Flyday, Sept. 9th; 13:40-14:20 Plenary Lecture

Chair: Ken-ichi Kimura

Outa Uryu, Ryusuke Niwa

Faculty of Life and Environmental Sciences, University of $% \left(1\right) =\left(1\right) \left(1\right) \left($

Tsukuba

Decision Making in Drosophila

Teiichi Tanimura

Graduate School of Systems Life Sciences, Kyusyu Univ.

S1-5 15:24-15:40

Identification of neuroendocrine pathways regulating female germline stem cell proliferation in *Drosophila*

<u>Yuto Yoshinari</u>¹, Tomotsune Ameku¹, Shu Kondo², Yuko Shimada-Niwa², and Ryusuke Niwa^{3,4}

1) Graduate School of Life and Environmental Sciences,
University of Tsukuba; 2) Genetic Strains Research
Center, National Institute of Genetics; 3) Life Science
Center of Tsukuba Advanced Research Alliance,
University of Tsukuba; 4) Faculty of Life and
Environmental Sciences, University of Tsukuba; 5)
PRESTO, Japan Science and Technology Agency

Flyday, Sept. 9th; 14:20-15:56 Oral Session 1

Chair: Shu Kondo

S1-1 14:20-14:36

Experience-dependent tuning of the auditory behavior in *Drosophila*

<u>Xiaodong Li</u>, Hiroshi Ishimoto, Azusa Kamikouchi Graduate School of Science, Nagoya University

S1-2 14:36-14:52

Species-specific auditory behavior of four Drosophila species

<u>Yusuke Yoneyama</u>, Eriko Matsuo, Yuki Ishikawa, Azusa Kamikouchi

Graduate School of Science, Nagoya University

S1-6 15:40-15:56

A gene network for nociceptive neuron development and function

<u>Caroline Delandre</u>¹, Andrew T Kwon², Saori Akimoto¹, Koji Wada¹, Yukihiko Noro^{1,2}, Ben Torben-Nielsen³, Adrian W Moore¹

RIKEN Brain Science Institute, Wako, Japan; 2) RIKEN
 Center for Life Science Technologies, Yokohama, Japan;
 University of Hertfordshire, Hertfordshire, United
 Kingdom

Break 15:56-16:06

S1-3 14:52-15:08

Exploring the function of auditory sensory neurons that respond to broad-frequency sound

<u>Hyunsoo Kim</u>, Yuki Ishikawa, Azusa Kamikouchi Graduate School of Science, Nagoya University

S1-4 15:08-15:24

Molecular and cellular mechanisms controlling development of the clock neurons in the fruit fly *Drosophila melanogaster*

Flyday, Sept. 9th; 16:06-17:42 Oral Session 2

Chair: Takeshi Awasaki

S2-1 16:06-16:22

Neuronal screening to fill the missing links between the sugar sensation and the motor/reward systems

<u>Takaaki Miyazaki</u>^{1,2,3}, Tzu-Yang Lin¹, Emiko Suzuki³, Chihon Lee¹, Mark Stopfer¹, Kei Ito²

1) NIH-NICHD 2) IMCB, Univ. Tokyo 3) National Institute of Genetics

S2-2 16:22-16:38

Phenotypic analysis of a *fruitless* mutant and CRISPR-mediated transgenesis in *D.* subobscura

Ryoya Tanaka, Hinata Murakami, Kosei Sato, Daisuke Yamamoto

Tohoku University

S2-3 16:38-16:54

Notch signaling in glial cells regulates long-term memory in *Drosophila*

<u>Saho Yoshioka</u>¹, Wataru Kobayashi¹, Saki Nagai¹, Takeshi Awasaki², Motoyuki Itoh¹, Ayako Tonoki¹.

1) Chiba University, 2) Kyorin University

S2-4 16:54-17:10

Dendritic Eph defines pheromone-sensing circuit via dendrite-dendrite segregation in *Drosophila*

Marie Anzo¹, Sayaka Sekine¹, Kinhon Chao¹, Shirin Makihara¹, Masayuki Miura^{1, 2}, Takahiro Chihara^{1, 3}

1) University of Tokyo, 2) AMED 3) Hiroshima University

S2-5 17:10-17:26

Sugar intake regulated by the neurons expressing serotonin receptor 5-HT_{2A}R in the insulin pathway in *Drosophila*

Yuta Mabuchi¹, Nobuaki Tanaka^{1,2}

1) Hokkaido University, 2) PRESTO, JST

S2-6 17:26-17:42

S-adenosylmethionine

governs

Drosophila intestinal homeostasis

<u>Kayoko Tsuda-Sakurai</u>^{1,2}, Fumiaki Obata^{1,3}, Takahiro Yamazaki¹, Kei Nishimura¹, Masayuki Miura^{1,2}

