiroshima Univ.[3], Dept. of Genet. and Cell Biol., Res. Inst. for Radiation Biol. and Med., Hiroshima Univ.[4])

FT01-07 (P171B) 13:48-13:52 Targeted mutagenesis of Xenopus laevis gene by CRISPR/Cas system
CRISPR/Cas システムによるアフリアツメガエル遺伝子への変異の導入
Mari Yamada, ○Minoru Watanabe (Fac.of Integrated Arts & Scis., The Univ. of Tokushima.)

FT01-08 (P172B) 13:52-13:55 Ezrin mediates the function of Inpp5e in ciliogenesis and polycystic kidney disease
○Wenyan Xu, Miaomiao Jin, Fan Zhang, Hong Wang, Ying Cao (SLST, Tongji Univ.)

FT01-09 (P142A) 13:55-13:58 Establishing a basis for molecular studies of Madagascar ground gecko – a model case of how modern sequencing can help next-generation developmental biology
○Yuichiro Hara, Miyuki Noro, Shigehiro Kuraku (GRAS, RIKEN CDB)

FT01-10 (P144B) 13:58-14:01 Development of pharyngeal derivatives in Xenopus laevis.
アフリカツメガエルにおける鰓性器官の発生
○Naoya Iimura, Hideho Uchiyama (YOKOHAMA CITY UNIV)

FT01-11 (P145A) 14:01-14:04 Functional interference of Pax proteins in Drosophila accessory gland development
○Li Li, Lei Xue (SLST, Tongji Univ)

FT01-12 (P146A) 14:04-14:07 Single-minded gene is required for specification of ventral cell by determining on ventral midline cell fate in Daphnia magna
オオミジンコ Single-minded ホモログは腹部正中線を決定し、腹部細胞の特異化に必須である
○Shinichi Morita[1], Chisato Hiraga[1], Yasuhiro Shiga[1], Shinichi Tokishita[1], Taisen Iguchi[2], Toshihiro Ohta[1] (LEMB at TUPS[1], Div. of Mol. Env. End., NIBB[2])

FT01-13 (P148B) 14:07-14:10 Activation of LTR retrotransposons and trophoblast-specific genes by the SRA protein Np95/Uhrf1 during murine placental development
○Jafar Sharif, Kayoko Katsuyama, Yoko Mizutani-Koseki, Tomoyuki Ishikura, Takanori Hasegawa, Haruhiko Koseki (RIKEN IMS)

FT01-14 (P149A) 14:10-14:13 Two distinct cell populations in lamprey mandibular arch, with a revision of the heterotopic scenario of the vertebrate jaw evolution
ヤツメウナギ顎骨弓における 2 つの異なる細胞集団の発見と顎進化に関する考察
Miho Yoshimura, Daichi Suzuki, ○Hiroshi Wada (Univ. of Tsukuba)

FT2: Morphogenesis

May 28 (Wed) 13:30 〜 14:30 Room B
Chairpersons: Kimiko Fukuda (Tokyo Metropolitan Univ.)
Takefumi Kondo (RIKEN CDB)

FT02-01 (P176B) 13:30-13:33 Nano scale morphogenesis of porous extracellular matrix in *Drosophila* olfactory sensilla
ショウジョウバエ嗅感覚毛における多孔性細胞外マトリックスのナノスケールでの形態形成
○Toshiya Ando[1], Kazuyo Misaki[2], Shigenobu Yonemura[2], Shigeo Hayashi[1] (RIKEN CDB, Laboratory for Morphogenetic Signaling[1], RIKEN CDB, Electron Microscpe Laboratory[2])

FT02-02 (P178A) 13:33-13:36 Comparative analyses of RTFL peptide family on control of plant organogenesis
○Pin Guo[1], Asami Yoshimura[2], Naoko Ishikawa[3], Takahiro Yamaguchi[4], Keiko Sakakibara[2], Takayuki Kohchi[5], Youhao Guo[1], Hirokazu Tsukaya[2] (Wuhan University[1], Department of Biological Sciences, Graduate School of Science, University of Tokyo[2], Saitama Museum of Natural History[3], Acel, Inc.[4], Graduate School of Biostudies, Kyoto Univer-

sity[5])

FT02-03 (P179B) 13:36-13:39 A Mathematical Model of Polygonal Cells for a Three-dimensionally Undulated Cell-sheet
3 次元空間で変形自由自在の細胞シートをつくる細胞形態形成モデル
○Hisao Honda[1,2] (Medicine, Kobe Univ.[1], RIKEN CDB[2])

FT02-04 (P181A) 13:39-13:42 The Quail Polydactyly Mutant, HMM, shows Inactivation of SHH Signaling
多指症を発症する HMM ウズラ変異体では SHH シグナルが不活性化している
○Kazuki Kawamura[1], Yoshiyuki Matsubara[1], Mikiharu Nakano[2], Masaoki Tsudzuki[3], Yoichi Matsuda[2,4], Atsushi Kuroiwa[1], Takayuki Suzuki[1] (Grad School of Sci, Nagoya Univ[1], ABRC, Grad School of Bioag Sci, Nagoya Univ[2], Grad School of Biosphere Sci, Hiroshima Univ[3], Grad School of Bioag Sci, Nagoya Univ[4])

FT02-05 (P182A) 13:42-13:45 Toward understanding the mechanisms that restricts where spicules are held up during spiculous skeleton construction of sponges
カイメンの骨片が立てられる位置を決める機構の解明に向けて
○Kouji Kishimoto, Chihiro Inui, Kiyokazu Agata, Noriko Funayama (Dept. of Biophysics, Graduate School of Science, Kyoto Univ.)

FT02-06 (P185A) 13:45-13:48 Characterization of polr1c in facial development related to the Treacher Collins Syndrome
○Marco CC Lau, William KF Tse (BIOL, HKBU)

FT02-07 (P186A) 13:48-13:52 Heterochrony in initiation of paraxial *Gdf11* expression specifies unique hindlimb positioning in tetrapods
Gdf11 発現開始タイミングのヘテロクロニーが四肢動物の後肢の位置の多様性を生み出す
○Yoshiyuki Matsubara[1], Ayumi Hattori[2], Yusuke Watanabe[2], Atsushi Sakai[3], Guojun Sheng[4], Toshihiko Ogura[2], Atsushi Kuroiwa[1], Takayuki Suzuki[1,5] (Div of Biol Sci, Grad Sch of Sci, Nagoya Univ.[1], IDAC, Tohoku Univ.[2], The Japan Snake Institute[3], RIKEN CDB[4], JST PRESTO[5])

FT02-08 (P188B) 13:52-13:55 Role of anteroposterior tissue polarity in elongation movement of *Xenopus* posterior neural tissue
ツメガエル後方神経組織の伸長運動における組織極性の働き
○Hiromasa Ninomiya (AIST)

FT02-09 (P192B) 13:55-13:58 Latrophilin-2 is involved in the migration and differentiation of neural crest cells.
Latrophilin-2 は神経堤細胞の遊走、分化に関与する。
○Kosuke Tanegashima[1], Marianna Suzuki[1,2], Kenji Suzuki[1], Tatsuo Michiue[3], Takahiko Hara[1] (Stem Cell Project, Tokyo Metropol. Inst. Med. Sci.[1], Grad. Sch. of Tokyo Med. Dent. Univ.[2], Dep. of Life Sci., Grad. Sch. of Arts and Sci., Univ. of Tokyo[3])

FT02-10 (P194A) 13:58-14:01 Loss-of-function analysis of deubiquitylating enzymes reveals their importance in zebrafish craniofacial development
○William Ka Fai Tse (BIOL, HKBU)

FT02-11 (P055B) 14:01-14:04 Mechanical properties that detect and regulate differential proliferation rate during epithelial cell competition
機械的な力という視点から、細胞競合を紐解く―“細胞が分裂速度の差を検知する仕組み”

○Alice Tsuboi[1], Shizue Ohsawa[2], Tatsushi Igaki[2], Koichi Fujimoto[1](Osaka Univ.[1], Graduate School of Biostudies, Kyoto University[2])

FT02-12 (P195B) 14:04-14:07 The role of zebrafish cdx1b in left-right patterning
○Chun-Shiu Wu, Sheng-Ping L. Hwang, Chang-Jen Huang (IBC, NTU)

FT02-13 (P197A) 14:07-14:10 Discontinuous Transitions of Phyllotaxis: The Cases of *Thuja occidentalis* (Cupressaceae) and *Diphasiastrum digitatum* (Lycopodiaceae)
○Xiaofeng Yin[1,2,4], Christian Lacroix[2], Denis Barabe[3], Roger Meicenheimer[4] (Dept. Bio. Sci., Gra. Sch. Sci., Univ. Tokyo[1], Department of Biology, University of Prince Edward Island. Canada[2], Plant Biology Research Institute, Montreal Botanical Garden. Canada[3], Department of Botany, Miami University. USA[4])

FT02-14 (P198A) 14:10-14:13 Identification of ocular- or blind-side enriched genes in flounder metamorphosis
ヒラメ変態過程において有眼側および無眼側で発現する遺伝子の解析
○Hayato Yokoi, Xiaoming Wu, Yoshifumi Sakai, Tohru Suzuki (Grad Sch Agricul Sci, Tohoku Univ)

FT3: Neural Development and Behavior

May 28 (Wed) 13:30 ～ 14:30 Room C
Chairpersons: Yohei Shinmyo (Kumamoto Univ.)
Makoto Sato (Kanazawa Univ.)

FT03-01 (P061A) 13:30-13:33 Lack of β1 integrin results in defective notochord morphogenesis with impaired convergent extension in the mouse
○Shengzhen Guo[1], T. Au[1], S. Wynn[1], D. Chan[1], A. Aszodi[2], R. Faessler[3], K. S.E. Cheah[1] (Biochemistry, The University of Hong Kong[1], Surgery, Ludwig-Maximilians-University[2], Molecular Medicine, Max Planck Institute of Biochemistry[3])

FT03-02 (P063B) 13:33-13:36 *Mab21l2* is required for neonatal breathing and survival
○Chung Man Chan, Wai Hung Tsang, King Lau Chow (LIFS, HKUST)

FT03-03 (P065A) 13:36-13:39 The behavior of the mandibular trigeminal nerve regulates attachment dependent of the swimming behavior in Xenopus tadpole
下顎三叉神経の分布様式がツメガエル幼生の遊泳行動を制御する
○Yumiko Harada[1], Megumi Takeyasu[2], Ayaka Ando[2], Ryutaro Murakami[3] (Grad. Sch. Sci. Eng., Yamaguchi Univ.[1], Dept. Biol Sci. Chem., Fac. Sci., Yamaguchi Univ.[2], Grad. Sch. Med., Yamaguchi Univ.[3])

FT03-04 (P066A) 13:39-13:42 Aging-related Neurodegeneration Dispels Male Courtship Choice in Drosophila
○Yujia Hu[1,2], Yi Han[1,2], Xingjun Wang[1,2], Lei Xue[1,2] (SLST, Tongji Univ.[1], DIRS, Shanghai 10th People's Hospital[2])

FT03-05 (P067B) 13:42-13:45 The Role of Ret in Retinal Degeneration
○I-Wen Huang[1], Meng-Lin Liao[1], Daphne Wei-Chun Kan[2], Nan-Kai Wang[3], Chung-Liang Chien[1] (Graduate Institute of Anatomy and Cell Biology, National Taiwan University[1], Department of Obstetrics and Gynecology, College of Medicine, National Taiwan University[2], Department of Ophthalmology, Linkou Chang Gung Memorial Hospital[3])

FT03-06 (P071B) 13:45-13:48 Maternal separation inhibits GAD67 expression in the hippocampal interneuron
母仔分離による海馬介在神経での GAD67 発現上昇阻害

○Tatsuya Katahira, Jun Motoyama (Laboratory of Developmental Neurobiology, Graduate School of Brain Science, Doshisha University)

FT03-07 (P073A) 13:48-13:52 Comprehensive monitoring of cell-cell contact and cell fate choice in the developing mouse neocortex
大脳新皮質における細胞間接触と細胞運命決定の網羅的モニタリング
○Takumi Kawaue[1], Ken Sago[1], Mayumi Okamoto[1], Tomoyasu Shinoda[1], Hiroshi Kiyonari[2], Ayano Kawaguchi[1], Takaki Miyata[1] (Cell Biology, Nagoya University, Graduate School of Medicine[1], Laboratory for Animal Resources and Genetic Engineering, Center for Developmental Biology, RIKEN[2])

FT03-08 (P074A) 13:52-13:55 Hidden left-right differences of the developing zebrafish habenula nuclei
Guo-Tzau Wang[2], Chang-Huain Hsieh[2], Yuan-Ding Yu[3], Wei-Han Lang[1], ○Yung-Shu Kuan[1,3,4] (IBS-NTU[1], NCHC-Taiwan[2], IBC-Academia Sinica[3], NPAS-Academia Sinica[4])

FT03-09 (P075B) 13:55-13:58 Gastrointestinal dissension of neural crest cell specific Rest transcription factor CKO mice caused by the aberration of Myenteric plexus
転写調節因子 Rest の神経堤細胞特異的ノックアウトマウスにおける腸管神経叢の異常による致死的腸管拡張
○Takahiro Kunisada[1], Yasuhiro Yamada[2], Akira Hara[3], Hitomi Aoki[1] (Dept. Tissue & Organ Development, Gifu Univ. Grad. Sch. Med.[1], CiRA, Kyoto University[2], Dept. Tumor Pathology, Gifu Univ. Grad. Sch. Med.[3])

FT03-10 (P076B) 13:58-14:01 Zebrafish Adar2 Edits the Q/R site of AMPA Receptor Subunit gria2α transcript to Ensure Normal Development of Nervous System and Cranial Cartilages
○I-Chen Li[1], Yu-Chia Chen[1], Yi-Yun Wang[2], Bo-Wei Tzeng[1], Chun-Wen Ou[1], Yi-Yan Lau[1], Kan-Mai Wu[1], Tzu-Min Chan[1], Wei-Hsiang Lin[1], Sheng-Ping Hwang[3], Wei-Yuan Chow[1,2] (IMCB, NTHU[1], Institue of Systems Neuroscience, National Tsing Hua University[2], Institute of Cellular and Organismic Biology, Academia Sinica[3])

FT03-11 (P077A) 14:01-14:04 Role of BMP/Smad signaling in Purkinje cell neurogenesis
○Tsz Ching Ma[1], Ka Kui Tong[1], Kin Ming Kwan[1,2,3] (SLS, CUHK[1], COBF, CUHK[2], SKL, CUHK[3])

FT03-12 (P079B) 14:04-14:07 Dissection of cerebellar neural circuitry with zebrafish Gal4 gene/enhancer trap lines
○Koji Matsuda[1], Miki Takeuchi[2], Kazuhide Asakawa[3], Masamichi Ohkura[4], Nobuhiko Miyasaka[5], Yoshihiro Yoshihara[5], Tetsutaro Hayashi[6], Shigehiro Kuraku[6], Koichi Kawakami[3], Masahiko Hibi[1,2], Takashi Shimizu[1,2] (Grad. Sch. Sci., Nagoya Univ.[1], BBC, Nagoya Univ.[2], NIG[3], BSI, Saitama Univ.[4], RIKEN BSI[5], RIKEN CDB[6])

FT03-13 (P081A) 14:07-14:10 FoxP1 contribute to the differentiation of the specific motoneurons committed to apoptosis in the cervical spinal cord of the developing chick embryo
発生期ニワトリ胚の頚髄においてFoxP1はアポトーシスに至る特異的な運動ニューロンの分化に関与する
○Katsuki Mukaigasa, Hiroyuki Yaginuma (Fukushima Med. Univ.)

FT03-14 (P082A) 14:10-14:13 Transcripts from amyloid precursor protein (APP) gene localize within a subset of axons of the optic tectum in chick embryos
アミロイド前駆体タンパク質 (APP) 遺伝子転写産物はニワトリ胚中脳視蓋の神経軸索に局在する
○Ryuji Nanayama[1], Shiho Nozaki[1], Keiko Okudaira[1], Nozomi Onodera[1,2], Isato Araki[1,2] (Dept Chem Bioeng, Fac Eng, Iwate Univ[1], UGAS, Iwate Univ[2])

FT03-15 (P085A) 14:13-14:17 An RNAi screen identifies modifiers of human APP in Drosophila
○Fei Peng, Lei Xue (SLST, Tongji Univ.)

