Saturday, October 13th; 12:40-13:30 Plenary Lecture

Chair: Satoshi Goto

PL-1
Transition from aquatic to terrestrial life and evolution of the vertebrate respiratory organs
Masataka Okabe[1)]
1) Department of Anatomy, The Jikei University School of Medicine, Japan

Coffee Break 13:30-13:40

Saturday, October 13th; 13:40-15:10 Oral Session 1

Chair: Masayuki Miura

O-1 (P-1) 13:40-13:55
Src controls tumorigenesis through JNK-dependent Hippo pathway regulation in *Drosophila*
Masato Enomoto[1)] and Tatsushi Igaki[1),2)]
1) Division of Genetics, Kobe University Graduate School of Medicine, Japan, 2) PRESTO, JST, Japan

O-2 (P-11) 14:10-14:25
Mitochondrial dysfunction drives non-autonomous tumor progression via the Hippo pathway
Shizue Ohsawa[1)], Yoshitaka Sato[1)], Masato Enomoto[1)], Mai Nakamura[1)], Aya Betsumiya[1)], Tatsushi Igaki[1),2)]
1) Division of Genetics, Kobe University Graduate School of Medicine, Japan, 2) PRESTO, JST, Japan

O-3 (P-10) 13:55-14:10
Non-cell autonomous tumor progression by cellular senescence in *Drosophila*
Mai Nakamura[1)], Shizue Ohsawa[1)], Tatsushi Igaki[1),2)]
1) Division of Genetics, Kobe University Graduate School of Medicine, Japan, 2) PRESTO, JST, Japan

O-4 (P-12) 14:25-14:40
IKKepsilon promotes paracrystalline actin bundle assembly by protecting Singed/Fascin from PKC-dependent inhibitory phosphorylation
Tetsuhisa Otani[1)], Takuya Maeda[1)], Kazuyo Misaki[2)], Shigenobu Yonemura[2)], and Shigeo Hayashi[1)]
1) Laboratory for Morphogenetic Signaling, RIKEN Center for Developmental Biology, Japan, 2) Electron Microscope Laboratory, RIKEN Center for Developmental Biology, Japan

O-5 (P-13) 14:40-14:55
Disruption of *Drosophila* serine palmitoyl transferase and acetyl-coA carboxylase cause tissue overgrowth associated with altered Notch and Wnt signaling
Takeshi Sasamura[1),3)], Kenji Matsuno[2)], Mark E. Fortini[1)]
1) Department of Biochemistry and Molecular Biology, Thomas Jefferson University, USA, 2) Department of Biological Sciences, Graduate School of Science, Osaka University, Japan, 3) Present address: Department of Biological Sciences, Graduate School of Science, Osaka University, Japan

O-6 (P-21) 14:55-15:10
Role of Hippo signaling in phenotypes induced by altered Dpp signaling in *Drosophila* wing imaginal discs
Tomonori Asada[1)], Kiichiro Taniguchi[1)], and Takashi Adachi-Yamada[1)]
1) Department of Life Science, Faculty of Science, Gakushuin University, Japan

Coffee Break 15:10-15:30

Saturday, October 13th; 15:30-17:00 Oral Session 2

Chair: Shigeo Hayashi

O-7 (P-22) 15:30-15:45
Prickle and Spiny-legs ratio determines the orientation of cellular asymmetry relative to the Dachsous and Four-jointed gradients
Tomonori Ayukawa[1)], Juergen A. Knoblich[2)], Takehiko Sasaki[1),3)] and Masakazu Yamazaki[1)]
1) Research Center for Biosignal, Akita University, Japan, 2) Institute of Molecular Biotechnology of the Austrian Academy of Sciences (IMBA), Austria, 3) Department of Pathology and Immunology, Akita University School of Medicine, Japan

O-8 (P-23) 15:45-16:00
Noppera-bo, a new player essential for controlling ecdysteroid biosynthesis and insect developmental transition
Sora Enya[1)], Yuko Shimada-Niwa[1)], Yoshinori Fujimoto[2)], Tetsuro Shinoda[3)], and Ryusuke Niwa[1)]
1) Graduate School of Life and Environmental Sciences, University of Tsukuba, Japan, 2) Department of Chemistry and Materials Science, Tokyo institute of technology, Japan, 3) Division of Insect Science, National Institute of Agrobiological Sciences, Japan

O-9 (P-24) 16:00-16:15
The HOX gene *Antp* in the midgut visceral mesoderm regulates both morphogenesis and cell differentiation of the endoderm
Keita Fujimoto[1)], Masahiko Arishige[1)], Yumiko Harada[2)] ,Ryutaro Murakami[1),3)]
1) Graduate School of Medicine, Yamaguchi University, Japan, 2) Graduate School of Science and Engineering, Yamaguchi University, Japan, 3) Department of Biology and Chemistry, Yamaguchi University, Japan

O-10 (P-25) 16:15-16:30
Left-right polarization in the cell-shape of epithelium cells occurs cell autonomously during the left-handed contortion of the *Drosophila* gut
Ryo Hatori[1)], Naotaka Nakazawa[1),] Kenji Matsuno[1),2)]
1) Department of Biological Science and Engineering, Tokyo University of Science, Japan, 2) Department of Biological Science, Osaka University, Japan

O-11 (P-27) 16:30-16:45
Physiological roles of long non-coding RNA MRE32 in the central nervous system and wing development
Sachi Inagaki[1)], Masanao Sato[2),3)], Yuji Kageyama[1)]
1) Research Center for Environmental Genomics, Kobe University, Japan, 2) Okazaki Institute for Integrative Bioscience, National Institutes of Natural Sciences, Japan, 3) National Institute for Basic Biology, National Institutes of Natural Sciences, Japan

O-12 (P-29) 16:45-17:00
A P-body component, Edc3, regulates *oskar* mRNA localization and translation during *Drosophila* oogenesis
Yasuko Kato[1)], Akie Tanigawa[1)], Kaori Shinmyozu[2)], Akira Nakamura[1)]
1) Laboratory for Germline Development, RIKEN Center for Developmental Biology, Japan, 2) Mass Spectrometry Analysis Unit, RIKEN Center for Developmental Biology, Japan

Coffee Break 17:00-17:20

Saturday, October 13th; 17:20-18:50 Oral Session 3

Chair: Toshiro Aigaki

O-13 (P-66) 17:20-17:35
Sickie regulates the axonal growth of *Drosophila* mushroom body neurons cooperatively with Cofilin signaling pathway
Takashi Abe[1)], Daisuke Yamazaki[1)], Satoshi Murakami[1)], Yuko Maeyama[1)], Tetsuya Tabata[1)]
1) Laboratory of neuroscience, Institute of Molecular and Cellular Bioscience, University of Tokyo, Japan

O-14 (P-73) 17:35-17:50
Functional analysis of CenG1A in the synaptic transmission
Mizuho Homma[1)], Shun Nagasima[1)], Toshifumi Fukuda[1)], Shigeru Yanagi[1)], Hiroyoshi Miyakawa[1)], Takako Morimoto[1)]
1) School of Life Science, Tokyo University of Pharmacy and Life Science, Japan

O-15 (P-75) 17:50-18:05
Locally distinct roles of E3 ubiquitin ligase *highwire* in controling the sensitivity of nociceptive sensory neurons
Ken Honjo[1)] and W. Daniel Tracey Jr.[1),2)]
1) Department of Anesthesiology, Duke University Medical Center, USA, 2) Department of Neurobiology, Department of Cell Biology, Duke University Medical Center, USA

O-16 (P-54) 18:05-18:20
Elimination of KP element's read-through sequence from pre-mRNA of host genes
Atsuhiko Matsumoto[1)], Haruka Kinosada[1)], Suguru Morishita[1)], and Masanobu Itoh[2,3)]
1) Department of Genetics, Graduate school of Applied biology, Kyoto Institute of Technology, Japan, 2) Center of Bioresource and Field Science, Kyoto Institute of Technology, Japan, 3) Insect Biomedical Research Center, Kyoto Institute of Technology, Japan

O-17 (P-62) 18:20-18:35
Odor-based contagious transmission of pathogen by *Drosophila melanogaster*
Kiyoshi Okado[1),2)], and Hirotaka Kanuka[1),2)]
1) Department of Tropical Medicine, The Jikei University School of Medicine, Japan, 2) National Research Center for Protozoan Diseases, Obihiro University of Agriculture and Veterinary Medicine, Japan