Grad. Sch. of Pharm. Sci., Univ. of Tokyo, 2)
 AMED/CREST, 3) The Francis Crick Institute, UK

Break 17:42-17:52

Flyday, Sept. 9th; 17:52-19:12

Oral Session 3

Chair: Ayako Tonoki

S3-1 17:52-18:08

Gr64a–f genes contribute to the variation of fructose sensitivity in natural population of *Drosophila melanogaster*

Shun Uchizono, Taichi Q Itoh, Teiichi Tanimura

Graduate School of Systems Life Sciences, Kyushu
University

S3-2 18:08-18:24

Sense of softness mediated by TRP channels, nanchung and nompC, in *Drosophila* larvae

Nana Kudo, Teiichi Tanimura

Department of Biology, Kyushu University

S3-3 18:24-18:40

Metabolomic analysis of egg activation in *Drosophila*

Misato Yamamoto, Taro Kaneuchi, Yukiko Sato, Satomi

Takeo, Toshiro Aigaki

Laboratory of Cellular Genetics, Department of Biological Sciences, Tokyo Metropolitan University

Reiko Tajiri, Haruhiko Fujiwara, Tetsuya Kojima

Grad. Sch. Frontier Sciences, University of Tokyo

Drosophila nervous tissue growth

RIKEN Center for Developmental Biology

Wnt proteins serve as directional cues for

polarity

and

S3-4 18:40-18:56

Coevolution of male and female genitalia in Drosophila suzukii driven by changes in ovipositor shape

<u>Leona Muto</u>¹, Yoshitaka Kamimura², Kentaro Tanaka¹, Aya Takahashi¹

1) Tokyo Metropolitan University, 2) Keio University

S4-4 9:48-10:04

S4-3 9:32-9:48

Par-complex

Shigeki Yoshiura, Fumio Matsuzaki

Nanopatterning of cuticle: How to make nanopores on *Drosophila* olfactory sensilla

<u>Toshiya Ando</u>^{1,3}, Kazuyo Misaki², Shigenobu Yonemura², Shigeo Hayashi¹

- 1) RIKEN CDB, Laboratory for Morphogenetic Signaling,
- 2) RIKEN CLST, Ultrastructural Research Team, 3) NIBB,

Division of Evolutionary Developmental Biology

S3-5 18:56-19:12

Enhancer activity of human ultraconserved elements in fruit fly

<u>Takashi Ohsako</u>¹, Ryosuke Nakano², Takeru Matsuda³, Takeshi Awasaki⁴, Masatoshi Tomaru², Timothy L. Karr², Toshiyuki Takano²

Adv. Tech. Cent., Kyoto Inst. Tech., 2) Dept. Dros.
 Genomics Genet. Res., Kyoto Inst. Tech., 3) Dept. Appl.
 Biol., Kyoto Inst. Tech., 4) Kyorin University

Saturday, Sept. 10th; 9:00-10:20

Oral Session 4
Chair: Naoyuki Fuse

Cell death enzymes accelerate *Drosophila* wing growth to ensure the bilateral symmetry of wing size

<u>Natsuki Shinoda</u>¹, Takahiro Chihara^{1,3}, Akiko Koto^{1,2}, Masayuki Miura^{1,2}

The University of Tokyo, 2) CREST-AMED, 3)
 Hiroshima University

Break 10:20-10:30

S4-5 10:04-10:20

S4-1 9:00-9:16

Tetragonal versus hexagonal tiling of the Drosophila eye

<u>Takashi Hayashi</u>¹, Masakazu Akiyama², Makoto Sato¹
1) Kanazawa University, 2) Hokkaido University

S4-2 9:16-9:32

Physical regulation of whole body shape by Obstructor-E, a constituent of the larval cuticle

Saturday, Sept. 10th ; 10:30-11:50 Oral Session 5

Chair: Hiroko Sano

11

S5-1 10:30-10:46

Determining molecular mechanisms for tissue non-autonomous responses to disc damage in *Drosophila melanogaster*

<u>Tomonori Katsuyama</u>^{1,2}, Soshiro Kashio¹, Mandi Zhou¹, and Masayuki Miura^{1,2}

 Department of Genetics, Graduate school of Pharmaceutical Sciences, University of Tokyo, 2) AMED-CREST, AMED

S5-2 10:46-11:02

Glutathione biosynthesis is essential for larval development in the fruit fly Drosophila melanogaster

<u>Chikana Yamamoto</u>¹, Sora Enya¹, Hajime Mizuno², Takeshi Esaki², Masatoshi Iga³, Hiroshi Kataoka³, Tsutomu Masujima², Ryusuke Niwa^{4,5}