FT03-16 (P086A) 14:17-14:20 Relationship between the dynamics of progenitor cells and the maintenance of pseudostratified structure of the ventricular zone
神経前駆細胞の挙動と神経上皮構造の維持機構
○Tomoyasu Shinoda[1], Ryo Higuchi[2], Mayumi Okamoto[1], Arata Nagasaka[1], Takashi Miura[3], Masaharu Nagayama[2], Toshihiko Fujimori[4], Takaki Miyata[1] (Nagoya Univ. Graduate School of Medicine[1], RIES, Hokkaido Univ.[2], Kyusyu Univ. Graduate School of Medicine[3], NIBB[4])

FT4: Signaling in Development / Reproduction and Gametogenesis / Cell Biology

May 29 (Thu) 13:30 〜 14:30 Room A
Chairpersons: Yoshifumi Yamaguchi (Univ. of Tokyo)
Yoshiki Hayashi (NIBB)

FT04-01 (P141A) 13:30-13:33 *ppk-1*/PIP5K inhibits the *cwn-2*/Wnt function to promote the correct polarity orientation of an epithelial stem cell in *C. elegans*
ppk-1/PIP5K は *cwn-2*/Wnt の機能を抑制することで線虫の表皮系幹細胞の正確な極性方向を誘導する
○Naoki Yoshida[1,2], Hitoshi Sawa[1,2] (SOKENDAI[1], NIG[2])

FT04-02 (P137A) 13:33-13:36 The Interplay between MT1-MMP and ADAMs in Vascular Development
○Hoi Leong Xavier Wong[1], Zhongjun Zhou[1] (HKU[1], The Department of Biochemistry, LKS Faculty of Medicine, The University of Hong Kong[2])

FT04-03 (P131B) 13:36-13:39 Spatial localization of noncanonical Wnt proteins during the early *Xenopus* embryogenesis.
アフリカツメガエル初期胚における非標準経路 Wnt 蛋白質の空間的局在
○Yusuke Mii[1,2,3], Shinji Takada[1,2,3] (NIBB[1], OIIB[2], SOKENDAI[3])

FT04-04 (P129A) 13:39-13:42 Vegetative origin of organizer cell differentiation in Dictyostelium
細胞性粘菌の増殖期に由来するオーガナイザー細胞の分化について
○Satoshi Kuwana[1], Masashi Fukuzawa[1,2] (UGAS, Iwate University[1], Hirosaki University[2])

FT04-05 (P128B) 13:42-13:45 Preferential protein flow in cellular proliferation zone of plant leaf primordia
葉原基の細胞増殖領域でみられるタンパク質の流れ
○Kensuke Kawade[1], Hirokazu Tanimoto[2] (RIKEN CSRS[1], Institut Jacques Monod[2])

FT04-06 (P125A) 13:45-13:48 Genome-wide analysis of Hedgehog target genes using RNAi and RNA-seq in the spider *Parasteatoda tepidariorum*
オオヒメグモにおける RNAi と RNA-seq を利用したヘッジホッグシグナル標的遺伝子のゲノムワイドな探索
○Yasuko Akiyama-Oda, Hiroki Oda (JT Biohistory Res. Hall)

FT04-07 (P059B) 13:48-13:52 Delta1-expressing otic precursor cells migrate within the preplacodal epithelium to form the otic placode during avian embryonic development
鳥類胚の予定耳プラコード領域における耳プラコード前駆細胞の移動
Hiroko Shida[1,2], Takumi Kawaue[3], Noriko Osumi[1], Takaki Miyata[3], ○Yoshio Wakamatsu[1] (Dept. Dev. Neurosci., Tohoku Univ. Grad. Sch. Med.[1], Dept. Orth. Dento. Orth., Tohoku Univ. Grad. Sch. Dent.[2], Dept. Anat. Cell Biol., Nagoya Univ. Grad. Sch. Med.[3])

FT04-08 (P056B) 13:52-13:55 The Neuroprotection Effect of Erythropoietin-Overexpressed Fibroblasts on Degenerating Neurons
○Yi-Chin Li, Chung-Liang Chien (Graduate Institute of Anatomy and Cell Biology, NTU)

FT04-09 (P052B) 13:55-13:58 Mechanochemical System for Self-organisation of Asymmetric Cell Division
細胞の非対称分裂における自己組織化
○S. Seirin Lee[1,2], Tatsuo Shibata[3] (MLS, Hiroshima Univ.[1], RcMcD, Hiroshima Univ.[2], CDB, RIKEN[3])

FT04-10 (P097A) 13:58-14:01 The gonadal development of the hybrid between white-spotted charr, *Salvelinus leucomaenis* and amago salmon, *Oncorhynchus masou ishikawae* in the tributary of Ibi River
揖斐川水系支流におけるイワナとアマゴの交雑種の生殖腺の発達について
○Taiki Niwa[1], Akihiko Goto[1], Naoki Miwa[1], Ryo Futamura[1], Takahiko Mukai[2], Yasunori Koya[3], Yuichi Yaoi[1], Masaki Takagi[1] (Biol. Club. Gifu High Sch.[1], Fac. Region. Stud., Gifu Univ.[2], Fac. Edu., Gifu Univ.[3])

FT04-11 (P100B) 14:01-14:04 Physiological relevance of frog egg apoptosis
○Alexander Tokmakov[1], Sho Iguchi[2], Tetsushi Iwasaki[1], Yasuo Fukami[1,2] (Res. Ctr. for Env. Genomics, Kobe Univ.[1], Grad. Sch. Sci., Kobe Univ.[2])

FT04-12 (P101A) 14:04-14:07 Molecular dissection of Vasa function in germ plasm localization and functional germ plasm assembly in vivo
○Szu-Chieh Wang[1], Hao-Jen Hsu[2], Gee-Way Lin[3], Chun-Che Chang[3], Ming-Der Lin[1,2] (MBHG, Tzu Chi University, Taiwan[1], LS, TCU, Taiwan[2], Entomology, NTU, Taiwan[3])

FT04-13 (P099B) 14:07-14:10 A revised model of gonocytes-to-spermatogonia transition in the mouse testis
○Han Pin Pui[1,2,3], Yumiko Saga[1,2,3] (SOKENDAI[1], Division of Mammalian Development[2], NIG[3])

FT04-14 (P098A) 14:10-14:13 Bmp7 and Lef1 are the downstream effectors of androgen signaling in androgen-induced sex characteristics development in medaka
Bmp7 と Lef1 はメダカ二次性徴発現過程においてアンドロゲンエフェクター因子として機能する
○Yukiko Ogino[1], Keiji Inohaya[2], Eri Sumiya[1], Shinich Miyagawa[1], Gen Yamada[3], Taisen Iguchi[1] (Div. Molecular Environmental Endocrinology, NIBB, SOKENDAI[1], Dept. Biological Information, Tokyou Inst. Tech.[2], Dept. Developmental Genetics, Wakayama Medical Univ.[3])

FT04-15 (P096B) 14:13-14:17 Identification of dicalcin-binding region on gp41, a *Xenopus* orthologue of ZP3
ツメガエル卵保護膜タンパク質 ZP3 における受精調節タンパク質ダイカルシン結合部位の同定
○Naofumi Miwa, Mayu Hanaue, Ken Takamatsu (Toho Univ., Dept. Physiol.)

FT04-16 (P095B) 14:17-14:20 Suppression of pluripofency gene together with NANOS2 is essential for male sexual differentiation in mouse germ cells
○Hiroko Koike[1], Yumiko Saga[1,2] (SOKENDAI[1], Division of Mammalian Development, National Institute of Genetics[2])

FT5: Stem Cells and Regenerationogy

May 29 (Thu) 13:30 ～ 14:30 Room B
Chairpersons: Norito Shibata (Kyoto Univ.)
Shinji Masui (Kyoto Univ.)

FT05-01 (P030A) 13:30-13:33 Nanos2 organizes a post-transcriptional buffering system in mouse Spermatogonia Stem Cells
○Zhi Zhou[1], Yumiko Saga[1] (NIG[1], National Institute of Genetics[2], National Institute of Genetics[3])

FT05-02 (P029A) 13:33-13:36 Cellular origin of blastema-like cells contributing to scarless skin regeneration of metamorphosed *Xenopus laevis*
ツメガエルの皮膚の完全再生に寄与する再生芽様細胞の起源
Rina Otsuka[1], Chikashi Nagayama[1], Aiko Kawasumi[1], Takashi Ariizumi[2], Koji Tamura[1], ○Hitoshi Yokoyama[1] (Dept. of Dev. Biol., Grad. School of Life Sci., Tohoku Univ.[1], Dept. of Bioresour. Sci., College of Agricul. Tamagawa Univ.[2])

FT05-03 (P025A) 13:36-13:39 Comprehensive screening and identification of genes expressed preferentially in the proliferating blastema cells of the *Xenopus laevis* tadpole tails
アフリカツメガエル幼生尾の再生芽増殖細胞に選択的に発現する遺伝子の網羅的検索と解析
○Hiroshi Tsujioka[1], Takekazu Kunieda[1], Yuki Katou[2], Katsuhiko Shirahige[2], Takeo Kubo[1] (Dept. Biol. Sci., Grad. Scl. Sci., Univ. Tokyo[1], IMCB, Univ. Tokyo[2])

FT05-04 (P021A) 13:39-13:42 Planarian homologs of cancer metastasis-related genes are involved in behaviors of their pluripotent stem cells.
プラナリア全能性幹細胞の挙動における癌転移関連遺伝子の機能解析
○Yuki Sato, Kiyokazu Agata, Norito Shibata (Dep. of Biophysics, Grad. School of Science, Kyoto Univ.)

FT05-05 (P019B) 13:42-13:45 Investigation of chicken early embryonic pluripotency toward a deeper understanding of its evolutionary background
ニワトリから見る多能性の進化的背景
○Shota Nakanoh, Kiyokazu Agata (Kyoto University, Science)

FT05-06 (P014A) 13:45-13:48 Transcriptome analysis of regenerating brain in the newt Pleurodeles waltl
イベリアトゲイモリにおける脳再生時のトランスクリプトーム解析
○Yuka Maeda, Makoto Kashima, Eri Kawaguchi, Shota Takemura, Takeshi Inoue, Kiyokazu Agata (Dept. of Biophys., Kyoto Univ.)

FT05-07 (P013A) 13:48-13:52 Specific proliferation mode of adult pluripotent stem cells for regeneration
○Hayoung Lee, Kiyokazu Agata, Norito Shibata (Dept. of Biophysics, Grad. School of Science, Kyoto Univ)

FT05-08 (P012B) 13:52-13:55 Heterogeneity of large RNP complexes, chromatoid bodies, in planarian adult pluripotent stem cells
プラナリア成体全能性幹細胞における大型 RNP 複合体クロマトイド小体の不均一性
○Nobuyoshi Kumagai, Makoto Kashima, Kiyokazu Agata, Norito Shibata (Div Biol. Sci. Grad. School of Sci. Kyoto Univeristy)

FT05-09 (P008B) 13:55-13:58 Differential Retinoic Acid Response of Stem Cell Subsets Maintains the Homeostatic Mouse Spermatogenesis

幹細胞サブセットのレチノイン酸応答性の違いが恒常的なマウス精子形成を支える
○Kanako Ikami[1], Ryo Sugimoto[1,2], Moe Tokue[1], Shosei Yoshida[1] (NIBB[1], EICM, Kagoshima Univ.[2])

FT05-10 (P011B) 13:58-14:01 Activation of H3K27 methyltransferase and demethylase genes during Xenopus tail regeneration
○Akane Kawaguchi[1,4], Haruki Ochi[2], Norihiro Sudou[3], Hajime Ogino[1] (Nagahama Inst. of Bio-Sci. and Tech.[1], Yamagata University Faculty of medicine[2], Tokyo Women's Medical University[3], NAIST[4])

FT05-11 (P009A) 14:01-14:04 Human fibroblast reprogramming by Lactic acid bacteria.
乳酸菌によるヒト繊維芽細胞の初期化
○Naofumi Ito, Rie Kawano, Kunimasa Ohta (Kumamoto University, Dev. Neurobiol.)

FT05-12 (P024B) 14:04-14:07 Regulatory mechanism of germline “potential stem cells” in mice
マウスの精子形成の”潜在的幹細胞”の制御機構
○Moe Tokue, Shosei Yoshida (NIBB)

FT05-13 (P007B) 14:07-14:10 The molecular mechanism underlying re-patterning of intermediate body regions during regeneration of the planarian *Dugesia japonica*
○Kazutaka Hosoda[1], Osmau Nishimura[2], Shigenobu Yazawa[1], Tetsutaro Hayashi[3], Kiyokazu Agata[1], Yoshihiko Umesono[4] (Dept. of Biophys., Kyoto Univ.[1], GCOE, Kyoto Univ.[2], RIKEN CDB[3], Dept. of Life Systems, Inst. of Tech. and Sci., Tokushima Univ.[4])

FT05-14 (P005A) 14:10-14:13 Epigenetic modification underlies recapitulation of limb-specific gene expression in Xenopus limb bud regeneration
ゼノパス肢芽再生におけるエピジェネティック制御による四肢特異的な遺伝子の再発現
○Shinichi Hayashi[1], Ikuo Uchiyama[2], Koji Tamura[1], Hitoshi Yokoyama[1] (Laboratory of Organ Morphogenesis, Tohoku University[1], Laboratory of Genome Informatics, NIBB[2])

FT05-15 (P004B) 14:13-14:17 Mouse spermatogenic stem cell dynamics during homeostasis
マウスの恒常的精子形成を支える幹細胞動態
○Kenshiro Hara[1,2], Hideki Enomoto[3,4], Benjamin Simons[5], Shosei Yoshida[1,2] (NIBB[1], SOKENDAI[2], Kobe Univ.[3], RIKEN CDB[4], Univ. of Cambridge[5])

FT05-16 (P002A) 14:17-14:20 Akhirin is involved in the neural stem cell regulation in the mouse spinal cord
○Athary Felemban[1,2,3], Rie Kawano[1], Xiaohong Song[1,2], Hideaki Tanaka[1,2], Kunimasa Ohta[1] (Dep. Dev. Neurobiol., Grad. Sch. Life Sci., Kumamoto Univ.[1], Kumamoto Univ., Global COE, Kumamoto Univ.[2], Ministry of H. Edu., Saudi Arabia[3])

FT6: Organogenesis / Regulation of Gene Expression / Neural Development and Behavior

May 29 (Thu) 13:30 ～ 14:30 Room C
Chairpersons: Takanori Amano (NIG)
Yusuke Watanabe (Tohoku Univ.)

FT06-01 (P048B) 13:30-13:33 Ripply2-dependent negative regulation of Tbx6 is required for somitogenesis
マウスの体節形成における Tbx6 抑制因子 Ripply2 の機能解析
○Wei Zhao[1,2], Yumiko Saga[1,2] (NIG[1], UTokyo[2])

FT06-02 (P053A) 13:33-13:36 A new strategy for gene knock-in in Xenopus laevis using Platinum TALENs
アフリカツメガエルにおける Platinum TALEN を用いた遺伝子ノックイ

ンの新しいストラテジー
○Yuto Sakane, Tetsushi Sakuma, Miyuki Suzuki, Takashi Yamamoto, Ken-ichi Suzuki (Dept. of Math. and Life Sci., Hiroshima Univ)

FT06-03 (P041A) 13:36-13:39 Mouse Hammer toe (*Hm*) mutation affects a long-range *Shh* regulation
マウス Hammer toe (*Hm*) 突然変異は長距離エンハンサーによる *Shh* 発現制御に影響する
○Kousuke Mouri, Tomoko Sagai, Takanori Amano, Toshihiko Shiroishi (NIG)

FT06-04 (P093A) 13:39-13:42 FoxO Mediates APP-Induced AICD-Dependent Cell Death and Locomotion Defect
○Xingjun Wang, Zhiqiang Wang, Lei Xue (Key Laboratory of Signaling and Disease Research, Tongji Univ.)