O-18 (P-65) 18:35-18:50
Novel roles of glycosylation in *Drosophila* innate immunity
Miki Yamsmoto-Hino[1),2)], Takako Shibano[2)], Wakae Awano[2)], Masatoshi Muraoka[4)], Hideyuki Okano[3)] and Satoshi Goto[1),2)]
1) Department of Life Science, Rikkyo University, Japan, 2) Mitsubishi-Kagaku Institute of Life Sciences, Japan, 3) Department of Physiology, School of Medicine, Keio University, Japan, 4) Tokyo Metropolitan Institute of Medical Science, Japan

Poster Session 19:00-21:30

Sunday, October 14th; 8:30-10:00 Oral Session 4

Chair: Fumio Matsuzaki

O-19 (P-30) 8:30-8:45
Morphometric analysis of tracheal placode invagination
Kagayaki Kato[1)], Takuya Maeda[1)], Andreas Altenburger[1),2)], Takefumi Kondo[1)], Shuichi Onami[3)], and Shigeo Hayashi[1)]
1) RIKEN CDB, Japan, 2) Natural History Museum of Denmark, University of Copenhagen, Denmark, 3) RIKEN, QBiC, Japan

O-20 (P-34) 8:45-9:00
Mitotic cell rounding accelerates epithelial invagination
Takefumi Kondo[1)], Shigeo Hayashi[1)]
1) Laboratory for Morphogenetic Signaling, RIKEN Center for Developmental Biology, Japan

O-21 (P-38) 9:00-9:15
Quantification of mechanical force driving the left-handed twisting of the gut epithelial tube in *Drosophila*
Naotaka Nakazawa[1),3)], Reo Maeda[1)], Shukei Sugita[2)], Takeo Matsumoto[2)], and Kenji Matsuno[3)]
1) Department of Biological Science and Technology, Tokyo University of Science, Japan, 2) Department of Mechanical Engineering, Nagoya Institute of Technology, Japan, 3) Department of Biological Sciences, Osaka University, Japan

O-22 (P-41) 9:15-9:30
***βν integrin* is required for normal proliferation and differentiation rates of intestinal stem cells in the *Drosophila* adult midgut**
Takashi Okumura[1)], Koji Takeda[1)], Kiichiro Taniguchi[1)], and Takashi Adachi-Yamada[1)]
1) Department of Life Science, Faculty of Science, Gakushuin University, Japan

O-23 (P-45) 9:30-9:45
The role of neurotransmitter receptors in the regulation of steroid hormone biosynthesis and developmental progression *in Drosophila*
Yuko Shimada-Niwa[1)], Yosuke Umei[1)], Jevgenija Maramzina[1)], Ryusuke Niwa[1)]
1) Graduate school of Life and Environmental Sciences, University of Tsukuba, Japan

O-24 (P-46) 9:45-10:00
Molecular mechanism of the production of neuronal diversity in the *Drosophila* visual center
Takumi Suzuki[1)], Masako Kaido[1)], Rie Takayama[1)], and Makoto Sato[1)]
1) Brain Liver Interface Medicine Research Center, Kanazawa University, Japan

Coffee Break 10:00-10:20

Sunday, October 14th; 10:20-11:50 Oral Session 5

Chair: Tadashi Uemura

O-25 (P-49) 10:20-10:35
Tre1 GPCR signaling orients stem cell divisions in the *Drosophila* central nervous system
Shigeki Yoshiura[1)], Nao Ohta[1)], Fumio Matsuzaki[1)]
1) Lab for Cell Asymmetry, RIKEN CDB, Japan

O-26 (P-78) 10:35-10:50
A role of ecdysone in adult conditioned behaviors in Drosophila, a link of GPCR-mediated non-genomic steroid action to cAMP signaling
Hiroshi Ishimoto[1)], Zhe Wang[2)], Chun-Fang Wu[2),3)], Toshihiro Kitamoto[1),3)]
1) Department of Anesthesia, College of Medicine, University of Iowa, USA, 2) Department of Biology, College of Liberal Arts and Sciences, University of Iowa, USA, 3) Interdisciplinary Programs in Genetics and Neuroscience, University of Iowa, USA

O-27 (P-79) 10:50-11:05
Comprehensive analysis of the brain structure and neural network in *Drosophila* based on the projectome mapping of the lineage-dependent neural circuits
Masayoshi Ito[1)], Keita Endo[2)], and Kei Ito[1)]
1) Institute of Molecular and Cellular Biosciences, University of Tokyo, Japan, 2) RIKEN Brain Science Institute, Japan

O-28 (P-80) 11:05-11:20
Draper is involved in the clearance of dead neuronal cells in the developing *Drosophila* optic lobe
Masashi Iwamura[1)], Yu Togane[1),2)] , Yusuke Hara[1),2)], Hiromi Akagawa[1),2)], Tatsuya Sudo[1)], Ayano Ishitsuka[1)], Ayaka Tsutsumi[1)], Ryo Iizuka[1)], Hidenobu Tsujimura[1)]
1) Developmental Biology, Tokyo University of Agriculture and Technology, Japan, 2) Department of Biological Production Science, Tokyo University of Agriculture and Technology, Japan

O-29 (P-82) 11:20-11:35
RNAi-based genetic screen of genes required for the integrity of Blood-Brain Barrier in *Drosophila*

Hiroshi Kanda[1)], Rieko Shimamura[1)], and Hideyuki Okano[1)]
1)Department of Physiology, Keio University School of Medicine, Japan.

O-30 (P-91) 11:35-11:50
Enhancement of *Drosophila* optmotor response to visual stimulation including low level of noise
Shota Nagaura[1)], Yoshinori Suzuki[2)], Hiroyoshi Miyakawa[1)], Toru Aonishi[2)], Takako Morimoto[1)]
1) School of Life Science, Tokyo University of Pharmacy and Life Sciences, Japan, 2) Interdisciplinary Graduate School of Science and Engineering, Tokyo Institute of Technology, Japan

Lunch 11:50-13:00

General Meeting 13:00-13:50

Coffee Break 13:50-14:00

Sunday, October 14th; 14:00-15:30 Oral Session 6

Chair: Tetsuya Tabata

O-31 (P-95) 14:00-14:15
Functional analysis of a novel immediate early gene, *Hr38*, in the long-term courtship memory in *Drosophila*
Tomoyo Ohmura[1)], Shouma Sato[3)], Masafumi Iwami[1),2)], Takaomi Sakai[3)], and Taketoshi Kiya[1),2)]
1) Division of Biological Sciences, Kanazawa University, Japan, 2) Division of Life Sciences, Graduate School of Natural Science and Technology, Kanazawa University, Japan, 3) Department of Biological Sciences, Tokyo Metropolitan University, Japan.

O-32 (P-97) 14:15-14:30
Role of PCP signal molecule Four-jointed in dendrite morphogenesis of olfactory projection neuron
Misako Okumura[1)], Masayuki Miura[1),3)] and Takahiro Chihara[1),2)]
1) Department of Genetics, Graduate School of Pharmaceutical Science, University of Tokyo, Japan, 2) PRESTO, JST, Japan, 3)CREST, JST, Japan

O-33 (P-98) 14:30-14:45
Feeding behavior and taste preference are under control of circadian rhythm and dietary history in *Drosophila melanogaster*
Aya Otaku[1)] and Teiichi Tanimura[1)]
1) Department of Biology, Faculty of Science, Kyushu University, Japan

O-34 (P-102) 14:45-15:00
The role of central nervous system-expressed Painless TRP channels in *Drosophila* long-term courtship memory
Shoma Sato[1)], Takaomi Sakai[1)]
1) Department of Biological Sciences, Tokyo Metropolitan University

O-35 (P-103) 15:00-15:15
Development of activity-dependent neural tracing methods in the brain of fruit fly, *Drosophila melanogaster*
Yuki Sato[1)], Masafumi Iwami[1),2)], and Taketoshi Kiya[1),2)]
1) Division of Biological Sciences, Kanazawa University, Japan, 2) Division of Life Sciences, Graduate School of Natural Science and Technology, Kanazawa University, Japan