1) Graduate School of Life and Environmental Sciences, University of Tsukuba; 2) Laboratory of Single-Cell Mass Spectrometry, RIKEN QBiC; 3) Graduate School of Frontier Sciences, The University of Tokyo; 4) Faculty of Life and Environmental Sciences, University of Tsukuba; 5) PRESTO, JST

S5-3 11:02-11:18

Mechanical competition for the lost territory of apoptotic cells in heterogeneously proliferating tissue

<u>Alice Tsuboi</u>¹, Shizue Ohsawa², Tatsushi Igaki², Koichi Fujimoto¹

1) Osaka University, 2) Kyoto University

S5-4 11:18-11:34

Identification and characterization of an "insect epididymis"

Timothy Karr

Kyoto Institute of Technology

S5-5 11:34-11:50

Winged Eye induces imaginal disc transdetermination through

heterochromatin formation

<u>Keita Masuko</u>, Hirofumi Furuhashi, Naoyuki Fuse, Shoichiro Kurata

Graduate School of Pharmaceutical Science, Tohoku University

Luncheon 12:05-13:00

Saturday, Sept. 10th; 13:00-14:50 Poster Session 1

Odd number

Saturday, Sept. 10th; 15:00-16:52 Oral Session 6

Chair: Akiko Satoh

S6-1 15:00-15:16

Genetic identification of Pointed/ETS transcriptional factor as a regulator of senescence-mediated tumor progression in *Drosophila*

<u>Takao Ito</u>, Masato Enomoto, Tatsushi Igaki Graduate School of Biostudies, Kyoto University

S6-2 15:16-15:32

Genetic and mathematical dissection of tumor heterogeneity that causes cancer progression

Masato Enomoto¹, Honda Naoki², Daisaku Takemoto¹,

and Tatsushi Igaki1

Laboratory of Genetics, Graduate School of Biostudies,
Kyoto University, 2) Imaging Platform for Spatio-Temporal
Information, Graduate School of Medicine, Kyoto
University

S6-3 15:32-15:48

Neuropeptides regulate mating-induced proliferation of germline stem cells

<u>Tomotsune Ameku</u>¹, Yuto Yoshinari¹, Shu Kondo², Yuko Shimada-Niwa³, Ryusuke Niwa^{4, 5}

1) Graduate School of Life and Environmental Sciences, University of Tsukuba 2) Genetic Strains Research Center, National Institute of Genetics 3) Life Science Center of Tsukuba Advanced Research Alliance, University of Tsukuba 4) Faculty of Life and Environmental Sciences, University of Tsukuba 5) PRESTO, Japan Science and Technology Agency

S6-4 15:48-16:04

Genetic screen in Drosophila muscle identifies autophagy-mediated T-tubule remodeling

Naonobu Fujita^{1,2}, Mitsunori Fukuda¹, and Amy Kiger²

1) Tohoku University, 2) University of California, San Diego

S6-5 16:04-16:20

Oocyte polarity establishment and germ plasm assembly require the endocytic regulation of the yolk protein receptor Yolkless

<u>Tsubasa Tanaka</u>^{1,3}, Sachiko Otsu¹, Naoki Tani², and Akira Nakamura^{1,3}

 Department of Germline Development, Institute of Molecular Embryology and Genetics (IMEG), 2) Liaison Laboratory Research Promotion Center, IMEG, 3) Graduate School of Pharmaceutical Sciences, Kumamoto
University

S6-6 16:20-16:36

Identification of novel microtubuleassociated proteins that contribute to the epithelial morphogenesis through the Wnt/PCP signaling pathway

<u>Koji Kikuchi</u>¹, Tsubasa Tanaka², Masaki Arata³, Dongbo Shi⁴, Akira Nakamura², Tadashi Uemura³, Toshihiko Fujimori⁴, Hiroyuki Nakanishi¹

1) Dept. Mol. Pharm., Grad. Sch. of Med. Sci., Kumamoto Univ., 2) Dept. Germline Dev., IMEG, Kumamoto Univ., 3) Grad. Sch. of Biostudies, Kyoto Univ., 4) Div.of Embryology, NIBB

S6-7 16:36-16:52

Abnormal planar spindle orientation induces cellular plasticity in *Drosophila* epithelia

<u>Yu-ichiro Nakajima</u>¹, Christopher Seidel² and Matthew C. Gibson²

Frontier Research Institute for Interdisciplinary
 Sciences, Tohoku University, 2) Stowers Institute for
 Medical Research, USA

Break 16:52-17:02

Saturday, Sept. 10th; 17:02-18:38 Oral Session 7

Chair: Shoichiro Kurata

S7-1 17:02-17:18

Neuronal processing of harmful stimuli mediated by dendritic Ca²⁺ rises and specific firing patterns <u>Tadao Usui</u>¹, Koun Onodera¹, Shin-Ichiro Terada¹, Daisuke Matsubara¹, Masanori Matsuzaki³, Risa Nishimura¹, Akira Murakami², Naoki Honda⁴, and Tadashi Uemura¹