FT06-05 (P092B) 13:42-13:45 Role of Sox9 in cerebellum neurogenesis
○Keng Ioi Vong[1], Crystal Kit-Ying Leung[1], Kin Ming Kwan[1,2,3] (SLS, CUHK[1], COBF, CUHK[2], SKL, CUHK[3])

FT06-06 (P091B) 13:45-13:48 Optogenetic analysis of escape behavior in zebrafish larvae
ゼブラフィッシュ幼生逃避行動における光遺伝学的機能解析
○Keiko Umeda, Wataru Shoji (FRIS, Tohoku Univ.)

FT06-07 (P090A) 13:48-13:52 Precise axogenesis of the cerebellar granule cells requires interaction between their axons and the basement membrane.
小脳顆粒細胞の正確な軸索形成には軸索と基底膜の相互作用を必要とする
○Miki Takeuchi[1], Shigenobu Yonemura[2], Kazuhide Asakawa[3], Koichi Kawakami[3], Shinji Takada[4], Takashi Shimizu[1], Masahiko Hibi[1] (BBC, Nagoya Univ.[1], RIKEN CDB[2], NIG[3], OIIB[4])

FT06-08 (P123B) 13:52-13:55 The loss of Astrin suppresses ureteric bad branching in kidney development by apoptosis and decreased proliferation of matanephric mesenchyme (MM).
腎発生において Astrin 欠損は後腎間葉のアポトーシスと増殖不良によって尿管芽の分岐を抑制する
○Hidenori Yasuda, Yuki Tochigi, Kentaro Katayama, Hiroetsu Suzuki (Vet physiology, NVLU)

FT06-09 (P116B) 13:55-13:58 Elimination of an oral epithelia-specific *Shh* enhancer causes an extra premolar-like tooth in mouse
口腔上皮特異的な *Shh* エンハンサーの欠失による小臼歯様過剰歯の形成
○Tomoko Sagai, Takanori Amano, Akiteru Maeno, Yoichi Mizushina, Toshihiko Shiroishi (Mammal. Genet., Natl. Inst. Genet.)

FT06-10 (P115B) 13:58-14:01 Investigation of role of a novel pancreatic beta cell gene
β 細胞特異的に発現する新規遺伝子の解析
○Hisayoshi Omori, Soichiro Ogaki, Nobuaki Shiraki, Kazuhiko Kume, Shoen Kume (IMEG, Kumamoto Univ)

FT06-11 (P112B) 14:01-14:04 Spatiotemporal imaging of airway epithelial cells
気道上皮細胞の 4D イメージング
○Masafumi Noguchi, Mitsuru Morimoto (RIKEN CDB)

FT06-12 (P111B) 14:04-14:07 Theoretical Approach for the Mechanisms Underlying the Heterophylly of Lake Cress (*Rorippa aquatica*)

Rorippa aquatica における異形葉性の形成機構の理論的研究
○Akiko Nakamasu[1,2,4], Hokuto Nakayama[1,2], Nobuhiko Suematsu[3,4], Seisuke Kimura[1] (Facul. Life Sci., Kyo-San Univ.[1], JSPS[2], Grad. Sch. Adv. Math. Sci., Meiji Univ.[3], MIMS, Meiji Univ.[4])

FT06-13 (P108B) 14:07-14:10 A stepwise enlargement of the mouse trachea
○Keishi Kishimoto, Mitsuru Morimoto (RIKEN CDB)

FT06-14 (P105A) 14:10-14:13 Self-organization of embryonic feather bud forming field in 3D culture
3 次元培養での胎仔性羽毛原基形成場の自己組織化
○Kentaro Ishida, Toshiyuki Mitsui (Dept. of Phys. & Math., Coll. of Sci. & Eng., Aoyama Gakuin Univ.)

FT06-15 (P104B) 14:13-14:17 Dachsous-dependent polarization of Spiny-legs is critical for determining planar cell polarity orientation in *Drosophila*
Dachsous 依存的な Spiny-legs の偏在化はショウジョウバエにおける平面内細胞極性の形成において重要である
○Tomonori Ayukawa[1,2,3], Masakazu Akiyama[4], Jennifer Mummery-Widmer[5], Thomas Stoeger[5], Junko Sasaki[6], Juergen Knoblich[5], Haruki Senoo[3], Takehiko Sasaki[1,2,6], Masakazu Yamazaki[1,2,3] (RCBS, Akita Univ[1], GCOE, Gunma Univ and Akita Univ[2], Dept of Cell Biol and dept of Morphol, Akita Univ Grad Sch of Med[3], RIES, Hokkaido Univ[4], IMBA[5], Dept of Medi Biol, Akita Univ Grad Sch of Med[6])

FT06-16 (P103B) 14:17-14:20 Quantification of mechanical force driving left-right asymmetric morphogenesis of the embryonic gut in *in Drosophila*
ショウジョウバエ胚消化管における左右非対称な形態を引き起こす機械的な力の定量化
○Mai Adachi[1], Naotaka Nakazawa[1], Syukei Sugita[2], Takeo Matsumoto[2], Kenji Matsuno[1] (Dept. of Biol. Sci., Osaka Univ.[1], Dept. of Mech. Eng., Nagoya Inst. of Tech.[2])

Poster Sessions: May 28 (Wed)-May 29 (Thu)

P-XXXA (or B) is Poster Award candidate.

P-001A (SW2-06) A classical niche for spermatogonial stem cells in the proximal tip of the seminiferous tubules in mammalian testes
曲精細管の末端部における古典的な精子幹細胞ニッチの発見
○Yoshimi Aiyama, Yoshiakira Kanai (Dept. of Vet. Anat, The Univ. of Tokyo)

P-002A (FT05-16) Akhirin is involved in the neural stem cell regulation in the mouse spinal cord
○Athary Felemban[1,2,3], Rie Kawano[1], Xiaohong Song[1,2], Hideaki Tanaka[1,2], Kunimasa Ohta[1] (Dep. Dev. Neurobiol., Grad. Sch. Life Sci., Kumamoto Univ.[1], Kumamoto Univ., Global COE, Kumamoto Univ.[2], Ministry of H. Edu., Saudi Arabia[3])

P-003B Epigenetic regulation of genes expressions via methylation on histone H3 27th lysine residue during leg regeneration.
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[1], Tetsuya Bando[2], Taro Mito[3], Kenji Tomioka[1], Sumihare Noji[3], Hideyo Ohuchi[2] (OKAYAMA UNIV., Grad. Sch of Nat. Sci. and Tech.[1], OKAYAMA UNIV., Grad. Sch of Med., Dent. and Pharm. Sci.[2], Inst. of Tec. and Sci., Univ. of Tokushima[3])

P-004B (FT05-15) Mouse spermatogenic stem cell dynamics during homeostasis
マウスの恒常的精子形成を支える幹細胞動態
○Kenshiro Hara[1,2], Hideki Enomoto[3,4], Benjamin Simons[5], Shosei Yoshida[1,2] (NIBB[1], SOKENDAI[2], Kobe Univ.[3], RIKEN CDB[4], Univ. of Cambridge[5])

P-005A (FT05-14) Epigenetic modification underlies recapitulation of limb-specific gene expression in Xenopus limb bud regeneration
ゼノパス肢芽再生におけるエピジェネティック制御による四肢特異的な遺伝子の再発現
○Shinichi Hayashi[1], Ikuo Uchiyama[2], Koji Tamura[1], Hitoshi Yokoyama[1] (Laboratory of Organ Morphogenesis, Tohoku University[1], Laboratory of Genome Informatics, NIBB[2])

P-006A Comparative analysis of activity of limb-specific *Shh* enhancer MFCS1 in newts and frogs
イモリとカエルを用いた四肢特異的 *Shh* エンハンサー MFCS1 の活性比較解析
○Miki Hirayama[1], Takuya Higashidate[2], Hitoshi Yokoyama[2], Koji Tamura[2], Takeshi Inoue[1], Kiyokazu Agata[1] (Kyoto Univ.[1], Department of Developmental Biology and Neuroscience, Graduate School of Life Science, Tohoku University[2])

P-007B (FT05-13) The molecular mechanism underlying re-patterning of intermediate body regions during regeneration of the planarian *Dugesia japonica*
○Kazutaka Hosoda[1], Osmau Nishimura[2], Shigenobu Yazawa[1], Tetsutaro Hayashi[3], Kiyokazu Agata[1], Yoshihiko Umesono[4] (Dept. of Biophys., Kyoto Univ.[1], GCOE, Kyoto Univ.[2], RIKEN CDB[3], Dept. of Life Systems, Inst. of Tech. and Sci., Tokushima Univ.[4])

P-008B (FT05-09) Differential Retinoic Acid Response of Stem Cell Subsets Maintains the Homeostatic Mouse Spermatogenesis
幹細胞サブセットのレチノイン酸応答性の違いが恒常的なマウス精子形成を支える
○Kanako Ikami[1], Ryo Sugimoto[1,2], Moe Tokue[1], Shosei Yoshida[1] (NIBB[1], EICM, Kagoshima Univ.[2])

P-009A (FT05-11) Human fibroblast reprogramming by Lactic acid bacteria.
乳酸菌によるヒト繊維芽細胞の初期化

○Naofumi Ito, Rie Kawano, Kunimasa Ohta (Kumamoto University, Dev. Neurobiol.)

P-010A Roles of DNA repairing factor Rad18 in germinal stem cell
生殖幹細胞における損傷修復因子 Rad18 の役割
○Natsuko Iyoda[1], Nami Ueda[2], Chika Sugiyama[2], Satoshi Tateishi[4], Kentaro Yomogida[3] (Mukogawa Women's Univ. Grad. Sch.[1], Dept. Human Environ. Scis., Mukogawa Woman's Univ.[2], IBS[3], IMEG[4])

P-011B (FT05-10) Activation of H3K27 methyltransferase and demethylase genes during Xenopus tail regeneration
○Akane Kawaguchi[1,4], Haruki Ochi[2], Norihiro Sudou[3], Hajime Ogino[1] (Nagahama Inst. of Bio-Sci. and Tech.[1], Yamagata University Faculty of medicine[2], Tokyo Women's Medical University[3], NAIST[4])

P-012B (FT05-08) Heterogeneity of large RNP complexes, chromatoid bodies, in planarian adult pluripotent stem cells
プラナリア成体全能性幹細胞における大型 RNP 複合体クロマトイド小体の不均一性
○Nobuyoshi Kumagai, Makoto Kashima, Kiyokazu Agata, Norito Shibata (Div Biol. Sci. Grad. School of Sci. Kyoto Univeristy)

P-013A (FT05-07) Specific proliferation mode of adult pluripotent stem cells for regeneration
○Hayoung Lee, Kiyokazu Agata, Norito Shibata (Dept. of Biophysics, Grad. School of Science, Kyoto Univ)

P-014A (FT05-06) Transcriptome analysis of regenerating brain in the newt Pleurodeles waltl
イベリアトゲイモリにおける脳再生時のトランスクリプトーム解析
○Yuka Maeda, Makoto Kashima, Eri Kawaguchi, Shota Takemura, Takeshi Inoue, Kiyokazu Agata (Dept. of Biophys., Kyoto Univ.)

P-015B Cooperative Bmp- and Fgf-signalling inputs convert skin wound healing to limb formation in urodele amphibians
BMP/FGF シグナルの協調的活性化により傷修復反応が四肢再生反応へと転換される
○Aki Makanae, Kazumasa Mitogawa, Akira Satoh (RCIS, Okayama Univ.)

P-016B Comparative analysis of cartilage marker gene expression patterns in axolotl and *Xenopus* limb regeneration
アホロートルとアフリカツメガエルの四肢再生における軟骨マーカー遺伝子の発現パターン比較解析
○Kazumasa Mitogawa, Aki Makanae, Akira Satoh (RCIS, Okayama Univ)

P-017A A pilot study: nutritional effect on newts tail regeneration
飼料の違いによるイモリの尾の再生率とカルシウムイオン濃度計測値の関係
○Toshiharu Morita[1], Keita Shimomura[1], Mitsuru Kawai[1], Tomoya Furutani[1], Masashi Yoshida[1], Naoki Matsuura[2], Takashi Fukui[2], Yoshimi Matsuura[2] (Department of Kyoto Cosmos, Kyoto Prefectural Sagano High School[1], Section of Science Education, Kyoto Prefectural Sagano High School[2])

P-018A (SW2-02) PRDM14 promotes naïve pluripotency through TET-BER-mediated active demethylation
PRDM14 による TET-BER 経路を介した多能性獲得機構の解明
○Jun Nakamura, Naoki Okashita, Yoshiyuki Seki (K.G. Univ.)

P-019B (FT05-05) Investigation of chicken early embryonic pluripotency toward a deeper understanding of its evolutionary background
ニワトリから見る多能性の進化的背景

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

P-020B LGR4 is required for the maintenance of mammary gland
LGR4 は乳腺組織の維持に必要である
○Kazunori Oyama, Takahiro Shimoda, Yasuaki Mohri, Katsuhiko Nishimori (Lab. Mol. Biol., Grad. Sch. of Agr. Sci., Tohoku Univ.)

P-021A (FT05-04) Planarian homologs of cancer metastasis-related genes are involved in behaviors of their pluripotent stem cells.
プラナリア全能性幹細胞の挙動における癌転移関連遺伝子の機能解析
○Yuki Sato, Kiyokazu Agata, Norito Shibata (Dep. of Biophysics, Grad. School of Science, Kyoto Univ.)

P-022A (SW2-09) Transgenic imaging and tracing of the wound epidermis during zebrafish fin regeneration
ゼブラフィッシュ再生傷上皮のトランスジェニックイメージングと細胞系譜解析
○Eri Shibata[1], Kazunori Ando[1], Natsumi Horita[1], Gembu Abe[2], Koichi Kawakami[2], Akira Kudo[1], Atsushi Kawakami[1] (Tokyo tech[1], NIG[2])

P-023B Mechanisms of muscle regeneration in newts
イモリの筋再生メカニズム
○Kentaro Shimozuru, Yuki Nakayama (GSST, Kumamoto Univ.)

P-024B (FT05-12) Regulatory mechanism of germline “potential stem cells” in mice
マウスの精子形成の”潜在的幹細胞”の制御機構
○Moe Tokue, Shosei Yoshida (NIBB)

P-025A (FT05-03) Comprehensive screening and identification of genes expressed preferentially in the proliferating blastema cells of the *Xenopus laevis* tadpole tails
アフリカツメガエル幼生尾の再生芽増殖細胞に選択的に発現する遺伝子の網羅的検索と解析
○Hiroshi Tsujioka[1], Takekazu Kunieda[1], Yuki Katou[2], Katsuhiko Shirahige[2], Takeo Kubo[1] (Dept. Biol. Sci., Grad. Scl. Sci., Univ. Tokyo[1], IMCB, Univ. Tokyo[2])

P-026A Comparative studies on regeneration of the dopaminergic neuron in newts and frogs
イモリとカエルにおけるドーパミン神経再生の比較解析
○Yuko Urata, Wataru Yamashita, Yuka Maeda, Takeshi Inoue, Kiyokazu Agata (Dept. of Biophys., Grad. Sch. of Sci., Kyoto Univ.)