O-36 (P-106) 15:15-15:30
Calcineurin is required for retrograde heart beats in *Drosophila*
Hiromu Shirato[1)], Taro Kaneuchi [1)], Ikegami keiichi[1)], Yasuhiro Nakai[2)], Toshiro Aigaki[1)]
1) Department of Biological Sciences, Tokyo Metropolitan University, Japan, 2) Kanazawa University, Japan

Coffee Break 15:30-15:50

Sunday, October 14th; 15:50-17:20 Oral Session 7

Chair: Erina Kuranaga

O-37 (P-107) 15:50-16:05
High-nutrient diet aggravates neurodegeneration through metabolic signaling pathways in *Drosophila* models of neurodegenerative diseases
Mari Suzuki[1)], Nobuhiro Fujikake[1)], Keiji Wada[1)], Yoshitaka Nagai[1)]
1) Department of Degenerative Neurological Diseases, National Institute of Neuroscience, Japan

O-38 (P-110) 16:05-16:20
Roles of a *Drosophila* homolog of Amyotrophic Lateral Sclerosis 2 (ALS2), a Rab5 GEF, in neuronal dendrite formation
Yuta Takayama[1)], Reina Ito[1)], and Tadashi Uemura[1)]
1) Graduate School of Biostudies, Kyoto University, Japan

O-39 (P-112) 16:20-16:35
RNAi-based screening for transcription factors in interneurons for speed control of larval locomotion

Koichi Teranishi[1)], Hiroshi Kohsaka[1)], and Akinao Nose[1),2)]
1) Department of Complexity Science and Engineering, Graduate School of Frontier Sciences, University of Tokyo, Japan, 2) Department of Physics, Graduate School of Science, University of Tokyo, Japan

O-40 (P-114) 16:35-16:50
An actin rich mechanosensory organelle in *Drosophila* somatosensory neurons
Asako Tsubouchi[1)], Jason C. Caldwell[1)], W. Daniel Tracey[1)]
1) Department of Anesthesiology, Department of Cell Biology, Department of Neurobiology, Duke University Medical Center, Durham NC, USA

O-41 (P-116) 16:50-17:05
Identification of sleep regulating dopamine pathway in *Drosophila*
Taro Ueno[1)], Jun Tomita[1)], Hiromu Tanimoto[2)], Keita Endo[3)], Kei Ito[3)], Shoen Kume[1)], Kazuhiko Kume[1)]
1) Institute of Molecular Embryology and Genetics, Kumamoto University, Japan, 2) Max-Planck-Institut für Neurobiologie, Germany, 3) Institute of Molecular and Cellular Biosciences, The University of Tokyo, Japan

O-42 (P-118) 17:05-17:20
Neurons mediating sugar reward in the brain
Nobuhiro Yamagata[1)], Chang Liu[1)], Anja B. Friedrich[1)], Hiromu Tanimoto[1)]
1) Max-Planck-Institute for Neurobiology, Germany

Coffee Break 17:20-17:40

Sunday, October 14th; 17:40-19:10 Oral Session 8

Chair: Takashi Adachi-Yamada

O-43 (P-120) 17:40-17:55
Electrophysiological properties of *Drosophila* embryonic body-wall muscles and their synaptic regulation
Sayaka Yokoyama[1)], Motojiro Yoshihara[2)], Masayuki Koganezawa[1)], Daisuke Yamamoto[1)]
1) Division of neurogenetics, Graduate School of Life Sciences, Tohoku University, Japan, 2) Department of Neurobiology, University of Massachusetts Medical School, USA

O-44 (P-122) 17:55-18:10
In vivo time-lapse imaging to decipher the dynamic mechanisms underlying dendrite morphogenesis
Li Foong Yoong[1)], Adrian W Moore[1)]
1) Disease Mechanism Research Core, RIKEN BSI, Japan

O-45 (P-125) 18:10-18:25
Apoptosis-deficiency leads to metabolic defects in *Drosophila*
Fumiaki Obata[1)], Erina Kuranaga[2)], Asuka Takeishi[1)], Ming Ming[1)], Tomoyoshi Soga[3)], Masayuki Miura[1),4)]
1) Department of Genetics, Graduate School of Pharmaceutical Science, University of Tokyo, Japan, 2) Laboratory for Histogenetic Dynamics, RIKEN CDB, Japan, 3) Institute for Advanced Biosciences (IAB), Keio University, Japan, 4) CREST, JST, Japan

O-46 (P-127) 18:25-18:40
Regulatory mechanism of the *Drosophila* insulin-like peptide gene expression
Naoki Okamoto[1)], and Takashi Nishimura[1)]
1) Laboratory for Growth Control Signaling, RIKEN Center for Developmental Biology, Japan

O-47 (P-129) 18:40-18:55
Genetic and metabolomic analyses of desiccation resistance and its relevance to lifespan in *Drosophila*
Xiuming Quan[1)], Toshiro Aigaki[1)]
1) Department of Biological Sciences, Tokyo Metropolitan University, Japan

O-48 (P-130) 18:55-19:10
A misexpression screen identifies a novel role for *MESR4* contributed in *Drosophila* lipid metabolism
Kayoko T. Sakurai[1),2)], Masanao Sato[3)], Satoru Kobayashi[3)], Manabu Tsuda[4)], Junjiro Horiuchi[2)], Toshiro Aigaki[2)], and Hiroko Sano[1)]
1) Ochadai Academic Production, Ochanomizu University, Japan, 2) Department of Biological Sciences, Tokyo Metropolitan University, Japan, 3) Okazaki Institute for Integrative Bioscience, National Institute for Basic Biology, National Institutes of Natural Sciences, Japan, 4) Faculty of Health and Social Services, Kanagawa University of Human Services, Japan.

Reception (Award Ceremony) 19:30-21:30

Monday, October 15th; 9:00-10:00 Senior Session 1

Chair: Kenji Matsuno

S-1 (P-39) 9:00-9:20
Secreted decoy of InR antagonizes insulin signaling to restrict body growth in *Drosophila*
Naoki Okamoto[1)], and Takashi Nishimura[1)]
1) Laboratory for Growth Control Signaling, RIKEN Center for Developmental Biology (CDB), Japan

S-2 (P-43) 9:20-9:40
A new downstream molecule, Awh is involved in the WNK signaling
Atsushi Sato[1)] and Hiroshi Shibuya[1)]
1) Department of Molecular Cell Biology, Medical Research Institute, Tokyo Medical & Dental University, Japan

S-3 (P-50) 9:40-10:00
Exploration of host genes involved in *Drosophila-Spiroplasma* endosymbiosis and male-killing phenotype by using RNA-seq
Hisashi Anbutsu[1)], Toshiyuki Harumoto[1)], Shuji Shigenobu[2)], Kazutoshi Yoshitake[3)], and Takema Fukatsu[1)]
1) National Institute of Advanced Industrial Science and Technology (AIST), Japan, 2) National Institute for Basic Biology, Japan, 3) New Business Promotion Department (Bio Project), Japan Software Management Co., Ltd, Japan

Coffee Break 10:00-10:20

Monday, October 15th; 10:20-11:40 Senior Session 2

Chair: Toshiyuki Takano

S-4 (P-52) 10:20-10:40
Genome and traits of "Dark-fly", a *Drosophila* line reared long-term in a dark environment
Naoyuki Fuse[1)], Maki Maeda[1)], Keita Tsujimoto[1)], Minako Izutsu[1)], and Kiyokazu Agata[1)]
1) Department of Biophysics, Kyoto University, Japan

S-5 (P-55) 10:40-11:00
Evolution of sexual dimorphism and behavior in *D. prolongata*
Takashi Matsuo[1)], Keita Nakamura[1)], Shiori Setoguchi[1)], Mai Kikuchi[2)], Tadashi Aotsuka[2)], Yukio Ishikawa[1)]
1) Department of Agricultural and Environmental Biology, University of Tokyo, Japan, 2) Department of Biological Sciences, Tokyo Metropolitan University, Japan

S-6 (P-63) 11:00-11:20
Molecular study of hearing disorders using *Drosophila*
Young-Mi Lim[1)], Yasuhiro Omata[1)], Leo Tsuda[1)]
1) Animal Models of Aging, National Center for Geriatrics and Gerontology, Japan

S-7 (P-68) 11:20-11:40
Large schale clonal analysis reveals 96 stereotyped neuronal lineages in the adult *Drosophila* central brain
Takeshi Awasaki[1),2)],Hung-Hsiang Yu[1),3)], Fuhui Long[1)], Jacob S. Yang[1)], Mark Schroeder[1)], Tzumin Lee[1)]
1) Janelia Farm Reserh Campus, HHMI, USA, 2) Division of Biology, Kyorin University School of Medicine, Japan, 3) Institute of Cellular and Organism Biology, Academia Sinica, Taiwan

Lunch 11:40-12:40

Monday, October 15th; 12:40-13:10 Session for NBRP

Chair: Ryu Ueda & Toshiyuki Takano

N-1 12:40-12:55
A new generation of *Drosophila* Genetic Resource Center at Kyoto Institute of Technology
Toshiyuki Takano[1)], Masatoshi Tomaru[1)], Takashi Ohsako[1),2)], and Masanobu Itoh[1)]
1) Drosophila Genetic Resource Center, Kyoto Institute of Technology, Japan, 2) Advanced Technology Center, Kyoto Institute of Technology, Japan

N-2 12:55-13:10
National BioResource Project: *Drosophila*
Ryu Ueda[1)], Masanobu Ito[2)], Masayoshi Watada[3)] Muneo Matsuda[4)], Ryo Akashi[5)]
1) Genetic Strains Research Center, National Institute of Genetics, Japan, 2) Drosophila Genetic Resource Center, Kyoto Institute of Technology, Japan, 3) Graduate School of Science and Engineering, Ehime University, Japan, 4) School of Medicine, Kyorin University, Japan, 5) Frontier Science Research Center, university of Miyazaki, Japan

Coffee Break 13:10-13:20

Monday, October 15th; 13:20-14:20 Senior Session 3

Chair: Tetsuya Kojima

S-8 (P-70) 13:20-13:40
Age-dependent apoptosis of select olfactory neurons in *Drosophila*
Takahiro Chihara[1),2)], Aki Kitabayashi[1),5)], Michie Morimoto[1),5)], Ken-ichi Takeuchi[1)], Kaoru Masuyama[4)], Jing W. Wang[4)] and Masayuki Miura[1),3)]
1) Department of Genetics, Graduate School of Pharmaceutical Sciences, The University of Tokyo, Japan, 2) PRESTO, JST, Japan, 3) CREST, JST, Japan, 4) Neurobiology Section, Division of Biological Sciences, University of California, USA, 5) These authors contributed equally to this work

S-9 (P-84) 13:40-14:00
Neural activity visualization in insect brains by a conserved immediate early gene, *Hr38*
Nozomi Fujita[1)], Miho Takashima[1)], Hiroki Yamahana[1)], Takumi Nishiuchi[3)], Makoto Sato[4)], Masafumi Iwami[1),2)] and Taketoshi Kiya[1),2)]
1) Division of Biological Sciences, Kanazawa University, Japan, 2) Division of Life Sciences, Graduate School of Natural Science and Technology, Kanazawa University, Japan, 3) Division of Functional Genomics, Advanced Science Research Center, Kanazawa University, Japan, 4) Brain/Liver Interface Medicine Research Center, Kanazawa University, Japan

S-10 (P-108) 14:00-14:20
Activity-dependent synaptic remodeling in the *Drosophila* photoreceptor neurons
Atsushi Sugie[2)], Satoko Hakeda-Suzuki[3)], Emiko Suzuki[3)], Gaia Tavosanis[2)] and Takashi Suzuki[1)]
1) Graduate School of Bioscience and Biotechnology, Tokyo Institute of Technology, Japan, 2) DZNE, Germany, 3) National Institute of Genetics, Japan

Poster Session
Cell Biology & Signaling

P-1 (O-1)
Src controls tumorigenesis through JNK-dependent Hippo pathway regulation in *Drosophila*
Masato Enomoto[1)] and Tatsushi Igaki[1),2)]
1) Division of Genetics, Kobe University Graduate School of Medicine, Japan, 2) PRESTO, JST, Japan

P-2
Identification of novel maternal neurogenic genes that are potential components of Notch signaling in *Drosophila*
Takuma Gushiken[1),2)], Kenjiroo Matsumoto[1),2)], Takahiro Seto[1)], Ryo Hatori[1),2)], Shunsuke Shimaoka[1)], Tomoko Yamakawa[2)], Takeshi Sasamura[2)], Kenji Matsuno[2)]
1) Department of Biological Science and Technology, Tokyo University of Science, Japan, 2) Department of Biological Science, Osaka university, Japan

P-3
Monomeric *O*-fucose modification of Notch is essential for its folding at high temperature
Akira Ishio[1),2)], Tomonori Ayukawa[2)], Takeshi Sasamura[1)], Hiroyuki O. Ishikawa[3)], Tetsuya Okajima[4)], and Kenji Matsuno[1),2),3)]
1) Department of Biological Science, Osaka University, Japan, 2) Department of Biological Science and Technology, Tokyo University of Science, Japan, 3) G&DRC, Tokyo University of Science, Japan, 4**)** Department of Biochemistry II, Nagoya University Graduate School of Medicine, Japan

P-4
A non-coding RNA gene that might regulate oxidative stress resistance in *Drosophila*
Eriko Katsuura[1)], Toshiro Aigaki[1)]
1) Biological Sciences, Tokyo Metropolitan University, Japan

P-5
In vivo analysis of cadherin domain phosphorylation in the *Drosophila* Fat
Yoko Keira[1)], Kenneth D. Irvine[2)], Hiroyuki O. Ishikawa[1)]
1) Department of Biology, Graduate School of Science, Chiba University, Japan, 2) HHMI/Waksman Institute, Rutgers University, USA

P-6
A switching mechanism of JNK-mediated Hippo pathway regulation
Daisuke Kizawa[1)], Masato Enomoto[1)], Tatsushi Igaki[1),2)]
1) Division of Genetics, Kobe University Graduate School of Medicine, Japan, 2) PRESTO, JST, Japan

P-7
Genetic dissection of cell competition that regulates tumorigenesis
Kei Kunimasa[1)], Shizue Ohsawa[1)], Tatsushi Igaki[1),2)]
1) Division of Genetics, Kobe University Graduate School of Medicine, Japan, 2) PRESTO, JST, Japan

P-8
Is the scaffold protein POSH essential for development in *Drosophila*?
Miku Matsumoto[1)], Toshiro Aigaki[1)]
1) Department of Biology Science, Tokyo Metropolitan University, Japan

P-9
Rescue of Notch signaling in cells incapable of GDP-L-fucose synthesis by gap junction transfer of GDP-L-fucose in *Drosophila*
Kenjiroo Matsumoto[1),2)], Tomonori Ayukawa[1)], Hiroyuki O. Ishikawa[1),3)], Akira Ishio[1),2)] Takuya Suzuki[1)], and Kenji Matsuno[2)]
1) Department of Biological Science and Technology, Tokyo University of Science, Japan, 2) Department of Biological Science, Osaka University, Japan, 3) Department of Biological Science, Chiba University, Japan

P-10 (O-3)
Non-cell autonomous tumor progression by cellular senescence in *Drosophila*
Mai Nakamura[1)], Shizue Ohsawa[1)], Tatsushi Igaki[1),2)]
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P-11 (O-2)
Mitochondrial dysfunction drives non-autonomous tumor progression via the Hippo pathway
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P-12 (O-4)
IKKepsilon promotes paracrystalline actin bundle assembly by protecting Singed/Fascin from PKC-dependent inhibitory phosphorylation
Tetsuhisa Otani[1)], Takuya Maeda[1)], Kazuyo Misaki[2)], Shigenobu Yonemura[2)], and Shigeo Hayashi[1)]
1) Laboratory for Morphogenetic Signaling, RIKEN Center for Developmental Biology, Japan, 2) Electron Microscope Laboratory, RIKEN Center for Developmental Biology, Japan

P-13 (O-5)
Disruption of *Drosophila* serine palmitoyl transferase and acetyl-coA carboxylase cause tissue overgrowth associated with altered Notch and Wnt signaling

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P-14
Specialization of the Tim50 genes in spermatogenesis and their role in the developmental function of mitochondria

Shin Sugiyama[1)], Satoshi Shibata[1)] and Yasuyoshi Nishida[1)]
1) Division of Biological Science, Graduate School of Science, Nagoya University, Japan

P-15
Non-autonomous tissue growth control by endocytic regulation of the Hippo pathway

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P-16
What is the function of *Drosophila Toll*-related genes?