P-027B Analyses of genomic imprinting during iPS cell derivation
リプログラミング過程におけるインプリンティング遺伝子の解析
○Masaki Yagi[1], Katsunori Semi[1,2], Akito Tanaka[1], Knut Woltjen[1,3], Shinya Yamanaka[1,2,4], Yasuhiro Yamada[1,2] (CiRA[1], iCeMS[2], Hakubi Center for Advanced Research, Kyoto University[3], Gladstone Institute of Cardiovascular Disease[4])

P-028B (SW2-11) Distal blastema is a signaling center that directs cell proliferation during zebrafish fin regeneration
ヒレ再生で先端再生芽は細胞増殖を指令する細胞集団である
○Yuki Yokota[1], Natsumi Horita[1], Abe Gembu[2], Kawakami Koichi[2], Kudo Akira[1], Kawakami Atsushi[1] (Dept. Biol. Info., Tokyo Inst. Tech[1], National Institute of Genetics[2])

P-029A (FT05-02) Cellular origin of blastema-like cells contributing to scarless skin regeneration of metamorphosed *Xenopus laevis*
ツメガエルの皮膚の完全再生に寄与する再生芽様細胞の起源
Rina Otsuka[1], Chikashi Nagayama[1], Aiko Kawasumi[1], Takashi Ariizumi[2], Koji Tamura[1], ○Hitoshi Yokoyama[1] (Dept. of Dev. Biol., Grad. School of Life Sci., Tohoku Univ.[1], Dept. of Bioresour. Sci., Col-

lege of Agricul. Tamagawa Univ.[2])

P-030A (FT05-01) Nanos2 organizes a post-transcriptional buffering system in mouse Spermatogonia Stem Cells

Zhi Zhou[1], ○Yumiko Saga[1] (NIG[1], National Institute of Genetics[2], National Institute of Genetics[3])

P-031B (SW1-07) Replication-coupled passive DNA demethylation for the erasure of genome imprints in mice

ゲノムインプリント消去における受動的脱メチル化の寄与

○Saya Kagiwada[1,2], Kazuki Kurimoto[1,2], Fumiyoshi Ishidate[3], Mitinori Saitou[1,2,4,5] (Kyoto Univ.[1], ERATO, Kyoto[2], CeMI, Kyoto Univ.[3], CiRA, Kyoto Univ.[4], iCeMS, Kyoto Univ.[5])

P-032B Otx2 expression in anterior neuroectoderm and forebrain/midbrain is directed by more than six enhancers.

Daisuke Kurokawa[2], ○Tomomi Ohmura[1], Yusuke Sakurai[1], Kenichi Inoue[1], Yoko Suda[1], Shinichi Aizawa[1] (CDB, RIKEN[1], Tokyo Univ.[2])

P-033A Lineage-specific highly conserved elements in avian genomes and their roles in regulation of avian-specific gene expression

鳥類特異的に高度に保存されたゲノム配列が担う鳥類特異的な遺伝子発現制御

○Ryohei Seki[1], Cai Li[2], Shiro Egawa[1], Mao Kondo[1], Tomohiko Sato[1], Jiang Hu[2], Luohao Xu[2], Hailin Pan[2], Naoki Irie[3], Guojie Zhang[2], Koji Tamura[1] (Grad. Sch. of Life Sci., Tohoku Univ.[1], China National Genebank, BGI-Shenzhen[2], Grad. Sch. of Sci., Univ. of Tokyo[3])

P-034A The impact of whole genome duplication on vertebrate evolution: Lessons from the artificially tetraploidized embryo

○Nanoka Suzuki[1], Hajime Ogino[2], Haruki Ochi[1] (Fac. of Med., Yamagata Univ.[1], Dept. of Animal Bioscience, Nagahama Inst. of Bio-Sci. and Tech.[2])

P-035B Functional analyses of two KAO-NASHI genes during vertebrate organogenesis using medaka model

メダカを用いた器官形成に関わる 2 種の機能未知「カオナシ」遺伝子の機能解析

○Yasuhiro Tonoyama[1,3], Atsuhi Shimizu[2], Naohiro Iwakura[3], Yoshiko Shimizu[1], Nobuyoshi Shimizu[1,3] (Adv. Res. Ctr. GSP, Keio Univ.[1], Iwate Tohoku Med. Megabank Org., Iwate Medical Univ.[2], Nagahama Inst. Bio-Sci. Tech.[3])

P-036B Bioluminescence imaging assay of armadillo promoter activity for determining the pharmacological effect of ionomycin and 6-bromoindirubin-3-oxime in Drosophila embryogenesis

発光イメージングを用いた薬剤の作用解析：ショウジョウバエの胚発生におけるイオノマイシンおよび 6-bromoindirubin-3-oxime による armadillo プロモーター活性への影響

○Ryutaro Akiyoshi, Hirobumi Suzuki (CRDC, OLYMPUS.Co.)

P-037A ROLES OF PHC2 POLYMERIZATION IN POLYCOMB REPRESSIVE FUNCTIONS

ポリコーム群複合体による遺伝子発現制御

○Kyoichi Isono, Mami Kumon, Haruhiko Koseki (RIKEN IMS-RCAI)

P-038A Using zebrafish to identify the novel gene which involved in regulating the huORFchop-mediated translational inhibition during ER stress

Hung-Chieh Lee, ○Huai-Jen Tsai (IMCB, NTU)

P-039B (SW1-04) Analysis of the mechanism to enrich a chromodomain protein MRG-1 into the primordial germ cells in *C.elegans*

線虫 *C.elegans* における、クロモドメインタンパク MRG-1 の始原生殖細胞への限局メカニズムの解析
○Takashi Miwa, Kunio Inoue, Hiroshi Sakamoto, Teruaki Takasaki (Kobe Univ.)

P-040B The expression of zebrafish *cx36.7* gene is regulated by Gata4 in early heart development
初期心臓発生におけるゼブラフィッシュ cx36.7 遺伝子の発現は Gata4 によって調節されている
○Hisako Miyagi, Ippei Kasajima, Yumiko Tanaka, Keijiro Munakata, Kakon Nag, Naznin Sultana, Shigehisa Hirose, Nobuhiro Nakamura (Dep. Biol. Sci., Tokyo Tech.)

P-041A (FT06-03) Mouse Hammer toe (*Hm*) mutation affects a long-range *Shh* regulation
マウス Hammer toe (*Hm*) 突然変異は長距離エンハンサーによる *Shh* 発現制御に影響する
○Kousuke Mouri, Tomoko Sagai, Takanori Amano, Toshihiko Shiroishi (NIG)

P-042A Target gene knockdown by 2′, 4′-BNA/LNA Antisense oligonucleotides in zebrafish.
ゼブラフィッシュにおける 2′, 4′-BNA/LNA アンチセンス核酸による標的遺伝子阻害
○Mizuki Nakaura[1], Takeshi Imanishi[2], Satoshi Obika[2], Motoyuki Itoh[1] (Grad. Sch. Pharm. Sci. Chiba Univ.[1], Graduate School of Pharmaceutical Sciences, Osaka University[2])

P-043B Identification of a cis-regulatory module for glomerular regeneration
Yuko Sasaki[1], Yuka Tamura[1], Kazuyuki Hoshijima[2], Hajime Ogino[3], ○Haruki Ochi[1] (Fac. of Med., Yamagata Univ.[1], Dept. of Human Genetics, Univ. of Utah[2], Dept. of Animal Bioscience, Nagahama Inst. Of Bio-Sci. and Tech.[3])

P-044B Negative feedback regulation of Ripply3 for own promoter during pharyngeal arch development
咽頭弓の分節過程における Ripply3 の発現調節機構
○Tadashi Okubo[1], Shinji Takada[2] (Dept. of Lab. Ani. Sci., Kitasato Univ. School of Med.[1], Okazaki Inst. for Integ. Biosci., NINS[2])

P-045A Osteogenesis is regulated by mechanical stress
メカニカルストレスが骨分化に与える影響
○Eriko Sato[1], Kota Miyasaka[2], Toshihiko Ogura[2] (Dept. Dev. Neuro., Life Sci., Tohoku Univ.[1], Dept. Dev. Neurobio., IDAC., Tohoku Univ.[2])

P-046A Development of hypocretin/orexin neurons in the hypothalamus of zebrafish embryos.
ゼブラフィッシュ視床下部における hypocretin/orexin ニューロンの発生
○Minoru Takahashi, Kanako Mizumoto, Kyo Yamasu (Div. Life Sci.,Grad. School Sci. Eng.,Saitama Univ.)

P-047B Multiple enhancers of the *Sox2* locus distributed within a 200 kb region in the chicken genome
ニワトリ *Sox2* 遺伝子座 200 kb における制御領域の解析
○Masanori Uchikawa, Ryuji Okamoto, Hisato Kondoh (Grad. Sch. of Frontier Bioscis., Osaka Univ.)

P-048B (FT06-01) Ripply2-dependent negative regulation of Tbx6 is required for somitogenesis
マウスの体節形成における Tbx6 抑制因子 Ripply2 の機能解析
○Wei Zhao[1,2], Yumiko Saga[1,2] (NIG[1], UTokyo[2])

P-049A (SW1-05) Reaction-diffusion pattern in shoot apical meristem of plants
植物茎頂分裂組織における反応拡散パターン
○Hironori Fujita[1], Masayoshi Kawaguchi[1,2] (Natl. Inst. Basic Biol.[1], Grad. Univ. Adv. Stud.[2])

P-050A (SW2-04) CARL: a newly developed transcriptome assembler for non-model organisms
CARL: 非モデル生物用新型 de novo トランスクリプトームアセンブラー
○Makoto Kashima, Suguru Kato, Eri Kawaguchi, Hayoung Lee, Kiyokazu Agata, Norito Shibata (DBGS, Kyoto Univ.)

P-051B SKL-tagging: a method for generating dominant-negative inhibitors of dimeric transcriptional factors such as Siamois and Vent
SKL タッギング法 : Siamois や Vent といった二量体形成型転写因子のドミナントネガティブ型を簡単に作る方法
○Yuka Sato[1], Shinya Matsukawa[2], Tomoyo Furukawa[3], Hiroki Kuroda[1] (Faculty of Environment and Information Studies, Keio Univ.[1], Dept. of Life Sciences, Graduate School of Arts and Sciences, Univ. of Tokyo[2], Graduate School of Science and Techonology, Shizuoka Univ.[3])

P-052B (FT04-09) Mechanochemical System for Self-organisation of Asymmetric Cell Division
細胞の非対称分裂における自己組織化
○S. Seirin Lee[1,2], Tatsuo Shibata[3] (MLS, Hiroshima Univ.[1], RcMcD, Hiroshima Univ.[2], CDB, RIKEN[3])

P-053A (FT06-02) A new strategy for gene knock-in in Xenopus laevis using Platinum TALENs
アフリカツメガエルにおける Platinum TALEN を用いた遺伝子ノックインの新しいストラテジー
○Yuto Sakane, Tetsushi Sakuma, Miyuki Suzuki, Takashi Yamamoto, Ken-ichi Suzuki (Dept. of Math. and Life Sci., Hiroshima Univ)

P-054A Jigsaw puzzle pattern in the epidermal cell wall of leaves
植物表皮細胞壁のジグソーパズル構造形成のメカニズム
○Hisako Takigawa-Imamura[1], Natsumaro Kutsuna[2], Takumi Higaki[2], Kae Akita[2], Takashi Miura[1] (Grad. Sch. Med., Kyushu Univ.[1], Grad. Sch. Frontier Sci., Univ. Tokyo[2])

P-055B (FT02-11) Mechanical properties that detect and regulate differential proliferation rate during epithelial cell competition
機械的な力という視点から、細胞競合を紐解く―“細胞が分裂速度の差を検知する仕組み”
○Alice Tsuboi[1], Shizue Ohsawa[2], Tatsushi Igaki[2], Koichi Fujimoto[1] (Osaka Univ.[1], Graduate School of Biostudies, kyoto University[2])

P-056B (FT04-08) The Neuroprotection Effect of Erythropoietin-Overexpressed Fibroblasts on Degenerating Neurons
○Yi-Chin Li, Chung-Liang Chien (Graduate Institute of Anatomy and Cell Biology, NTU)

P-057A The interplay between stress granules and P-bodies during Drosophila oogenesis
○Chia-Ying Liu[1], Szu-Jing Huang[2], Ming-Der Lin[1,2] (MBHG, Tzu Chi Univeristy, Taiwan[1], LS, Tzu Chi University, Taiwan[2])

P-058A Mechanical stress induces cell differentiation and regulates metabolic change for energy demand
メカニカルストレスによる細胞分化と代謝制御機構の解明
○Kota Miyasaka, Eriko Sato, Toshihiko Ogura (IDAC)

P-059B (FT04-07) Delta1-expressing otic precursor cells migrate within the preplacodal epithelium to form the otic placode during avian embryonic development
鳥類胚の予定耳プラコード領域における耳プラコード前駆細胞の移動
Hiroko Shida[1,2], Takumi Kawaue[3], Noriko Osumi[1], Takaki Miyata[3], ○Yoshio Wakamatsu[1] (Dept. Dev. Neurosci., Tohoku Univ. Grad. Sch. Med.[1], Dept. Orth. Dento. Orth., Tohoku Univ. Grad. Sch. Dent.[2], Dept. Anat. Cell Biol., Nagoya Univ. Grad. Sch. Med.[3])

P-060B Heme acts through the Bach1b/Nrf2a-MafK pathway to regulate exocrine peptidase precursor genes in porphyric zebrafish

○Shuqing Zhang[1,2], Minrui Xu[1,2], Jian Huang[1,2], Lili Tang[1,2], Yanqing Zhang[1,2], Jingyao Wu[1,2], Shuo Lin[3], Han Wang[1,2] (ccc[1], School of Biology & Basic Medical Sciences, Medical College, Soochow University, Suzhou, Jiangsu, China[2], Department of Molecular, Cell and Developmental Biology, University of California, Los Angeles, CA, USA[3])

P-061A (FT03-01) Lack of β1 integrin results in defective notochord morphogenesis with impaired convergent extension in the mouse

○Shengzhen Guo[1], T. Au[1], S. Wynn[1], D. Chan[1], A. Aszodi[2], R. Faessler[3], K. S.E. Cheah[1] (Biochemistry, The University of Hong Kong[1], Surgery, Ludwig-Maximilians-University[2], Molecular Medicine, Max Planck Institute of Biochemistry[3])

P-062A Remodeling of glial assembly in Drosophila brain during metamorphosis
変態期のショウジョウバエ脳におけるグリアアセンブリのリモデリング

Kentaro Kato, ○Takeshi Awasaki (Kyorin Univ. Sch. Med.)

P-063B *Mab21l2* is required for neonatal breathing and survival

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

P-064B The labor-related functional characterizations of the European honeybee cephalic and thoracic exocrine glands by using large-scale proteomics
分業に応じたセイヨウミツバチ頭部・胸部外分泌腺機能の大規模プロテオミクスを用いた解析

○Toshiyuki Fujita[1], Hiroko Kozuka-Hata[2], Hiroko Ao-Kondo[2], Masaaki Oyama[2], Takeo Kubo[3] (TIIMS[1], Med. Proteomics Lab., Inst. of Med., Univ. of Tokyo[2], Dept. of Biol. Sci., Grad. Sch. of Sci., Univ. of Tokyo[3])

P-065A (FT03-03) The behavior of the mandibular trigeminal nerve regulates attachment dependent of the swimming behavior in Xenopus tadpole
下顎三叉神経の分布様式がツメガエル幼生の遊泳行動を制御する

○Yumiko Harada[1], Megumi Takeyasu[2], Ayaka Ando[2], Murakami Ryutaro[3] (Grad. Sch. Sci. Eng., Yamaguchi Univ.[1], Dept. Biol Sci. Chem., Fac. Sci., Yamaguchi Univ.[2], Grad. Sch. Med., Yamaguchi Univ.[3])

P-066A (FT03-04) Aging-related Neurodegeneration Dispels Male Courtship Choice in Drosophila

○Yujia Hu[1,2], Yi Han[1,2], Xingjun Wang[1,2], Lei Xue[1,2] (SLST, Tongji Univ.[1], DIRS, Shanghai 10th People's Hospital[2])

P-067B (FT03-05) The Role of Ret in Retinal Degeneration

○I-Wen Huang[1], Meng-Lin Liao[1], Daphne Wei-Chun Kan[2], Nan-Kai Wang[3], Chung-Liang Chien[1] (Graduate Institute of Anatomy and Cell Biology, National Taiwan University[1], Department of Obstetrics and Gynecology, College of Medicine, National Taiwan University[2], Department of Ophthalmology, Linkou Chang Gung Memorial Hospital[3])

P-068B (SW2-01) Strain-dependent embryonic lethality induced by flanking genes in homozygous *ST8sia2*-deficient mice
ST8sia2 ノックアウトマウスにおける系統特異的フランキング遺伝子領域の胚性致死に及ぼす影響

○Keisuke Ikegami[1], Kazumasa Saigoh[2], Mamoru Nagano[1], Susumu Kusunoki[2], Yasufumi Shigeyoshi[1] (Dept. Anato. Neurobiol., Kinki Univ. Facul. Med.[1], Dept. Neurology., Kinki Univ. Facul. Med.[2])

P-069A Cancelled

P-070A Temporal and Spatial Regulation of Neuregulin-ErbB signaling in the developing nervous system

神経系の発達における Neuregulin-ErbB signaling の時空間的制御機構
○Aosa Kamezaki, Fuminori Sato, Kazuya Tsumagari, Atsuko Sehara-Fujisawa (IFMS, Kyoto Univ.)