Yoshimasa Yagi[1)]
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P-17
Function of a neurogenic gene, *pecanex* in Notch signaling

Tomoko Yamakawa[1)], Takeshi Sasamura[1)], Naotaka Nakazawa[2)], Emiko Suzuki[3)], Mark E. Fortini[3)], Kenji Matsuno[1)]
1) Department of Biological Sciences, Graduate School of Science Osaka University, Japan, 2) Gene Network Laboratory, National Institute of Genetics, Japan, 3) Department of Biochemistry and Molecular Biology, Kimmel Cancer Center, Thomas Jefferson University, USA

P-18
Screening and characterization of a mutant involved in pigment-granule migration in *Drosophila* photoreceptors

Shiori Yamamoto[1)], Takunori Satoh [2)], Shin Sugiyama[1)], Koichi Ozaki[3)], and Akiko Satoh[2)]
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Poster Session
Development

P-19
Dissecting cell competition using a novel genetic model system in *Drosophila*

Nanami Akai[1)], Shizue Ohsawa[1)], Tatsushi Igaki[1),2)]
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P-20
Expression and functional analyses of enzymes for ecdysteroid biosynthesis during gonadal development in *Drosophila*

Tomotsune Ameku[1)], Sora Enya[2)], Yuko Shimada-Niwa[2)], Maki Kashikawa-Yoshida[2)], and Ryusuke Niwa[2)]
1) College of Biological Sciences, University of Tsukuba, Japan, 2) Graduate School of Life and Environmental Sciences, University of Tsukuba, Japan

P-21 (O-6)
Role of Hippo signaling in phenotypes induced by altered Dpp signaling in *Drosophila* wing imaginal discs

Tomonori Asada[1)], Kiichiro Taniguchi[1)], and Takashi Adachi-Yamada[1)]
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P-22 (O-7)
Prickle and Spiny-legs ratio determines the orientation of cellular asymmetry relative to the Dachsous and Four-jointed gradients

Tomonori Ayukawa[1)], Juergen A. Knoblich[2)], Takehiko Sasaki[1),3)] and Masakazu Yamazaki[1)]
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P-23 (O-8)
Noppera-bo, a new player essential for controlling ecdysteroid biosynthesis and insect developmental transition

Sora Enya[1)], Yuko Shimada-Niwa[1)], Yoshinori Fujimoto[2)], Tetsuro Shinoda[3)], and Ryusuke Niwa[1)]
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Tokyo institute of technology, Japan, 3) Division of Insect Science, National Institute of Agrobiological Sciences, Japan

P-24 (O-9)
The HOX gene *Antp* in the midgut visceral mesoderm regulates both morphogenesis and cell differentiation of the endoderm

Keita Fujimoto[1)], Masahiko Arishige[1)], Yumiko Harada[2)] ,Ryutaro Murakami[1),3)]
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P-25 (O-10)
Left-right polarization in the cell-shape of epithelium cells occurs cell autonomously during the left-handed contortion of the *Drosophila* gut

Ryo Hatori[1)], Naotaka Nakazawa[1),] Kenji Matsuno[1),2)]
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P-26
Mechanism of in body size control via Sima/HIF-1α signaling in *Drosophila*

Mikako Hiramoto[1)], Takahisa Ohno[1)], Nobuhito Goda[1)], and Nanami Senoo-Matsuda[1)]
1) Department of Life Science and Medical BioScience, School of Advanced Science and Engineering, Waseda University, Japan

P-27 (O-11)
Physiological roles of long non-coding RNA MRE32 in the central nervous system and wing development

Sachi Inagaki[1)], Masanao Sato[2),3)], Yuji Kageyama[1)]
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P-28
COPI-mediated membrane trafficking is required for cytokinesis in *Drosophila* male meiotic divisions

Daishi Kitazawa[1)] and Yoshihiro H. Inoue[1)]
1) Insect Biomedical Research Center, Kyoto Institute of Technology, Japan

P-29 (O-12)
A P-body component, Edc3, regulates *oskar* mRNA localization and translation during *Drosophila* oogenesis

Yasuko Kato[1)], Akie Tanigawa[1)], Kaori Shinmyozu[2)], Akira Nakamura[1)]
1) Laboratory for Germline Development, RIKEN Center for Developmental Biology, Japan, 2) Mass Spectrometry Analysis Unit, RIKEN Center for Developmental Biology, Japan

P-30 (O-19)
Morphometric analysis of tracheal placode invagination

Kagayaki Kato[1)], Takuya Maeda[1)], Andreas Altenburger[1),2)], Takefumi Kondo[1)], Shuichi Onami[3)], and Shigeo Hayashi[1)]
1) RIKEN CDB, Japan, 2) Natural History Museum of Denmark, University of Copenhagen, Denmark, 3) RIKEN, QBiC, Japan

P-31
Samuel, DHR78, and ecdysone receptor are involved in the regulation of germ cell proliferation in spermatogenesis

Kohei Kawaguchi[1)], Takehiro Kajiwara[1)], Hiroyuki Kose[1)]
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P-32
Cell size of mature primary spermatocytes determines meiotic spindle length in *Drosophila* species

Daishi Kitazawa[1)], Yoshihiro H. Inoue[1)]
1) Insect Biomedical Research Center, Kyoto Institute of Technology, Japan

P-33
Identification and characterization of Dipteran-specific genes essential for ecdysteroid biosynthesis

Tatsuya Komura[1)], Yosuke Umei[2)], Sora Enya[2)], Yuko Shimada-Niwa[2)], Tetsuro Shinoda[3)] and Ryusuke Niwa[2)]
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P-34 (O-20)
Mitotic cell rounding accelerates epithelial invagination

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P-35
Wnt signal plays an essential role in the left-right asymmetric development of the embryonic gut in *Drosophila*

Junpei Kuroda[1)], Mitsutoshi Nakamura[1)], Naotaka Nakazawa[1)], Ryo Hatori[1)], and Kenji Matsuno[1)]

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P-36
The control of cell number mediated by a *Drosophila* RhoGEF, Pebble, is required for the left-right asymmetric development of the embryonic hindgut

Mitsutoshi Nakamura[1),2)], Kenjiroo Matsumoto[1),2)], Yuta Iwamoto[1),2)], Takeshi Muguruma[1)], Naotaka Nakazawa[1),2)], Ryo Hatori[1),2)], Kiichiro Taniguchi[1)], Reo Maeda[1)], and Kenji Matsuno[2)]
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P-37
Mechanism for determination of pupation timing by transcription factor FTZ-F1 *in Drosophila*

Takumi Nakayama[1)], Hitoshi Ueda[1)], Kazutaka Akagi[1)], Abdel Rahman Sayed Sultan[1)], and Haruka Nishida[1)]
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P-38 (O-21)
Quantification of mechanical force driving the left-handed twisting of the gut epithelial tube in *Drosophila*

Naotaka Nakazawa[1),3)], Reo Maeda[1)], Shukei Sugita[2)], Takeo Matsumoto[2)], and Kenji Matsuno[3)]
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P-39 (S-1)
Secreted decoy of InR antagonizes insulin signaling to restrict body growth in *Drosophila*

Naoki Okamoto[1)], and Takashi Nishimura[1)]
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P-40
Disco-interacting protein 2 regulates guidance of axon branches in the mushroom body

Yohei Nitta[1)], Kazumichi Shimizu[1)], Maki Ohtsubo[1)], Kenji Nishi[2)], Kumiko Ui-Tei[2)], Tetsuya Tabata[1)]
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P-41 (O-22)
βν integrin is required for normal proliferation and differentiation rates of intestinal stem cells in the *Drosophila* adult midgut

Takashi Okumura[1)], Koji Takeda[1)], Kiichiro Taniguchi[1)], and Takashi Adachi-Yamada[1)]
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P-42
The neurogenic gene *big brain*, which encodes the membrane-associated protein, may cancel the effects of excess Delta in the embryonic CNS and in the adult thorax of *Drosophila melanogaster*

Minako Orihara-Ono[1),2)], Masato Yasui[3)], Hideyuki Okano[1)]
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P-43 (S-2)
A new downstream molecule, Awh is involved in the WNK signaling