P-071B (FT03-06) Maternal separation inhibits GAD67 expression in the hippocampal interneuron
母仔分離による海馬介在神経での GAD67 発現上昇阻害
○Tatsuya Katahira, Jun Motoyama (Laboratory of Developmental Neurobiology, Graduate School of Brain Science, Doshisha University)

P-072B Involvement of caspase-6 in the presynaptic axon pruning of developing chick ciliary ganglion.
発達期ニワトリ胚毛様体神経節で見られるプレシナプス刈り込みへのカスパーゼ 6 の関与
○Hidetaka Katow[1], Ryo Egawa[1], Shoko Hososhima[1], Toru Ishizuka[1,2], Hiromu Yawo[1,2,3] (Graduate school of life sciences, Tohoku Univ.[1], JST, CREST[2], Center of neuroscience, Tohoku University Graduate school of medicine[3])

P-073A (FT03-07) Comprehensive monitoring of cell-cell contact and cell fate choice in the developing mouse neocortex
大脳新皮質における細胞間接触と細胞運命決定の網羅的モニタリング
○Takumi Kawaue[1], Ken Sago[1], Mayumi Okamoto[1], Tomoyasu Shinoda[1], Hiroshi Kiyonari[2], Ayano Kawaguchi[1], Takaki Miyata[1] (Cell Biology, Nagoya University, Graduate School of Medicine[1], Laboratory for Animal Resources and Genetic Engineering, Center for Developmental Biology, RIKEN[2])

P-074A (FT03-08) Hidden left-right differences of the developing zebrafish habenula nuclei
Guo-Tzau Wang[2], Chang-Huain Hsieh[2], Yuan-Ding Yu[3], Wei-Han Lang[1], ○Yung-Shu Kuan[1,3,4] (IBS-NTU[1], NCHC-Taiwan[2], IBC-Academia Sinica[3], NPAS-Academia Sinica[4])

P-075B (FT03-09) Gastrointestinal dissension of neural crest cell specific Rest transcription factor CKO mice caused by the aberration of Myenteric plexus
転写調節因子 Rest の神経堤細胞特異的ノックアウトマウスにおける腸管神経叢の異常による致死的腸管拡張
○Takahiro Kunisada[1], Yasuhiro Yamada[2], Akira Hara[3], Hitomi Aoki[1] (Dept. Tissue & Organ Development, Gifu Univ. Grad. Sch. Med.[1], CiRA, Kyoto University[2], Dept. Tumor Pathology, Gifu Univ. Grad. Sch. Med.[3])

P-076B (FT03-10) Zebrafish Adar2 Edits the Q/R site of AMPA Receptor Subunit gria2 α transcript to Ensure Normal Development of Nervous System and Cranial Cartilages
○I-Chen Li[1], Yu-Chia Chen[1], Yi-Yun Wang[2], Bo-Wei Tzeng[1], Chun-Wen Ou[1], Yi-Yan Lau[1], Kan-Mai Wu[1], Tzu-Min Chan[1], Wei-Hsiang Lin[1], Sheng-Ping Hwang[3], Wei-Yuan Chow[1,2] (IMCB, NTHU[1], Institue of Systems Neuroscience, National Tsing Hua University[2], Institute of Cellular and Organismic Biology, Academia Sinica[3])

P-077A (FT03-11) Role of BMP/Smad signaling in Purkinje cell neurogenesis
○Tsz Ching Ma[1], Ka Kui Tong[1], Kin Ming Kwan[1,2,3] (SLS, CUHK[1], COBF, CUHK[2], SKL, CUHK[3])

P-078A Spatiotemporal expression patterns of novel candidate genes for axonal guidance in the mouse head
新規軸索ガイド候補分子のマウス頭部における発現様式
○Tomoyuki Masuda[1], Masahiko Taniguchi[2], Chie Sakuma[3], Hideki Ohmomo[4], Shuichi Ueda[5], Hiroyuki Yaginuma[3] (Dept of Neurobiol, Univ of Tsukuba Sch of Med[1], Dept of Biochem, Sapporo Med Univ Sch of Med[2], Dept of Anat, Fukushima Med Univ Sch of Med[3], Iwate Tohoku Med Bank Orga, Iwate Med Univ[4], Dept of Histol Neurobiol, Dokkyo Med Univ Sch of Med[5])

P-079B (FT03-12) Dissection of cerebellar neural circuitry with zebrafish Gal4 gene/enhancer trap lines
○Koji Matsuda[1], Miki Takeuchi[2], Kazuhide Asakawa[3], Masamichi Ohkura[4], Nobuhiko Miyasaka[5], Yoshi-

hiro Yoshihara[5], Tetsutaro Hayashi[6], Shigehiro Kuraku[6], Koichi Kawakami[3], Masahiko Hibi[1,2], Takashi Shimizu[1,2] (Grad. Sch. Sci., Nagoya Univ.[1], BBC, Nagoya Univ.[2], NIG[3], BSI, Saitama Univ.[4], RIKEN BSI[5], RIKEN CDB[6])

P-080B Different combinations of Notch ligands and receptors regulate V2 interneuron progenitor proliferation and V2a /V2b cell fate determination.
Sayumi Okigawa[2], ○Takamasa Mizoguchi[1], Makoto Okanao[2], Haruna Tanaka[1], Miho Isoda[2], Yun-Jin Jiang[3], Maximiliano Susuter[4], Shinichi Higashijima[5], Koichi Kawakami[4], Motoyuki Itoh[1,2] (Grad. Sch. of Pharm. Sci., Chiba Univ.[1], Grad. Sch. of Sci., Nagoya Univ.[2], IMGM, NHRI[3], NIG[4], Okazaki Inst. Integr. Biosci.[5])

P-081A (FT03-13) FoxP1 contribute to the differentiation of the specific motoneurons committed to apoptosis in the cervical spinal cord of the developing chick embryo
発生期ニワトリ胚の頚髄においてFoxP1はアポトーシスに至る特異的な運動ニューロンの分化に関与する
○Katsuki Mukaigasa, Hiroyuki Yaginuma (Fukushima Med. Univ.)

P-082A (FT03-14) Transcripts from amyloid precursor protein (APP) gene localize within a subset of axons of the optic tectum in chick embryos
アミロイド前駆体タンパク質 (APP) 遺伝子転写産物はニワトリ胚中脳視蓋の神経軸索に局在する
○Ryuji Nanayama[1], Shiho Nozaki[1], Keiko Okudaira[1], Nozomi Onodera[1,2], Isato Araki[1,2] (Dept Chem Bio-eng, Fac Eng, Iwate Univ[1], UGAS, Iwate Univ[2])

P-083B Mechanical stress influences the behavior of cortical progenitor cells
力学的刺激が大脳神経前駆細胞の挙動に与える影響
○Mayumi Okamoto, Tomoyasu Shinoda, Arata Nagasaka, Takaki Miyata (Department of Anatomy and Cell Biology, Nagoya University)

P-084B (SW2-10) Axonal mRNAs encoding transcription factors in the tectum of chick embryos
ニワトリ胚中脳視蓋でみられる転写因子をコードする軸索性 mRNA
○Nozomi Onodera[1,2], Hiroshi Nakata[2], Miwa Watanabe[3], Yasuhiro Itoh[4], Isato Araki[1,2] (UGAS, Iwate Univ[1], Dept Chem Bioeng, Fac Eng, Iwate Univ[2], Tech Div, Fac Eng, Iwate Univ[3], Grad Sch Pharm Sci, Univ Tokyo[4])

P-085A (FT03-15) An RNAi screen identifies modifiers of human APP in Drosophila
○Fei Peng, Lei Xue (SLST, Tongji Univ.)

P-086A (FT03-16) Relationship between the dynamics of progenitor cells and the maintenance of pseudostratified structure of the ventricular zone
神経前駆細胞の挙動と神経上皮構造の維持機構
○Tomoyasu Shinoda[1], Ryo Higuchi[2], Mayumi Okamoto[1], Arata Nagasaka[1], Takashi Miura[3], Masaharu Nagayama[2], Toshihiko Fujimori[4], Takaki Miyata[1] (Nagoya Univ. Graduate School of Medicine[1], RIES, Hokkaido Univ.[2], Kyusyu Univ. Graduate School of Medicine[3], NIBB[4])

P-087B (SW2-05) Semaphorin/plexin signaling regulates the development of the amygdala-BNST network
セマフォリン / プレキシン シグナルは扁桃体と分界条床核との接続を制御する
○Fumikazu Suto[1], Masahumi Kawaguchi[1], Noriko Osumi[2], Noritaka Ichinohe[1] (NINS, NCNP[1], Div. Dev. Neurosci., Tohoku Univ. Grad. Sch. of Med.[2])

P-088B (SW2-08) Establishment of neural circuit by interaction between cells of different origins
由来の異なる細胞同士の相互作用による神経回路の形成機構
○Takumi Suzuki[1], Masako Kaido[1], Rie Takayama[1], Makoto Sato[1,2] (Brain/Liver Center, Kanazawa Univ[1], PRESTO, JST[2])

P-089A Visualization of zebrafish rhombomere-boundary formation using a modified multiple embryo-mounting method and short-time interval time-lapse confocal microscopy
ゼブラフィッシュ後脳ロンボメア境界形成の短時間間隔タイムラプスイメージング解析
○Masanori Takahashi[1,2,3], Qiling Xu[3], David Wilkinson[3] (Div. of Biol. Cent. for Mol. Med. Jichi Med. Univ.[1], Grad. Sch. of Med. Jichi Med. Univ.[2], Div. of Dev. Neurobiol. MRC NIMR[3])

P-090A (FT06-07) Precise axogenesis of the cerebellar granule cells requires interaction between their axons and the basement membrane.
小脳顆粒細胞の正確な軸索形成には軸索と基底膜の相互作用を必要とする
○Miki Takeuchi[1], Shigenobu Yonemura[2], Kazuhide Asakawa[3], Koichi Kawakami[3], Shinji Takada[4], Takashi Shimizu[1], Masahiko Hibi[1] (BBC, Nagoya Univ.[1], RIKEN CDB[2], NIG[3], OIIB[4])

P-091B (FT06-06) Optogenetic analysis of escape behavior in zebrafish larvae
ゼブラフィッシュ幼生逃避行動における光遺伝学的機能解析
○Keiko Umeda, Wataru Shoji (FRIS, Tohoku Univ.)

P-092B (FT06-05) Role of Sox9 in cerebellum neurogenesis
○Keng Ioi Vong[1], Crystal Kit-Ying Leung[1], Kin Ming Kwan[1,2,3] (SLS, CUHK[1], COBF, CUHK[2], SKL, CUHK[3])

P-093A (FT06-04) FoxO Mediates APP-Induced AICD-Dependent Cell Death and Locomotion Defect
○Xingjun Wang, Zhiqiang Wang, Lei Xue (Key Laboratory of Signaling and Disease Research, Tongji Univ.)

P-094A (SW2-07) Conserved roles of PRDM14 orthologues in DNA demethylation and pluripotency in embryonic stem cells
種間比較を用いた PRDM14 の機能解析
○Shota Hashimoto, Akari Shirakami, Yoshiyuki Seki (K.G. Univ)

P-095B (FT04-16) Suppression of pluripofency gene together with NANOS2 is essential for male sexual differentiation in mouse germ cells
○Hiroko Koike[1], Yumiko Saga[1,2] (SOKENDAI[1], Division of Mammalian Development, National Institute of Genetics[2])

P-096B (FT04-15) Identification of dicalcin-binding region on gp41, a *Xenopus* orthologue of ZP3
ツメガエル卵保護膜タンパク質 ZP3 における受精調節タンパク質ダイカルシン結合部位の同定
○Naofumi Miwa, Mayu Hanaue, Ken Takamatsu (Toho Univ., Dept. Physiol.)

P-097A (FT04-10) The gonadal development of the hybrid between white-spotted charr, *Salvelinus leucomaenis* and amago salmon, *Oncorhynchus masou ishikawae* in the tributary of Ibi River
揖斐川水系支流におけるイワナとアマゴの交雑種の生殖腺の発達について
○Taiki Niwa[1], Akihiko Goto[1], Naoki Miwa[1], Ryo Futamura[1], Takahiko Mukai[2], Yasunori Koya[3], Yuichi Yaoi[1], Masaki Takagi[1] (Biol. Club. Gifu High Sch.[1], Fac. Region. Stud., Gifu Univ.[2], Fac. Edu., Gifu Univ.[3])

P-098A (FT04-14) Bmp7 and Lef1 are the downstream effectors of androgen signaling in androgen-induced sex characteristics development in medaka
Bmp7 と Lef1 はメダカ二次性徴発現過程においてアンドロゲンエフェクター因子として機能する
○Yukiko Ogino[1], Keiji Inohaya[2], Eri Sumiya[1], Shinich Miyagawa[1], Gen Yamada[3], Taisen Iguchi[1] (Div. Molecular Environmental Endocrinology, NIBB, SOKENDAI[1], Dept. Biological Information, Tokyou Inst. Tech.[2], Dept. Developmental Genetics, Wakayama Medical Univ.[3])

P-099B (FT04-13) A revised model of gonocytes-to-spermatogonia transition in the mouse testis
○Han Pin Pui[1,2,3], Yumiko Saga[1,2,3] (SOKENDAI[1], Division of Mammalian Development[2], NIG[3])

P-100B (FT04-11) Physiological relevance of frog egg apoptosis
○Alexander Tokmakov[1], Sho Iguchi[2], Tetsushi Iwasaki[1], Yasuo Fukami[1,2] (Res. Ctr. for Env. Genomics, Kobe Univ.[1], Grad. Sch. Sci., Kobe Univ.[2])

P-101A (FT04-12) Molecular dissection of Vasa function in germ plasm localization and functional germ plasm assembly in vivo
○Szu-Chieh Wang[1], Hao-Jen Hsu[2], Gee-Way Lin[3], Chun-Che Chang[3], Ming-Der Lin[1,2] (MBHG, Tzu Chi University, Taiwan[1], LS, TCU, Taiwan[2], Entomology, NTU, Taiwan[3])

P-102A Testicular Zinc Finger Transcription Factor Zfp318 Deficiency Results in Defective Meiosis of Spermatogenesis in Mice
マウス精巣特異的転写因子 Zfp318 欠失による精子形成時の減数分裂異常について
○Kaoru Yoshida[1], Masamichi Ishizuka[2], Eri Ohtsuka[2], Mirei Odaka[2], Hirotaka Ohshima[2], Norihisa Tamura[2], Norihisa Sako[3], Tadashi Baba[4], Shin-ichi Kashiwabara[4], Masaru Okabe[5], Junko Noguchi[6], Hiromi Hagiwara[2,3] (BME Center, Toin Univ. of Yokohama[1], Dept. of Biol. Sci.,Tokyo Inst. Tech.[2], Dept. of Biomed. Engir., Toin Univ. of Yokohama[3], Grad. Sc. of Life & Environ. Sci., Univ. of Tukuba[4], Genome Information Research Center, RIMD, Osaka Univ.[5], Germ Cell Conservation Laboratory, NIAS[6])

P-103B (FT06-16) Quantification of mechanical force driving left-right asymmetric morphogenesis of the embryonic gut in *in Drosophila*
ショウジョウバエ胚消化管における左右非対称な形態を引き起こす機械的な力の定量化
○Mai Adachi[1], Naotaka Nakazawa[1], Syukei Sugita[2], Takeo Matsumoto[2], Kenji Matsuno[1] (Dept. of Biol. Sci., Osaka Univ.[1], Dept. of Mech. Eng., Nagoya Inst. of Tech.[2])

P-104B (FT06-15) Dachsous-dependent polarization of Spiny-legs is critical for determining planar cell polarity orientation in *Drosophila*
Dachsous 依存的な Spiny-legs の偏在化はショウジョウバエにおける平面内細胞極性の形成において重要である
○Tomonori Ayukawa[1,2,3], Masakazu Akiyama[4], Jennifer Mummery-Widmer[5], Thomas Stoeger[5], Junko Sasaki[6], Juergen Knoblich[5], Haruki Senoo[3], Takehiko Sasaki[1,2,6], Masakazu Yamazaki[1,2,3] (RCBS, Akita Univ[1], GCOE, Gunma Univ and Akita Univ[2], Dept of Cell Biol and dept of Morphol, Akita Univ Grad Sch of Med[3], RIES, Hokkaido Univ[4], IMBA[5], Dept of Medi Biol, Akita Univ Grad Sch of Med[6])

P-105A (FT06-14) Self-organization of embryonic feather bud forming field in 3D culture
3 次元培養での胎仔性羽毛原基形成場の自己組織化
○Kentaro Ishida, Toshiyuki Mitsui (Dept. of Phys. & Math., Coll. of Sci. & Eng., Aoyama Gakuin Univ.)

P-106A Expression of *Eph/ephrin* family genes in the heart tube and proepicardium of the chick embryo
ニワトリ胚心臓および心外膜原基における *Eph/ephrin* ファミリー遺伝子の発現
○Yasuo Ishii, Kiyoe Fujimoto, Wang Zi, Sadao Yasugi (Fac. Life. Sci., Kyoto Sangyo Univ.)

P-107B (SW1-03) 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、ニワトリ胚神経管の背腹軸に沿った形態形成に関与している
○Rie Kawano, Kunimasa Ohta, Naofumi Ito (Dev. Neurobio. Kumamoto University)

P-108B (FT06-13) A stepwise enlargement of the mouse trachea
○Keishi Kishimoto, Mitsuru Morimoto (RIKEN CDB)

P-109A Tissue reconstruction of myocardium during Xenopus laevis metamorphosis
アフリカツメガエルの変態期における心筋の組織再構築
○Manami Kobayashi, Misa Sugiura, Tsutomu Kinoshita (Dept. Life Sci. Fac. Sci. Rikkyo Univ.)

P-110A Role of HOX genes in the pattern formation of Drosophila midgut
ショウジョウバエ中腸のパターン形成における HOX 遺伝子群の役割
Yuichi Yoshimura[1], Yumiko Harada[2], Keita Fujimoto[1], Masahiko Arishige[1], ○Ryutaro Murakami[1] (Grad. Sch. Med., Yamaguchi Univ.[1], Grad. Sch. Sci. Eng., Yamaguchi Univ.,[2])

P-111B (FT06-12) Theoretical Approach for the Mechanisms Underlying the Heterophylly of Lake Cress (*Rorippa aquatica*)
Rorippa aquatica における異形葉性の形成機構の理論的研究
○Akiko Nakamasu[1,2,4], Hokuto Nakayama[1,2], Nobuhiko Suematsu[3,4], Seisuke Kimura[1] (Facul. Life Sci., Kyo-San Univ.[1], JSPS[2], Grad. Sch. Adv. Math. Sci., Meiji Univ.[3], MIMS, Meiji Univ.[4])

P-112B (FT06-11) Spatiotemporal imaging of airway epithelial cells
気道上皮細胞の 4D イメージング
○Masafumi Noguchi, Mitsuru Morimoto (RIKEN CDB)

P-113A A novel marker identifying the genuine population of the definitive endoderm cells
真の胚性内胚葉細胞外表面マーカーの同定
○Soichiro Ogaki, Mayu Moroka, Nobuaki Shiraki, Shoen Kume (Kumamoto Univ IMEG Dept. of Stem Cell Biol.)

P-114A Hepatocyte Growth Factor signaling is required for melanocyte incorporation in the non-sensory structures of mammalian cochlea
蝸牛血管条形成における HGF シグナルの役割
Shumei Shibata[2], Toru Miwa[1], Hsiao-Huei Wu[3], Pat Levitt[3], ○Takahiro Ohyama[1] (KSOM, USC[1], Oto, Med Kyushu Univ[2], SRI, CHLA[3])

P-115B (FT06-10) Investigation of role of a novel pancreatic beta cell gene
β 細胞特異的に発現する新規遺伝子の解析
○Hisayoshi Omori, Soichiro Ogaki, Nobuaki Shiraki, Kazuhiko Kume, Shoen Kume (IMEG, Kumamoto Univ)

P-116B (FT06-09) Elimination of an oral epithelia-specific *Shh* enhancer causes an extra premolar-like tooth in mouse
口腔上皮特異的な *Shh* エンハンサーの欠失による小臼歯様過剰歯の形成
○Tomoko Sagai, Takanori Amano, Akiteru Maeno, Yoichi Mizushina, Toshihiko Shiroishi (Mammal. Genet., Natl. Inst. Genet.)

P-117A TALEN mediated knockout zebrafish reveals the critical function of *r-spondin2* in the fin and vertebral skeletogenesis
TALEN 法で作製した *r-spondin2*- ノックアウトゼブラフィッシュは鰭と脊椎骨に異常を示す
Tatsumi Yoshinari[1], Hayato Yokoi[1], Masaru Matsuda[2], ○Tohru Suzuki[1] (Grad. Sch. of Agric. Sci., Tohoku Univ.[1], Ctr Biosci Res Edu, Utsunomiya Univ[2])

P-118A (SW1-09) Celf1 Regulates Endoderm Proliferation and Migration In Zebrafish
ゼブラフィッシュ胚における RNA 結合タンパク celf1 の内胚葉由来の器官形成に対する制御機構の解明

○Naoyuki Tahara, Yasumasa Bessho, Takaaki Mtatsui (NAIST)

P-119B Analysis of morphological changes of epidermal cells producing *C. elegans* sensory rays
C. elegans の感覚器を形成する表皮細胞の形態変化解析
○Shin Takagi, Hiroki Tanaka, Ayana Kobayashi (Div. of Biol. Sci. Nagoya Univ.)

P-120B Analysis of distribution of Wt1 expression cell in diaphragm development
横隔膜発生時における Wt1 発現細胞の分布解析
○Norifumi Tatsumi, Masataka Okabe (Dept. of Anat. Jikei Univ. Sch. of Med.)

P-121A (SW1-08) Unexpected role of blood platelets in lung development depending on a novel platelet activation receptor, CLEC-2
血小板が正常な肺発生を可能にする - 新規血小板活性化受容体 CLEC-2 の機能解析 -
○Nagaharu Tsukiji[1], Osamu Inoue[2], Shogo Tamura[1], Toshiaki Shirai[1], Katsue Inoue[1], Yukio Ozaki[1] (Department of Clinical and Laboratory Medicine, Faculty of Medicine, University of Yamanashi[1], Infection Control Office, University of Yamanashi Hospital, Facalty of Medicine, University of Yamanashi[2])

P-122A A regulatory mechanism of skeletal tissue size in the limb
○Yo-ichi Yamamoto-Shiraishi, Atsushi Kuroiwa (Div. of Biol.Sci., Grad. Sch. of Sci., Nagoya Univ.)

P-123B (FT06-08) The loss of Astrin suppresses ureteric bad branching in kidney development by apoptosis and decreased proliferation of matanephric mesenchyme (MM).
腎発生において Astrin 欠損は後腎間葉のアポトーシスと増殖不良によって尿管芽の分岐を抑制する
○Hidenori Yasuda, Yuki Tochigi, Kentaro Katayama, Hiroetsu Suzuki (Vet physiology, NVLU)

P-124B Zinc finger transcription factor sp7 is essential for zebrafish bone development
Pengfei Niu, ○Zhaomin Zhong, Guodong Huang, Shuhao Xu, Mingyong Wang, Yi Hou, Yilin Yan, Han Wang (CCC, Soochow Univ.)

P-125A (FT04-06) Genome-wide analysis of Hedgehog target genes using RNAi and RNA-seq in the spider *Parasteatoda tepidariorum*
オオヒメグモにおける RNAi と RNA-seq を利用したヘッジホッグシグナル標的遺伝子のゲノムワイドな探索
○Yasuko Akiyama-Oda, Hiroki Oda (JT Biohistory Res. Hall)

P-126A Xenopus Ubiquitin carboxy-terminal hydrolase 37 (XUch37) is required for the mesoderm pattering by regulating the formation of Tcf1/β-catenin complex
Wonhee Han, ○Jin-Kwan Han (POSTECH)

P-127B Cancelled

P-128B (FT04-05) Preferential protein flow in cellular proliferation zone of plant leaf primordia
葉原基の細胞増殖領域でみられるタンパク質の流れ
○Kensuke Kawade[1], Hirokazu Tanimoto[2] (RIKEN CSRS[1], Institut Jacques Monod[2])

P-129A (FT04-04) Vegetative origin of organizer cell differentiation in Dictyostelium
細胞性粘菌の増殖期に由来するオーガナイザー細胞の分化について
○Satoshi Kuwana[1], Masashi Fukuzawa[1,2] (UGAS, Iwate University[1], Hirosaki University[2])

P-130A Manipulation of gene expression by localized heat shock by infrared laser in *Drosophila*
○Guangxia Miao[1,2], Shigeo Hayashi[1,2] (RIKEN CDB[1], Department of Biology, Kobe University Graduate School of Science[2])

P-131B (FT04-03) Spatial localization of noncanonical Wnt proteins during the early *Xenopus* embryogenesis.
アフリカツメガエル初期胚における非標準経路 Wnt 蛋白質の空間的局在
○Yusuke Mii[1,2,3], Shinji Takada[1,2,3] (NIBB[1], OIIB[2], SOKENDAI[3])

P-132B Secreted decoy of insulin-receptor (SDR) positively regulates insulin/IGF signaling for neuroblast re-activation in Drosophila brain
ショウジョウバエ分泌型おとりインスリン受容体 SDR は、脳内のインスリンシグナルを正に制御することで神経幹細胞の増殖を誘導する
Takayuki Yamada, Naoki Okamoto, ○Takashi Nishimura (RIKEN CDB)

P-133A (SW1-10) Analysis of the Delta signaling as the reverse signaling of Notch during mouse development
マウス胚発生における Notch とは逆方向の Delta シグナル解析
○Yusuke Okubo[1], Katsuhide Igarashi[1], Yumiko Saga[2], Jun Kanno[1] (Div. of Cell. and Mol. Toxicol., NIHS[1], Div. of Mam. Dev., NIG[2])

P-134A (SW1-02) Apolipoprotein A-I is involvement in the liver regionalization via control BMP signaling.
Apolipoprotein A-I は BMP シグナルの調節を介して肝臓の領域化に働く。
○Satoru Shimura, Hiroyuki Kawahara, Kimiko Fukuda (Dept. Biol. Sci., Tokyo Metr. Univ.)

P-135B Metabolic profiling of brown adipose tissue during mouse development
マウス成長過程における褐色脂肪組織のメタボローム解析
○Hitomi Takada[1], Yasu-yuki Kida[1] (AIST[1], AIST[2])

P-136B Non-neuronal acetylcholine as an endogenous regulator of proliferation and differentiation of Lgr5-positive stem cells in mice
腸幹細胞システムを制御する非神経性アセチルコリンの役割
○Toshio Takahashi[1], Hiroe Ohnishi[2], Yuki Sugiura[3], Kurara Honda[3], Makoto Suematsu[3], Takashi Kawasaki[2], Tomonori Deguchi[2], Takeshi Fujii[4], Kaoru Orihashi[5], Yoshitaka Hippo[5], Takehiro Watanabe[1], Tohru Yamagaki[1], Shunsuke Yuba[2] (Suntory Found. for Life Sci.[1], AIST[2], DBSM, Keio Univ.[3], DPFPS, Doshisha Women's College[4], DCDS, Natl. Cancer Res. Inst.[5])

P-137A (FT04-02) The Interplay between MT1-MMP and ADAMs in Vascular Development
Hoi Leong Xavier Wong, ○Zhongjun Zhou (HKU)

P-138A Root-knot nematodes utilize plant CLE signaling for infection process
サツマイモネコブ線虫は植物 CLE シグナル経路を利用して寄生する
○Yasuka Yamaguchi, Yumi Kanemaru, Chika Ejima, Shinichiro Sawa (GSST, Kumamoto Univ.)

P-139B The role of heparan sulfate proteoglycan nanostructures in morphogen gradient formation and signaling reception
○Takayoshi Yamamoto[1], Yusuke Mii[2], Masanori Taira[1] (Lab. of Mol. Biol., Dept. of Biol. Scis., Grad. Sch. of Sci., Univ. of Tokyo[1], Div. of Mol. and Dev. Biol., NIBB[2])

P-140B Interplay between ER stress and hypoxia pathways in chondrocytes
○Qing Yao, Wilson Chan, Vivian Ng, Zhijia Tan, Kwok Tsang, Kathryn Cheah, Danny Chan (Department of Biochemistry, Faculty of Medicine, The University of Hong Kong)

P-141A (FT04-01) *ppk-1*/PIP5K inhibits the *cwn-2*/Wnt function to promote the correct polarity orientation of an epithelial stem cell in *C. elegans*
ppk-1/PIP5K は *cwn-2*/Wnt の機能を抑制することで線虫の表皮系幹細胞の正確な極性方向を誘導する
○Naoki Yoshida[1,2], Hitoshi Sawa[1,2] (SOKENDAI[1], NIG[2])

P-142A (FT01-09) Establishing a basis for molecular studies of Madagascar ground gecko – a model case of how modern sequencing can help next-generation developmental biology
○Yuichiro Hara, Miyuki Noro, Shigehiro Kuraku (GRAS, RIKEN CDB)

P-143B Expression profile of POU family class V transcription factor in the ontogeny of *Cynops pyrrhogaster*.
アカハライモリの個体発生における POU ファミリークラス V 転写因子の発現プロファイルの解析
○Shun Hasegawa, Yuuki Ootani, Tsutomu Kinoshita (Dept. Life Sci. Rikkyo Univ.)

P-144B (FT01-10) Development of pharyngeal derivatives in Xenopus laevis.
アフリカツメガエルにおける鰓性器官の発生
○Naoya Iimura, Hideho Uchiyama (YOKOHAMA CITY UNIV)

P-145A (FT01-11) Functional interference of Pax proteins in Drosophila accessory gland development
○Li Li, Lei Xue (SLST, Tongji Univ)

P-146A (FT01-12) Single-minded gene is required for specification of ventral cell by determining on ventral midline cell fate in Daphnia magna
オオミジンコ Single-minded ホモログは腹部正中線を決定し、腹部細胞の特異化に必須である
○Shinichi Morita[1], Chisato Hiraga[1], Yasuhiro Shiga[1], Shinichi Tokishita[1], Taisen Iguchi[2], Toshihiro Ohta[1] (LEMB at TUPS[1], Div. of Mol. Env. End., NIBB[2])

P-147B Hox genes of the hagfish and the early genomic evolution of vertebrates
○Juan Pascual-Anaya[1], Antonio Perez-Pulido[2,3], Fumiaki Sugahara[4], Shigeru Kuratani[1] (RIKEN CDB[1], CABD[2], UPO-CSIC-JA[3], HCM[4])

P-148B (FT01-13) Activation of LTR retrotransposons and trophoblast-specific genes by the SRA protein Np95/Uhrf1 during murine placental development
○Jafar Sharif, Kayoko Katsuyama, Yoko Mizutani-Koseki, Tomoyuki Ishikura, Takanori Hasegawa, Haruhiko Koseki (RIKEN IMS)

P-149A (FT01-14) Two distinct cell populations in lamprey mandibular arch, with a revision of the heterotopic scenario of the vertebrate jaw evolution
ヤツメウナギ顎骨弓における 2 つの異なる細胞集団の発見と顎進化に関する考察
Miho Yoshimura, Daichi Suzuki, ○Hiroshi Wada (Univ. of Tsukuba)

P-150A (FT01-01) Novel white plumage mutation (*EDBRB2; mo*^{w}) suppresses dermal hyperpigmentation in inner organs (Fibromelanosis) in Silky chicken
ウコッケイの過剰色素産生における EDN3-EDNRB2 シグナル伝達系の関与
○Tomoko Adachi[1], Ai Shinomiya[2], Keiji Kinoshita[3], Makoto Mizutani[3], Mikiharu Nakano[3], Yoichi Matsuda[3], Toyoko Akiyama[1] (Dept. Biol., Keio Univ.[1], NIBB[2], Avian Biosci. Res. Center, Nagoya Univ.[3])