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P-44
A new allele of *engrailed* with three spermathecae in *Drosophila melanogaster* female

Akiko Sawada[1),], Takahisa Uenoyama[2)], and Masanobu Itoh[3),4)]
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P-45 (O-23)
The role of neurotransmitter receptors in the regulation of steroid hormone biosynthesis and developmental progression *in Drosophila*

Yuko Shimada-Niwa[1)], Yosuke Umei[1)], Jevgenija Maramzina[1)], Ryusuke Niwa[1)]
1) Graduate school of Life and Environmental Sciences, University of Tsukuba, Japan

P-46 (O-24)
Molecular mechanism of the production of neuronal diversity in the *Drosophila* visual center

Takumi Suzuki[1)], Masako Kaido[1)], Rie Takayama[1)], and Makoto Sato[1)]

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P-47
Significance in scattered distribution of enteroendocrine cells in adult midgut

Koji Takeda[1)], Takashi Okumura[2)], Kiichiro Taniguchi[2)], and Takashi Adachi-Yamada[1),2)]
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P-48
An intracellular signal transduction pathway that regulates ecdysone biosynthesis in *Drosophila melanogaster*

Yosuke Umei[1)], Yuko Shimada-Niwa[1)], and Ryusuke Niwa[1)]
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P-49 (O-25)
Tre1 GPCR signaling orients stem cell divisions in the *Drosophila* central nervous system

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Poster Session
Genome & Evolution

P-50 (S-3)
Exploration of host genes involved in *Drosophila-Spiroplasma* endosymbiosis and male-killing phenotype by using RNA-seq

Hisashi Anbutsu[1)], Toshiyuki Harumoto[1)], Shuji Shigenobu[2)], Kazutoshi Yoshitake[3)], and Takema Fukatsu[1)]
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P-51
Genetic decay of balancer chromosomes in *Drosophila melanogaster*

Quenta Araye[1)], Kyoichi Sawamura[2)]
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P-52 (S-4)
Genome and traits of “Dark-fly”, a *Drosophila* line reared long-term in a dark environment

Naoyuki Fuse[1)], Maki Maeda[1)], Keita Tsujimoto[1)], Minako Izutsu[1)], and Kiyokazu Agata[1)]
1) Department of Biophysics, Kyoto University, Japan

P-53
A gene causing multiple phenotypes of hybrid incompatibility in *Drosophila*: *Nucleoporin 160* (*Nup160*)

Kazunori Maehara[1)], Kyoichi Sawamura[2)]
1) Graduate School of Life and Environmental Sciences, University of Tsukuba, Japan, 2) Faculty of Life and Environmental Sciences, University of Tsukuba, Japan

P-54 (O-16)
Elimination of KP element’s read-through sequence from pre-mRNA of host genes

Atsuhiko Matsumoto[1)], Haruka Kinosada[1)], Suguru Morishita[1)], and Masanobu Itoh[2,3)]
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P-55 (S-5)
Evolution of sexual dimorphism and behavior in *D. prolongata*

Takashi Matsuo[1)], Keita Nakamura[1)], Shiori Setoguchi[1)], Mai Kikuchi[2)], Tadashi Aotsuka[2)], Yukio Ishikawa[1)]
1) Department of Agricultural and Environmental Biology, University of Tokyo, Japan, 2) Department of Biological Sciences, Tokyo Metropolitan University, Japan

P-56
Suppressor hunting for lethal hybrid rescue between *Drosophila melanogaster* and *D. simulans*

Mika Shirata[1)], Kyoichi Sawamura[2)]
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Poster Session
Immunology & Disease

P-57
Disruption of microtubule-dependent transport of TDP-43 triggers aggregation of TDP-43, leading to neurodegeneration in *Drosophila* models of human disease

Nobuhiro Fujikake[1)], Yuji Saitoh[1)], Akio Yokoseki[2)], Osamu Onodera[2)], Keiji Wada[1)], Yoshitaka Nagai[1)]

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P-58
Chemical genetics study for drug discovery using cancer model fly

Mitsuyasu Kawaguchi[1),2)], Takahiro Chihara[1),2)], Masayuki Miura[1),2)]
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P-59
Apoptotic deficiency renders abnormal immune activation in the absence of infection

Ming Ming[1)], Erina Kuranaga [3)], Fumiaki Obata[1)], and Masayuki Miura[1),2)]
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P-60
Putative phosphate/organic anion transporter modulates stress sensitivity

Hannah Mitchell[1),2)], Asuka Takeishi[1),2)], Erina Kuranaga[3)], and Masayuki Miura[1),2)]
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P-61
Gut cell turnover via caspase mediates systemic wound response

Asuka Takeishi[1)], Erina Kuranaga[2)], Ayako Tonoki[3)], Kazuyo Misaki[4)], Shigenobu Yonemura[4)], Hirotaka Kanuka[5)], and Masayuki Miura[1)]
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P-62 (O-17)
Odor-based contagious transmission of pathogen by *Drosophila melanogaster*

Kiyoshi Okado[1),2)], and Hirotaka Kanuka[1),2)]
1) Department of Tropical Medicine, The Jikei University School of Medicine, Japan, 2) National Research Center for Protozoan Diseases, Obihiro University of Agriculture and Veterinary Medicine, Japan

P-63 (S-6)
Molecular study of hearing disorders using *Drosophila*

Young-Mi Lim[1)], Yasuhiro Omata[1)], Leo Tsuda[1)]
1) Animal Models of Aging, National Center for Geriatrics and Gerontology, Japan

P-64
Loss of *Drosophila* A-type *lamin C* initially causes tendon abnormality including disintegration of cytoskeleton and nuclear lamina in muscular defects

Ryou Uchino[1)], Yu-ki Nonaka[1)], Tuneyoshi Horigome[1)], Shin Sugiyama[2)], and Kazuhiro Furukawa[1)]
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P-65 (O-18)
Novel Roles of Glycosylation in Drosophila innate immunity

Miki Yamsmoto-Hino[1),2)], Takako Shibano[2)], Wakae Awano[2)], Masatoshi Muraoka[4)], Hideyuki Okano[3)] and Satoshi Goto[1),2)]
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Poster Session
Neurobiology

P-66 (O-13)
Sickie regulates the axonal growth of *Drosophila* mushroom body neurons cooperatively with Cofilin signaling pathway

Takashi Abe[1)], Daisuke Yamazaki[1)], Satoshi Murakami[1)], Yuko Maeyama[1)], Tetsuya Tabata[1)]
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P-67
Characterization of the secondary auditory neurons in the fly brain

Tomonori Asai[1)], Eriko Matsuo[1)], Haruyoshi Seki[2)], Takako Morimoto[2)], Hiroyoshi Miyakawa[2)], Kei Ito[3)], and Azusa Kamikouchi[1), 4)]
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P-68 (S-7)
Large schale clonal analysis reveals 96 stereotyped neuronal lineages in the adult *Drosophila* central brain
Takeshi Awasaki[1),2)],Hung-Hsiang Yu[1),3)], Fuhui Long[1)], Jacob S. Yang[1)], Mark Schroeder[1)], Tzumin Lee[1)]
1) Janelia Farm Reserh Campus, HHMI, USA, 2) Division of Biology, Kyorin University School of Medicine, Japan, 3) Institute of Cellular and Organism Biology, Academia Sinica, Taiwan

P-69
Eph/Ephrin Signaling Is Required in Axon Guidance of *Drosophila* Olfactory Projection Neurons
Kinhong Chao[1)], Sayaka Sekine[1)], Masayuki Miura[1),2)] and Takahiro Chihara[1),3)]
1) Department of Genetics, Graduate School of Pharmaceutical Science, University of Tokyo, Japan, 2) CREST, JST, Japan, 3) PRESTO, JST, Japan

P-70 (S-8)
Age-dependent apoptosis of select olfactory neurons in *Drosophila*
Takahiro Chihara[1),2)], Aki Kitabayashi[1)], Michie Morimoto[1)], Ken-ichi Takeuchi[1)], Kaoru Masuyama[4)], Jing W. Wang[4)] and Masayuki Miura[1),3)]
1) Department of Genetics, Graduate School of Pharmaceutical Sciences, The University of Tokyo, Japan, 2) PRESTO, JST, Japan, 3) CREST, JST, Japan, 4) Neurobiology Section, Division of Biological Sciences, University of California, USA