P-151B Involvement of ERK MAPK signaling in the expression of mesoderm genes in embryonic stem cells
ES 細胞における中胚葉遺伝子発現への ERK MAPK シグナル経路の関与
○Yuhei Ashida, Eisuke Nishida (Dept. of Cell and Dev. Biol., Grad. Sch. of Biostudies, Kyoto Univ)

P-152B Disruption of human XLID gene results in deficiency of early extra-embryonic progenitor maintenance
○Chun-Yu Chen, I-Shing Yu, Yu-Chen Hsu, Chien-Yu Lin, Ming-Shian Tsai, Shu-Wha Lin (CLSMB, NTU)

P-153A Functional analyses of a novel insulin-like factor
新規インスリン様因子の機能解析
○Yoshikazu Haramoto[1], Shuji Takahashi[2], Yasuko Onuma[1], Yuzuru Ito[1], Makoto Asashima[1] (SCRC, AIST[1], Inst. for Amphibian Biology, Grad. Sch. of Sci. Hiroshima Univ.[2])

P-154A (SW2-03) Instructive role of Lhx1 on the formation of organizer and three germ layers in epiblasts
エピブラストで Lhx1 はオーガナイザー、3 胚葉形成において指令的な役割を持つ。
○Akira Hasegawa[1], Tasuku Yoshimoto[1], Nobuhito Ikeda[1], Takafumi Nakamura[2], Ichiro Hisatome[1], Yasuaki Shirayoshi[1] (DRMT, Tottori Univ.[1], DIB, Tottori Univ.[2])

P-155B OTX2 and DKK1 Exhibit the Earliest Asymmetric Expression in Distal Visceral Endoderm.
OTX2 と DKK1 は Distal Visceral Endoderm において最も早く非対称に発現する遺伝子である
○Hideharu Hoshino[1], Go Shioi[2], Hiroshi Kiyonari[2], Takaya Abe[2], Kazuki Nakao[2], Shinichi Aizawa[1] (RIKEN CDB[1], LARGE, CDB, RIKEN[2])

P-156B (SW1-01) How organ size is determined in zebrafish Kupffer's vesicle?
ゼブラフィッシュのクッペル胞形成において、器官の大きさはどのように決定されるのか？
○Hiroshi Ishikawa[1], Sohei Yamada[1], Naoyuki Tahara[1], Tatsuro Matta[1], Eri Sumino[1], Yasumasa Bessho[1], Yoichiro Hosokawa[2], Takaaki Matsui[1] (Gene Regulation Research, Graduate School of Biological Sciences, NAIST[1], Green Bio Nano, Graduate School of Materials Science, NAIST[2])

P-157A Anterior-posterior (A-P) axis formation in soft-shelled turtle and gecko
スッポンとヤモリにおける前後軸形成
○Eriko Kajikawa[1], Michio Yoshida[1], Daisuke Kurokawa[1,2], Daisuke Yamamoto[1], Miyuki Noro[1,3], Shigehiro Kuraku[3], Shinichi Aizawa[1] (Lab. for Vertebrate Body Plan, RIKEN CDB[1], MMBS, Univ. Tokyo[2], Genome Resource and Analysis Unit, RIKEN CDB[3])

P-158A Functional analyses of *Mab21l2* during intestine development
消化管形成過程における *Mab21l2* の機能解析
○Chie Kobayashi, Yohei Saito, Takuya Kojima, Naoki Takahashi (Grad. Sch. Agr. Life Sci., Univ Tokyo)

P-159B (FT01-02) PRL is involved in the development of mesenchymal cells in Strongylocentrotus purpuratus
○Li-Yi Lin[1], Han-Ru Li[2], Ming-Der Lin[1], Yi-Hsien Su[2] (MBHG, Tzu-Chi University, Taiwan[1], ICOB, Academia Sinica, Taiwan[2])

P-160B Functions of Polycomb group gene in regulation of Hox gene expression in a primitive mode of insect embryogenesis in the cricket *Gryllus bimaculatus*
原始的発生様式をとる昆虫の胚発生過程におけるポリコーム遺伝子群によるホメオティック遺伝子発現の制御機能
○Yuji Matsuoka[1], Tetsuya Bando[2], Takahito Watanabe[3], Sumihare Noji[1], Taro Mito[1] (Dept. of Bio. Sci. and Tech., Fact. of Eng., Tokushima Univ.[1], Grad. School of Med, Dent. and Pharm. Sci., Okayama Univ.[2], Center for Collab. among Agri., Indust. and Commerce, Tokushima Univ.[3])

P-161A Development of circadian rhythm in the suprachiasmatic nuclei in a marine fish, flounder (*Paralichthys olivaceus*) embryos
ヒラメ孵化仔魚における視交叉上核での概日リズムの発生
○Makoto Mogi[1], Susumu Uji[2], Hayato Yokoi[1], Tohru Suzuki[1] (Grad. Sch. Agr. Sci., Tohoku Univ.[1], NRIA[2])

P-162A The effects of rapamycin and Ex-527 on early embryogenesis in Xenopus
ツメガエル初期発生におけるラパマイシン及び Ex-527 の影響
Yoshihisa Ohata[2], Shinya Matsukawa[3], Yuki Moriyama[4], Tatsuo Michiue[3], ○Kenta Morimoto[1], Hiroki Kuroda[1] (Environment & Info. Studies, Keio Univ.[1], Graduate School of Science and Technology, Shizuoka University[2], Department of Life Sciences, Graduate School of Arts and Sciences, The University of Tokyo[3], Howard Hughes Medical Institute and Department of Biological Chemistry, University of California, Los Angeles[4])

P-163B Dynamics of Histone H2A Variants in the Mouse Somatic Cell Nuclear Transfer Embryos by the Treatment of HDAC Inhibitors
ヒストン脱アセチル化酵素阻害剤によるマウス体細胞核移植胚におけるヒストン H2A バリアントの動態
○Masataka Nakaya[1], Rika Azuma[1], Masayuki Anzai[2], Satoshi Kishigami[1], Yoshihiko Hosoi[1,2], Masahiko Harata[3], Tasuku Mitani[2] (Grad. Sch. of Biol.-Oriented Sci. Technol., Kinki Univ[1], Inst. Adv. Technol., Kinki Univ[2], Grad. Sch. of Agri. Sci., Tohoku Univ[3])

P-164B (FT01-03) Anterior/posterior patterning of the dorsal mesoderm in vertebrates evolved as a novelty from the ancestral chordate mesoderm by heterochronic/heterotopic shifts
脊椎動物背側中胚葉の前後軸パターン形成は祖先的脊索動物のヘテロクロニック及びヘテロトピックシフトによって進化した新規形質である。
○Takayuki Onai, Toshihiro Aramaki[2], Hidehiko Inomata[3], Tamami Hirai[1], Shigeru Kuratani[1] (RIKEN CDB[1], Graduate School of Frontier Biosciences, Osaka University[2], Laboratory for Axial Pattern Dynamics, RIKEN Center for Developmental Biology[3])

P-165A (FT01-04) Mechanism and significance of Wnt protein distribution in the mouse spinal cord
マウス神経管における Wnt タンパク質分布の制御と意義
○Takuma Shinozuka[1,2], Ritsuko Takada[2], Shinji Takada[1,2] (Dept. Basic Biology, SOKENDAI[1], NIBB[2])

P-166A (FT01-05) Cell surface epimorphin triggers cardiomyocyte differentiation in embryonal carcinoma P19CL6 cells
細胞膜エピモルフィンは胚性癌細胞 P19CL6 の心筋分化を引き起こす
○Takashi Tagawa, Natsumi Hagiwara, Yohei Hirai (Kwansei Gakuin Univ.)

P-167B Mammalian GyrI-like gene has an essential role in early mouse embryonic development
大腸菌トポイソメラーゼ Gyrase を阻害する GyrI タンパク質の哺乳類ホモログはマウス胚発生で必須な役割を担う
○Sho Takaoka[1,2], Masayuki Yokoi[2], Akira Nakanishi[3], Masamichi Yamamoto[4], Fumio Hanaoka[1,2] (Grad. Sch. Front. Biosci., Osaka Univ.[1], Fac. Sci., Gakushuin Univ.[2], Dep. Mol. Genetics, Med. Res. Inst., Tokyo Medical & Dental Univ.[3], Advanced Scientific Research Leaders Development Unit, Gunma Univ.[4])

P-168B Establishment of vertebrate body plan via coordinated regulation of dorsal-ventral and anterior-posterior patterning during early *Xenopus* embryogenesis
胚発生初期に背腹と頭尾のパターン形成を統合する分子機構
○Kimiko Takebayashi-Suzuki, Hidenori Konishi, Atsushi Suzuki (Inst. for Amphibian Biol., Hiroshima Univ. Grad. Sch. of Sci.)

P-169A (FT01-06) The establishment of the Left-right asymmetry in sea urchin embryo
ウニ胚における左右非対称性決定機構
○Ayumi Takemoto[1], Fumie Shimono[2,3], Tatsuo Miyamoto[4], Akinori Awazu[1], Hiraku Nishimori[1], Takashi Yamamoto[1], Naoaki Sakamoto[1] (Dept. of Math. and Life Sci., Hiroshima Univ.[1], Hiroshima Kokudaiji High Sch.[2], Edu. Proj. for Excit. Sci. Hiroshima Univ.[3], Dept. of Genet. and Cell Biol., Res. Inst. for Radiation Biol. and Med., Hiroshima Univ.[4])

P-170A Analysis of expression patterns of Cdx2 and cell movement in mouse preimplantation embryos by live-cell imaging
ライブイメージングによるマウス着床前胚における Cdx2 遺伝子の発現局在の観察
○Yayoi Toyooka, Sanae Oka, Toshihiko Fujimori (NIBB)

P-171B (FT01-07) Targeted mutagenesis of Xenopus laevis gene by CRISPR/Cas system
CRISPR/Cas システムによるアフリアツメガエル遺伝子への変異の導入
Mari Yamada, ○Minoru Watanabe (Fac.of Integrated Arts & Scis., The Univ. of Tokushima.)

P-172B (FT01-08) Ezrin mediates the function of Inpp5e in ciliogenesis and polycystic kidney disease
○Wenyan Xu, Miaomiao Jin, Fan Zhang, Hong Wang, Ying Cao (SLST, Tongji Univ.)

P-173A (SW1-06) A brand-new model of amphibian gastrulation
両生類における新しい原腸形成モデル
○Takanori Yanagi[1,2], Chikara Hashimoto[1,2] (Dept. of Biol. Sci., Sch. of Sci, Osaka Univ.[1], JT Biohistory Research Hall[2])

P-174A Comparative gene expression analysis in anterior-posterior axis formation of non-rodent mammals
非齧歯類哺乳動物の前後軸形成における遺伝子発現の比較解析
○Michio Yoshida[1], Eriko Kajikawa[1], Daisuke Yamamoto[1], Daisuke Kurokawa[2], Akira Onishi[3], Tomoyuki Tokunaga[4], Shinichi Aizawa[1] (Body plan, CDB, RIKEN[1], MMBS, Tokyo Univ.[2], NIAS[3], NIAS[4])

P-175B Analysis of the function of R31 limb specific enhancer of Fgf10.
Fgf10 肢芽特異的エンハンサー R31 の機能解析
○Chisa Ando, Yu-hei Kohara, Yo-ichi Yamamoto-Shiraishi, Atsushi Kuroiwa (Div. of Biol. Sci., Grad. Sch. of Sci., Nagoya Univ)

P-176B (FT02-01) Nano scale morphogenesis of porous extracellular matrix in *Drosophila* olfactory sensilla
ショウジョウバエ嗅感覚毛における多孔性細胞外マトリックスのナノスケールでの形態形成
○Toshiya Ando[1], Kazuyo Misaki[2], Shigenobu Yonemura[2], Shigeo Hayashi[1] (RIKEN CDB, Laboratory for Morphogenetic Signaling[1], RIKEN CDB, Electron Microscpe Laboratory[2])

P-177A Fat body-derived apical extracellular matrix enzyme is transported to the airway lumen and regulates tube morphogenesis
○Bo Dong, Shigeo Hayashi (RIKEN CDB)

P-178A (FT02-02) Comparative analyses of RTFL peptide family on control of plant organogenesis
○Pin Guo[1], Asami Yoshimura[2], Naoko Ishikawa[3], Takahiro Yamaguchi[4], Keiko Sakakibara[2], Takayuki Kohchi[5], Youhao Guo[1], Hirokazu Tsukaya[2] (Wuhan University[1], Department of Biological Sciences, Graduate School of Science, University of Tokyo[2], Saitama Museum of Natural History[3], Acel, Inc.[4], Graduate School of Biostudies, Kyoto University[5])

P-179B (FT02-03) A Mathematical Model of Polygonal Cells for a Three-dimensionally Undulated Cell-sheet
3 次元空間で変形自由自在の細胞シートをつくる細胞形態形成モデル
○Hisao Honda[1,2] (Medicine, Kobe Univ.[1], RIKEN CDB[2])

P-180B αcells regulate pancreatic progenitor cell expansion and endocrine cell number through Wnt4 expression during early pancreas development
α 細胞は、Wnt4 の発現を介して、膵臓前駆細胞の増殖と内分泌細胞の数を制御している
○Keiichi Katsumoto[1], Jingdong Shan[2], Carsten Gustavsen[1], Palle Serup[1], Seppo Vainio[2], Anne Grapin-

Botton[1] (Danstem, University of Copenhagen[1], Department of Medical Biochemistry and Molecular Biology, University of Oulu[2])

P-181A (FT02-04) The Quail Polydactyly Mutant, HMM, shows Inactivation of SHH Signaling
多指症を発症する HMM ウズラ変異体では SHH シグナルが不活性化している
○Kazuki Kawamura[1], Yoshiyuki Matsubara[1], Mikiharu Nakano[2], Masaoki Tsudzuki[3], Yoichi Matsuda[2,4], Atsushi Kuroiwa[1], Takayuki Suzuki[1] (Grad School of Sci, Nagoya Univ[1], ABRC, Grad School of Bioag Sci, Nagoya Univ[2], Grad School of Biosphere Sci, Hiroshima Univ[3], Grad School of Bioag Sci, Nagoya Univ[4])

P-182A (FT02-05) Toward understanding the mechanisms that restricts where spicules are held up during spiculous skeleton construction of sponges
カイメンの骨片が立てられる位置を決める機構の解明に向けて
○Kouji Kishimoto, Chihiro Inui, Kiyokazu Agata, Noriko Funayama (Dept. of Biophysics, Graduate School of Science, Kyoto Univ.)