P-71
Differential control of microtubule organization in dendrite arbour diversification
Saman Ebrahimi[1)], Cagri Yalgin[1)], Caroline Delandre[1)], Saori Akimoto[1)], Reiko Amikura[1)], Adrian W Moore[1)]
1) Disease Mechanism Research Core, RIKEN BSI, Japan

P-72
Genetic variations of feeding response to amino acid-deficiency in *Drosophila melanogaster*
Chieko Hara[1)] and Teiichi Tanimura[1)]
1) Department of Biology, Faculty of Science, Kyushu University, Japan

P-73 (O-14)
Functional analysis of CenG1A in the synaptic transmission
Mizuho Homma[1)], Shun Nagasima[1)], Toshifumi Fukuda[1)], Shigeru Yanagi[1)], Hiroyoshi Miyakawa[1)], Takako Morimoto[1)]
1) School of Life Science, Tokyo University of Pharmacy and Life Science, Japan

P-74
Optogenetic and thermogenetic activation of memory circuit in *Drosophila* larvae
Takato Honda[1)], Katsuo Furukubo-Tokunaga[1),2)]
1) College of Biological Sciences, School of Life and Environmental Sciences, University of Tsukuba, Japan, 2) Graduate School of Life and Environmental Sciences, University of Tsukuba, Japan

P-75 (O-15)
Locally distinct roles of E3 ubiquitin ligase *highwire* in controling the sensitivity of nociceptive sensory neurons
Ken Honjo[1)] and W. Daniel Tracey Jr.[1),2)]
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P-76
Calcineurin is required for formation of the NMJ and behavior in *Drosophila*
Keiichi Ikegami[1)], Taro Kaneuchi[1)], Yasuhiro Nakai[2)], Toshiro Aigaki[1)]
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P-77
The role of the LIM-homeobox gene, *apterous*, in *Drosophila* long-term courtship memory
Sho Inami[1)], Takaomi Sakai[1)]
1) Department of Biological Sciences, Tokyo Metropolitan University, Japan

P-78 (O-26)
A role of ecdysone in adult conditioned behaviors in Drosophila, a link of GPCR-mediated non-genomic steroid action to cAMP signaling
Hiroshi Ishimoto[1)], Zhe Wang[2)], Chun-Fang Wu[2),3)], Toshihiro Kitamoto[1),3)]
1) Department of Anesthesia, College of Medicine, University of Iowa, USA, 2) Department of Biology, College of Liberal Arts and Sciences, University of Iowa, USA, 3) Interdisciplinary Programs in Genetics and Neuroscience, University of Iowa, USA

P-79 (O-27)
Comprehensive analysis of the brain structure and neural network in *Drosophila* based on the projectome mapping of the lineage-dependent neural circuits
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P-80 (O-28)
Draper is involved in the clearance of dead neuronal cells in the developing *Drosophila* optic lobe

Masashi Iwamura[1)], Yu Togane[1),2)] , Yusuke Hara[1),2)], Hiromi Akagawa[1),2)], Tatsuya Sudo[1)], Ayano Ishitsuka[1)], Ayaka Tsutsumi[1)], Ryo Iizuka[1)], Hidenobu Tsujimura[1)]
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P-81
Neural mechanism that modulates the sound-evoked behavior of fruit flies

Yoon Jeonghyeon[1)], Eriko Matsuo[1)], Hiroshi Mizuno[2)], Takako Morimoto[2)], Hiroyoshi Miyakawa[2)], and Azusa Kamikouchi[1),3)]
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P-82 (O-29)
RNAi-based genetic screen of genes required for the integrity of Blood-Brain Barrier in *Drosophila*

Hiroshi Kanda[1)], Rieko Shimamura[1)], and Hideyuki Okano[1)]
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P-83
Cell-type specific gene-expression profiling of *Drosophila* olfactory projection neuron

Tomoko Kato[1)], Masayuki Miura[1),2)] and Takahiro Chihara[1),3)]
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P-84 (S-9)
Neural activity visualization in insect brains by a conserved immediate early gene, *Hr38*

Nozomi Fujita[1)], Miho Takashima[1)], Hiroki Yamahana[1)], Takumi Nishiuchi[3)], Makoto Sato[4)], Masafumi Iwami[1),2)] and Taketoshi Kiya[1),2)]
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P-85
FGF signaling regulates post synaptic development in the *Drosophila* neuromuscular junction

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P-86
A study of decision making under the conflicting conditions in *Drosophila melanogaster* larvae

Nozomi Koseki[1)], Sakiko Kosugi[1)], Shoki Suzuki[1)], Hiroyoshi Miyakawa[1)], Takako Morimoto[1)]
1) School of Life Science, Tokyo University of Pharmacy and Life Sciences, Japan

P-87
Direct expression of a schizophrenia susceptibility gene, DISC1, suppresses neural development in *Drosophila*

Kazuki Kurita[1)], Daisuke Tanaka[1)], Takato Honda[1)], Himani, Pandey[1)], Yuko Arai[1)], Kousuke Ikejiri[1)] and Katsuo Furukubo-Tokunaga[1)]
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P-88
Excessive intake of amino acid is harmful for *Drosophila* adult flies

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P-89
Post-translational modification of Charlatan, a *Drosophila* NREF/REST-like repressor, is required for neuron specific genes expression

Young-Mi Lim[1)], Yasutoyo Yamasaki[1)], Leo Tsuda[1)]
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P-90
The auditory map in the fly brain

Eriko Matsuo[1)], Haruyoshi Seki[2)], Tomonori Asai[1)], Takako Morimoto[2)], Hiroyoshi Miyakawa[2)], Kei Ito[3)], and Azusa Kamikouchi[1),4)]
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P-91 (O-30)
Enhancement of *Drosophila* optmotor response to visual stimulation including low level of noise
Shota Nagaura[1)], Yoshinori Suzuki[2)], Hiroyoshi Miyakawa[1)], Toru Aonishi[2)], Takako Morimoto[1)]
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P-92
Identification and functional analysis of the putative neuronal circuit for motion detection in the medulla
Yasuhiro Nakai[1)], Eri Hasegawa[1)], Masako Kaido[1)], Rie Takayama[1)], Makoto Sato[1)]
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P-93
Electrophysiological characterization of tarsal chemosensilla in *Drosophila*
Tomoaki Nishimura[1)] and Teiichi Tanimura[1)]
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P-94
The role of Painless TRP channels in noxious heat response in *Drosophila* adults
Hirono Ohashi[1)], Takaomi Sakai[1)]
1) Department of Biological Sciences, Tokyo Metropolitan Univ., Tokyo, Japan

P-95 (O-31)
Functional analysis of a novel immediate early gene, *Hr38*, in the long-term courtship memory in *Drosophila*
Tomoyo Ohmura[1)], Shouma Sato[3)], Masafumi Iwami[1),2)], Takaomi Sakai[3)], and Taketoshi Kiya[1),2)]
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P-96
Functional analysis of Sima/HIF-1α signaling in *Drosophila* neurodegenerative disease models
Takahisa Ohno[1)], Nobuhito Goda[1)], and Nanami Senoo-Matsuda[1)]
1) Department of Life Science and Medical BioScience, School of Advanced Science and Engineering, Waseda University, Japan

P-97 (O-32)
Role of PCP signal molecule Four-jointed in dendrite morphogenesis of olfactory projection neuron
Misako Okumura[1)], Masayuki Miura[1),3)] and Takahiro Chihara[1),2)]
1) Department of Genetics, Graduate School of Pharmaceutical Science, University of Tokyo, Japan, 2) PRESTO, JST, Japan, 3)CREST, JST, Japan

P-98 (O-33)
Feeding behavior and taste preference are under control of circadian rhythm and dietary history in *Drosophila melanogaster*
Aya Otaku[1)] and Teiichi Tanimura[1)]
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P-99
A novel regulator of synapse formation: Dogi, an evolutionarily conserved protein, regulates synaptic growth and microtubule stability at the *Drosophila* neuromuscular junction
Yoshie Saito[1)], Chisako Sakuma[1)], Masayuki Miura[1),2)] and Takahiro Chihara[1),3)]
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P-100
Analysis of peripheral cholinergic sensory neurons in Drosophila larva using Kaede fluorescent protein
Hirotaka Hirabayashi[1), 2)], and Masahiko Sakaguchi[1)]
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P-101
Neurite branching and elongation requires microtubule-based early endosome maturation by Dogi, an evolutionarily conserved protein
Chisako Sakuma[1)], Vladimir I Gelfand[5)], Liqun Luo[4)], Masayuki Miura[1),2)], and Takahiro Chihara[1),3)]
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P-102 (O-34)
The role of central nervous system-expressed Painless TRP channels in *Drosophila* long-term courtship memory

Shoma Sato[1)], Takaomi Sakai[1)]
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P-103 (O-35)
Development of activity-dependent neural tracing methods in the brain of fruit fly, *Drosophila melanogaster*

Yuki Sato[1)], Masafumi Iwami[1),2)], and Taketoshi Kiya[1),2)]
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P-104
Identification of neurons controlling female reproductive behavior in *Drosophila*

Chiaki Sato[1)], Masayuki Koganezawa[2)], Daisuke Yamamoto[2)] and Ken-ichi Kimura[1)]
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P-105
Meigo, an endoplasmic reticulum stress-responsive protein, controls dendrite and axon targeting along a specific axis in an olfactory map

Sayaka Sekine[1)], Liqun Luo[4)], Masayuki Miura[1),2)] and Takahiro Chihara[1),3)]
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P-106 (O-36)
Calcineurin is required for retrograde heart beats in *Drosophila*

Hiromu Shirato[1)], Taro Kaneuchi [1)], Ikegami keiichi[1)], Yasuhiro Nakai[2)], Toshiro Aigaki[1)]
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P-107 (O-37)
High-nutrient diet aggravates neurodegeneration through metabolic signaling pathways in *Drosophila* models of neurodegenerative diseases

Mari Suzuki[1)], Nobuhiro Fujikake[1)], Keiji Wada[1)], Yoshitaka Nagai[1)]
1) Department of Degenerative Neurological Diseases, National Institute of Neuroscience, Japan

P-108 (S-10)
Activity-dependent synaptic remodeling in the *Drosophila* photoreceptor neurons

Atsushi Sugie[2)], Satoko Hakeda-Suzuki[3)], Emiko Suzuki[3)], Gaia Tavosanis[2)] and Takashi Suzuki[1)]
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P-109
Synaptic specificity and loci determination in the *Drosophila* photoreceptor neurons

Fumio Takahashi[1)] Atsushi Sugie[2)] and Takashi Suzuki[1)]
1) Graduate School of Bioscience and Biotechnology, Tokyo Institute of Technology, Japan, 2) DZNE, Germany

P-110 (O-38)
Roles of a *Drosophila* homolog of Amyotrophic Lateral Sclerosis 2 (ALS2), a Rab5 GEF, in neuronal dendrite formation

Yuta Takayama[1)], Reina Ito[1)], and Tadashi Uemura[1)]
1) Graduate School of Biostudies, Kyoto University, Japan

P-111
Profiling age-related alternation of olfactory neural circuit by microarray analysis and calcium imaging

Ken-ichi Takeuchi[1)], Takahiro Chihara[1),2)], Masayuki Miura[1), 3)]
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P-112 (O-39)
RNAi-based screening for transcription factors in interneurons for speed control of larval locomotion

Koichi Teranishi[1)], Hiroshi Kohsaka[1)], and Akinao Nose[1),2)]
1) Department of Complexity Science and Engineering, Graduate School of Frontier Sciences, University of Tokyo, Japan, 2) Department of Physics, Graduate School of Science, University of Tokyo, Japan

P-113
Modulation of feeding behavior by internal nutritional state in *Drosophila*

Naoko Toshima[1)] and Teiichi Tanimura[1)]
1) Department of Biology, Faculty of Science, Kyushu University, Japan

P-114 (O-40)
An actin rich mechanosensory organelle in *Drosophila* somatosensory neurons

Asako Tsubouchi[1)], Jason C. Caldwell[1)], W. Daniel Tracey[1)]
1) Department of Anesthesiology, Department of Cell Biology, Department of Neurobiology, Duke University Medical Center, Durham NC, USA

P-115
Genetic variation of sugar taste sensitivity among wild-type lines established from natural population of *Drosophila melanogaster*

Shun Uchizono[1)] and Teiichi Tanimura[1)]
1) Department of Biology, Faculty of Science, Kyushu University, Japan

P-116 (O-41)
Identification of sleep regulating dopamine pathway in *Drosophila*

Taro Ueno[1)], Jun Tomita[1)], Hiromu Tanimoto[2)], Keita Endo[3)], Kei Ito[3)], Shoen Kume[1)], Kazuhiko Kume[1)]
1) Institute of Molecular Embryology and Genetics, Kumamoto University, Japan, 2) Max-Planck-Institut für Neurobiologie, Germany, 3) Institute of Molecular and Cellular Biosciences, The University of Tokyo, Japan

P-117
Elucidation of the response characteristics of subgroup-D neurons in the fly ear

Daichi Yamada[1)], Eriko Matsuo[1)], Azusa Kamikouchi[1),2)]
1) Graduate School of Science, Nagoya University, 2) Decoding and controlling Brain Information, PRESTO, JST

P-118 (O-42)
Neurons mediating sugar reward in the brain

Nobuhiro Yamagata[1)], Chang Liu[1)], Anja B. Friedrich[1)], Hiromu Tanimoto[1)]
1) Max-Planck-Institute for Neurobiology, Germany

P-119
Toward the functional identification of gustatory receptors for amino acids in *Drosophila*

Asahi Yamamoto[1)], Shun Uchizono[1)], Nozomi Kuriyama[1)] and Teiichi Tanimura[1)]
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P-120 (O-43)
Electrophysiological properties of *Drosophila* embryonic body-wall muscles and their synaptic regulation

Sayaka Yokoyama[1)], Motojiro Yoshihara[2)], Masayuki Koganezawa[1)], Daisuke Yamamoto[1)]
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P-121
Anatomical Analysis of Ascending Fiber Projection in the Fly Central Brain Using Enhancer-Trap System

Takeshi K. Yokoyama[1),2)], Moeko Hamada[1)], Kei Ito[1)]
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P-122 (O-44)
In vivo time-lapse imaging to decipher the dynamic mechanisms underlying dendrite morphogenesis

Li Foong Yoong[1)], Adrian W Moore[1)]
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Physiology

P-123
The *Drosophila* glycolytic gene *Enolase* encodes two isoforms targeted to cytoplasm and mitochondria

Mai Hosogi[1)], Toshiro Aigaki[1)]
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P-124
The role of NADPH oxidase (dNox) in *Drosophila*

Maki Kanaki[1)], Yukiko Sato[1)], Toshiro Aigaki[1)]
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P-125 (O-45)
Apoptosis-deficiency leads to metabolic defects in *Drosophila*

Fumiaki Obata[1)], Erina Kuranaga[2)], Asuka Takeishi[1)], Ming Ming[1)], Tomoyoshi Soga[3)], Masayuki Miura[1),4)]
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P-126
Metabolites analysis of egg activation and maturation processes in *Drosophila*

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P-127 (O-46)
Regulatory mechanism of the *Drosophila* insulin-like peptide gene expression

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P-128
Characterization of intermediates in the black box of the ecdysone biosynthetic pathway in *Drosophila melanogaster*
Hajime Ono[1)], Ryota Kimura[1)], Sayo Morita[1)], Ichiyoh Asakura[1)], Ritsuo Nishida[1)]
1) Division of Applied Life Sciences, Graduate School of Agriculture, Kyoto University, Japan

P-129 (O-47)
Genetic and metabolomic analyses of desiccation resistance and its relevance to lifespan in *Drosophila*
Xiuming Quan[1)], Toshiro Aigaki[1)]
1) Department of Biological Sciences, Tokyo Metropolitan University, Japan

P-130 (O-48)
A misexpression screen identifies a novel role for *MESR4* contributed in *Drosophila* lipid metabolism
Kayoko T. Sakurai[1),2)], Masanao Sato[3)], Satoru Kobayashi[3)], Manabu Tsuda[4)], Junjiro Horiuchi[2)], Toshiro Aigaki[2)], and Hiroko Sano[1)]
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