P-183B Chirality in cell plane is associated with collective migration of epithelial cells
回転する器官形成を支える上皮細胞集団移動のしくみ
Ayako Isomura, Emi Maekawa, Aimi Tsukioka, ○Erina Kuranaga (Lab Histogenetic Dyn, RIKEN CDB)

P-184B Early Zebrafish Development, a Screening Model to Identify Effects of Endocrine Disrupting Chemicals
○Kp Lai[1], Bhy Yeung[2], Ht Wan[2], Wkf Tse[2], Ckc Wong[2] (HKU[1], BIOL, HKBU[2])

P-185A (FT02-06) Characterization of polr1c in facial development related to the Treacher Collins Syndrome
○Marco CC Lau, William KF Tse (BIOL, HKBU)

P-186A (FT02-07) Heterochrony in initiation of paraxial *Gdf11* expression specifies unique hindlimb positioning in tetrapods
Gdf11 発現開始タイミングのヘテロクロニーが四肢動物の後肢の位置の多様性を生み出す
○Yoshiyuki Matsubara[1], Ayumi Hattori[2], Yusuke Watanabe[2], Atsushi Sakai[3], Guojun Sheng[4], Toshihiko Ogura[2], Atsushi Kuroiwa[1], Takayuki Suzuki[1,5] (Div of Biol Sci, Grad Sch of Sci, Nagoya Univ.[1], IDAC, Tohoku Univ.[2], The Japan Snake Institute[3], RIKEN CDB[4], JST PRESTO[5])

P-187B In vivo study of Msx1 gene in mice using CRISPR/Cas system
○Silvia Mitsui[1], Akihiro Yasue[1], Issei Imoto[2], Seiichi Oyadomari[3], Sumihare Noji[4], Taro Mito[4], Eiji Tanaka[1] (Department of Orthodontics and Dentofacial Orthopedics, Institute of Health Biosciences, The Univ. of Tokushima Graduate School[1], Department of Human Genetics and Publich Health, Institute of Health Biosciences, The University of Tokushima Graduate School[2], Division of Molecular Biology, Institute for Genome Research, The University of Tokushima[3], Department of Life Systems, Institute of Technology and Science, The University of Tokushima[4])

P-188B (FT02-08) Role of anteroposterior tissue polarity in elongation movement of *Xenopus* posterior neural tissue
ツメガエル後方神経組織の伸長運動における組織極性の働き
○Hiromasa Ninomiya (AIST)

P-189A Overview of twinning formation in Xenopus laevis embryo
アフリカツメガエル 2 次胚の生じ方
○Eiji Sato[1], Yasuko Onuma[2], Tadayoshi Uezato[1], Naoyuki Miura[1], Yuzuru Ito[2] (Dept.of Biochem., Hamamatsu Univ.Sch.of Med.[1], AIST[2])

P-190A Genetic evidence that Hox embedded microRNAs are required for axial body patterning in mouse

○Tempei Sato[1,2,3], Moe Tamano[1], Masafumi Inui[1], Shuji Takada[1], Hiroshi Asahara[1,2,4] (Dept. of Syst. BioMed., Natl. Res. Inst. for Child Health and Dev.[1], Dept. of Syst. BioMed., Tokyo Med. and Dent. Univ.[2], JSPS Research Fellow[3], CREST, JST[4])

P-191B Homeotic transformation of the upper jaw into lower jaw-like structures in Dlx5-overexpressing mice.
Dlx5 過剰発現マウスにおける上顎の下顎構造へのトランスフォーメーション
○Miki Shimizu[1], Taro Kitazawa[1], Yumiko Kawamura[1], Nicolas Narboux-Nme[2], Giovanni Levi[2], Yasunobu Uchijima[1], Yukiko Kurihara[1], Hiroki Kurihara[1] (Dept. Physiol. Chem. & Metab., Grad. Sc. of Med., Univ. of Tokyo[1], UMR7221 CNRS-MNHN[2])

P-192B (FT02-09) Latrophilin-2 is involved in the migration and differentiation of neural crest cells.
Latrophilin-2 は神経堤細胞の遊走、分化に関与する。
○Kosuke Tanegashima[1], Marianna Suzuki[1,2], Kenji Suzuki[1], Tatsuo Michiue[3], Takahiko Hara[1] (Stem Cell Project, Tokyo Metropol. Inst. Med. Sci.[1], Grad. Sch. of Tokyo Med. Dent. Univ.[2], Dep. of Life Sci., Grad. Sch. of Arts and Sci., Univ. of Tokyo[3])

P-193A Role of *Mab21l2* in Palatogenesis
○Wai Hung Tsang, Fei Sun, King Lau Chow (LIFS, HKUST)

P194A (FT02-10) Loss-of-function analysis of deubiquitylating enzymes reveals their importance in zebrafish craniofacial development
○William Ka Fai Tse (BIOL, HKBU)

P-195B (FT02-12) The role of zebrafish cdx1b in left-right patterning
○Chun-Shiu Wu, Sheng-Ping L. Hwang, Chang-Jen Huang (IBC, NTU)

P-196B LGR4 is required for the development of sequential molars.
新規膜受容体 LGR4 はマウス臼歯の連続的発生を制御する
○Yukiko Yamakami, Kazunori Oyama, Yasuaki Mohri, Katsuhiko Nishimori (Lab. of Mol. Biol., Grad. Sch. of Agri. Sci., Tohoku Univ.)

P-197A (FT02-13) Discontinuous Transitions of Phyllotaxis: The Cases of *Thuja occidentalis* (Cupressaceae) and *Diphasiastrum digitatum* (Lycopodiaceae)
○Xiaofeng Yin[1,2,4], Christian Lacroix[2], Denis Barabe[3], Roger Meicenheimer[4] (Dept. Bio. Sci., Gra. Sch. Sci., Univ. Tokyo[1], Department of Biology, University of Prince Edward Island. Canada[2], Plant Biology Research Institute, Montreal Botanical Garden. Canada[3], Department of Botany, Miami University. USA[4])

P-198A (FT02-14) Identification of ocular- or blind-side enriched genes in flounder metamorphosis
ヒラメ変態過程において有眼側および無眼側で発現する遺伝子の解析
○Hayato Yokoi, Xiaoming Wu, Yoshifumi Sakai, Tohru Suzuki (Grad Sch Agricul Sci, Tohoku Univ)

Technical Workshop: Fundamentals of Quantitative Image Analysis

May 27 (Tue) 13:00 〜 16:00 Room A
Chairpersons: Hiroshi Koyama (NIBB)
Kagayaki Kato (NINS/CNSI)

Image processing has been recognized as an indispensable tool in the field of developmental biology, largely due to the evolution of microscopies. The basic concepts and techniques, however, do not seem to be shared among developmental biologists. Moreover, interpretations of image processing/analysis results have yet to be discussed. This workshop will provide a basic lecture and a short practice for image processing/analysis, and a few advanced lectures. We recommend you to attend the practice with your laptop in which the ImageJ software and sample images (available at our web site; http://is.cnsi.jp/…) are installed in advance. The advanced lectures will not only provide practical cases of image processing/analysis but also cover subsequent statistical analyses and statistical/mathematical modellings.
Supported by Grant-in-Aid for Scientific Research on Innovative Areas “Cross-talk between moving cells and microenvironment as a basis of emerging order in multicellular system”

13:00-13:10 Introduction

TW01-1 13:10-14:10 Quantitative image processing: lecture and practice
定量的画像処理 : 講義と演習
○Yoshitaka Kimori (CNSI/NINS)

14:10-14:20 Short break

TW01-2 14:20-14:40 Quantitative image analysis of collective cell migration
細胞集団移動様式の定量的画像解析
○Kagayaki Kato (NINS/CNSI)

TW01-3 14:40-15:10 Image analysis for plant cell biology
画像解析と植物細胞の生物学
○Natsumaro Kutsuna (GSFS, Univ. Tokyo)

TW01-4 15:10-15:40 Analysis of Multicellular Dynamics with Image Processing
画像解析による多細胞動態の解析
○Kazuhiro Aoki (Grad. Sch. Med., Kyoto Univ.)

15:40-16:00 Discussion

Satellite Workshops (in Japanese)

SW01: Morphogenesis and Signaling

May 27 (Tue) 13:00 〜 16:00 Room B
Chairpersons: Shunya Hozumi (Hiroshima Univ.)
Yo-ichi Yamamoto-Shiraishi (Nagoya Univ.)
Katsuyoshi Takaoka (Osaka Univ.)
Takamasa Mizoguchi (Chiba Univ.)

SW1-01 (P156B) 13:00-13:15
How organ size is determined in zebrafish Kupffer's vesicle?
ゼブラフィッシュのクッペル胞形成において、器官の大きさはどのように決定されるのか？
○Hiroshi Ishikawa[1], Sohei Yamada[1], Naoyuki Tahara[1], Tatsuro Matta[1], Eri Sumino[1], Yasumasa Bessho[1], Yoichiro Hosokawa[2], Takaaki Matsui[1] (Gene Regulation Research, Graduate School of Biological Sciences, NAIST[1], Green Bio Nano, Graduate School of Materials Science, NAIST[2])

SW1-02 (P134A) 13:15-13:30
Apolipoprotein A-I is involvement in the liver regionalization via control BMP signaling.
Apolipoprotein A-I は BMP シグナルの調節を介して肝臓の領域化に働く。
○Satoru Shimura, Hiroyuki Kawahara, Kimiko Fukuda (Dept. Biol. Sci., Tokyo Metr. Univ.)

SW1-03 (P107B) 13:30-13:45
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、ニワトリ胚神経管の背腹軸に沿った形態形成に関与している
○Rie Kawano, Kunimasa Ohta, Naofumi Ito (Dev. Neurobio. Kumamoto University)

SW1-04 (P039B) 13:45-14:00
Analysis of the mechanism to enrich a chromodomain protein MRG-1 into the primordial germ cells in *C.elegans*
線虫 *C.elegans* における、クロモドメインタンパク MRG-1 の始原生殖細胞への限局メカニズムの解析
○Takashi Miwa, Kunio Inoue, Hiroshi Sakamoto, Teruaki Takasaki (Kobe Univ.)

SW1-05 (P049A) 14:00-14:15
Reaction-diffusion pattern in shoot apical meristem of plants
植物茎頂分裂組織における反応拡散パターン
○Hironori Fujita[1], Masayoshi Kawaguchi[1,2] (Natl. Inst. Basic Biol.[1], Grad. Univ. Adv. Stud.[2])

SW1-06 (P173A) 14:15-14:30
A brand-new model of amphibian gastrulation
両生類における新しい原腸形成モデル
○Takanori Yanagi[1,2], Chikara Hashimoto[1,2] (Dept. of Biol. Sci., Sch. of Sci, Osaka Univ.[1], JT Biohistory Research Hall[2])

SW1-07 (P031B) 14:30-14:45
Replication-coupled passive DNA demethylation for the erasure of genome imprints in mice
ゲノムインプリント消去における受動的脱メチル化の寄与
○Saya Kagiwada[1,2], Kazuki Kurimoto[1,2], Fumiyoshi Ishidate[3], Mitinori Saitou[1,2,4,5] (Kyoto Univ.[1], ERATO, Kyoto[2], CeMI, Kyoto Univ.[3], CiRA, Kyoto Univ.[4], iCeMS, Kyoto Univ.[5])

SW1-08 (P121A) 14:45-15:00 Unexpected role of blood platelets in lung development depending on a novel platelet activation receptor, CLEC-2
血小板が正常な肺発生を可能にする - 新規血小板活性化受容体 CLEC-2 の機能解析 -
○Nagaharu Tsukiji[1], Osamu Inoue[2], Shogo Tamura[1], Toshiaki Shirai[1], Katsue Inoue[1], Yukio Ozaki[1] (Department of Clinical and Laboratory Medicine, Faculty of Medicine, University of Yamanashi[1], Infection Control Office, University of Yamanashi Hospital, Facalty of Medicine, University of Yamanashi[2])

SW1-09 (P118A) 15:00-15:15 Celf1 Regulates Endoderm Proliferation and Migration In Zebrafish
ゼブラフィッシュ胚における RNA 結合タンパク celf1 の内胚葉由来の器官形成に対する制御機構の解明
○Naoyuki Tahara, Bessho Yasumasa, Takaaki Mtatsui (NAIST)

SW1-10 (P133A) 15:15-15:30 Analysis of the Delta signaling as the reverse signaling of Notch during mouse development
マウス胚発生における Notch とは逆方向の Delta シグナル解析
○Yusuke Okubo[1], Katsuhide Igarashi[1], Yumiko Saga[2], Jun Kanno[1] (Div. of Cell. and Mol. Toxicol., NIHS[1], Div. of Mam. Dev., NIG[2])

SW02: Stem Cells and Neural Development

May 27 (Tue) 13:00 ～ 16:00 Room C
Chairpersons: Tomoyasu Shinoda (Nagoya Univ.)
Yayoi Toyooka (NIBB)
Hitoshi Yokoyama（Tohoku Univ.）
Kenshiro Hara (NIBB)

SW2-01 (P068B) 13:00-13:15 Strain-dependent embryonic lethality induced by flanking genes in homozygous *ST8sia2*-deficient mice
ST8sia2 ノックアウトマウスにおける系統特異的フランキング遺伝子領域の胚性致死に及ぼす影響
○Keisuke Ikegami[1], Kazumasa Saigoh[2], Mamoru Nagano[1], Susumu Kusunoki[2], Yasufumi Shigeyoshi[1] (Dept. Anato. Neurobiol., Kinki Univ. Facul. Med.[1], Dept. Neurology., Kinki Univ. Facul. Med.[2])

SW2-02 (P018A) 13:15-13:30 PRDM14 promotes naïve pluripotency through TET-BER-mediated active demethylation
PRDM14 による TET-BER 経路を介した多能性獲得機構の解明
○Jun Nakamura, Naoki Okashita, Yoshiyuki Seki (K.G. Univ.)

SW2-03 (P154A) 13:30-13:45 Instructive role of Lhx1 on the formation of organizer and three germ layers in epiblasts
エピブラストで Lhx1 はオーガナイザー、3 胚葉形成において指令的な役割を持つ。
○Akira Hasegawa[1], Tasuku Yoshimoto[1], Nobuhito Ikeda[1], Takafumi Nakamura[2], Ichiro Hisatome[1], Yasuaki Shirayoshi[1] (DRMT, Tottori Univ.[1], DIB, Tottori Univ.[2])

SW2-04 (P050A) 13:45-14:00 CARL: a newly developed transcriptome assembler for non-model organisms
CARL: 非モデル生物用新型 de novo トランスクリプトームアセンブラー
○Makoto Kashima, Suguru Kato, Eri Kawaguchi, Hayoung Lee, Kiyokazu Agata, Norito Shibata (DBGS, Kyoto Univ.)

SW2-05 (P087B) 14:00-14:15 Semaphorin/plexin signaling regulates the development of the amygdala-BNST network
セマフォリン / プレキシン シグナルは扁桃体と分界条床核との接続を制御する
○Fumikazu Suto[1], Masahumi Kawaguchi[1], Noriko Osumi[2], Noritaka Ichinohe[1] (NINS, NCNP[1], Div. Dev. Neurosci., Tohoku Univ. Grad. Sch. of Med.[2])

SW2-06 (P001A) 14:15-14:30 A classical niche for spermatogonial stem cells in the proximal tip of the seminiferous tubules in mammalian testes
曲精細管の末端部における古典的な精子幹細胞ニッチの発見
○Yoshimi Aiyama, Yoshiakira Kanai (Dept. of Vet. Anat, The Univ. of Tokyo)

SW2-07 (P094A) 14:30-14:45 Conserved roles of PRDM14 orthologues in DNA demethylation and pluripotency in embryonic stem cells
種間比較を用いた PRDM14 の機能解析
○Shota Hashimoto, Akari Shirakami, Yoshiyuki Seki (K.G. Univ)

SW2-08 (P088B) 14:45-15:00 Establishment of neural circuit by interaction between cells of different origins
由来の異なる細胞同士の相互作用による神経回路の形成機構
○Takumi Suzuki[1], Masako Kaido[1], Rie Takayama[1], Makoto Sato[1,2] (Brain/Liver Center, Kanazawa Univ[1], PRESTO, JST[2])

SW2-09 (P022A) 15:00-15:15 Transgenic imaging and tracing of the wound epidermis during zebrafish fin regeneration
ゼブラフィッシュ再生傷上皮のトランスジェニックイメージングと細胞系譜解析
○Eri Shibata[1], Kazunori Ando[1], Natsumi Horita[1], Gembu Abe[2], Koichi Kawakami[2], Akira Kudo[1], Atsushi Kawakami[1] (Tokyo tech[1], NIG[2])

SW2-10 (P084B) 15:15-15:30 Axonal mRNAs encoding transcription factors in the tectum of chick embryos
ニワトリ胚中脳視蓋でみられる転写因子をコードする軸索性 mRNA
○Nozomi Onodera[1,2], Hiroshi Nakata[2], Miwa Watanabe[3], Yasuhiro Itoh[4], Isato Araki[1,2] (UGAS, Iwate Univ[1], Dept Chem Bioeng, Fac Eng, Iwate Univ[2], Tech Div, Fac Eng, Iwate Univ[3], Grad Sch Pharm Sci, Univ Tokyo[4])

SW2-11 (P028B) 15:30-15:45 Distal blastema is a signaling center that directs cell proliferation during zebrafish fin regeneration
ヒレ再生で先端再生芽は細胞増殖を指令する細胞集団である
○Yuki Yokota[1], Natsumi Horita[1], Gembu Abe[2], Koichi Kawakami[2], Akira Kudo[1], Atsushi Kawakami[1] (Dept. Biol. Info., Tokyo Inst. Tech[1], National Institute of Genetics[2])