1) Graduate School of Biostudies, Kyoto University, 2)
Faculty of Science, Kyoto University, 3) National Institute
for Basic Biology, 4) Research and Education Platform
for Innovative Research on Dynamic Living Systems
Based on Multi-Dimensional Quantitative Imaging and
Mathematical Modeling, Kyoto University

S7-2 17:18-17:34

Visualization and manipulation of neural circuit activated by courtship behavior in the brain of *Drosophila melanogaster*, using a neural activity marker gene, *Hr38*

Taketoshi Kiya, Masafumi Iwami

Kanazawa University

S7-3 17:34-17:50

Two receptor tyrosine phosphatases dictate the depth of final axonal stabilizing layer in the *Drosophila* visual system

<u>Satoko Hakeda-Suzuki</u>, Hiroki Takechi and Takashi Suzuki

Graduate School of Life Science and Technology, Tokyo
Institute of Technology

S7-4 17:50-18:06

A critical role of insulin-like signaling in memory maintenance and age-related memory impairment in *Drosophila*

<u>Ayako Tonoki</u>, Kento Tanabe, Motoyuki Itoh Chiba University

S7-5 18:06-18:22

The role of the novel periphery-to-brain signaling by the CCHa2 peptide in the coupling of growth to nutritional status

<u>Hiroko Sano</u>¹, Akira Nakamura², Michael J. Texada³, James W. Truman³, Hiroshi Ishimoto⁴, Azusa Kamikouchi⁴, ⁵, Yutaka Nibu⁶, Kazuhiko Kume⁷, Takanori Ida⁸, Daisuke Yamamoto⁹, Masayasu Kojima¹

1) Kurume University, 2) Kumamoto University, 3) Janelia Research Campus, HHMI 4) Nagoya University, 5) PRESTO, 6) Cornell University, 7) Nagoya City University, 8) University of Miyazaki, 9) Tohoku University

S7-6 18:22-18:38

Tissue geometry triggers a positive transcriptional feedback for the maintenance of tubular epithelial architecture

Takefumi Kondo^{1, 2, 3} and Shigeo Hayashi³

1) Graduate School of Biostudies, Kyoto University, 2) Keihanshin Consortium for Fostering the Next Generation of Global Leaders in Research (K-CONNEX), Kyoto University, 3) RIKEN Center for Developmental Biology

Saturday, Sept. 10th ; 19:00-21:00 Reception

Main Dining Hall

Sunday, Sept. 11th; 9:00-10:40 Poster Session 2

Even number

Sunday, Sept. 11th; 10:50-12:10 Oral Session 8

Chair: Akira Nakamura

S8-1 10:50-11:06

Establishment of new model system for Alzheimer's disease using *Drosophila*

Leo Tsuda, Yasutoyo Yamasaki, Young-Mi Lim National Center for Geriatrics and Gerontology

S8-2 11:06-11:22

Dietary restriction improves intestinal cellular fitness through *dMyc* to enhance gut barrier function and lifespan in *D. melanogaster*

<u>Kazutaka Akagi</u>^{1,2}, Subhash D. Katewa¹, Kenneth A. Wilson¹, Mauricio Ortega¹, Jesse Simmons¹, Subir Kapuria¹, Heinrich Jasper¹, Pankaj Kapahi¹

 Buck Institute for Research on Aging, 2) National Center for Geriatrics and Gerontology

S8-3 11:22-11:38

The molecular basis of distinct responses to nutrient balances between *Drosophila* generalist and specialist species

<u>Yukako Hattori</u>¹, Kaori Watanabe¹, Yuuki Takahashi¹, Yuki Furumizo¹, Hironobu Uchiyama², Shunsuke Yajima², Masayoshi Watada³, Tadashi Uemura¹

 Graduate School of Biostudies, Kyoto University, 2)
 NODAI Genome Research Center, Tokyo University of Agriculture, 3) Graduate School of Science and Engineering, Ehime University

S8-4 11:38-11:54

An evolutionarily ancient role for Plexins during epithelial repair in Drosophila and zebrafish

<u>Sa Kan Yoo</u>¹, Heath G. Pascoe², Telmo Pereira³, Shu Kondo⁴, Antonio Jacinto³, Xuewu Zhang², Iswar Hariharan⁵

 RIKEN, 2) University of Texas Southwestern Medical Center, 3) CEDOC, Chronic Diseases Research Centre,
 National Institute of Genetics, 5) UC-Berkeley

S8-5 11:54-12:10

Homeostasis of an apical microtubule network coupled to basal shifts of polarity propels cell shortening during epithelial folding

Yu-Chiun Wang, Michiko Takeda, Mustafa Sami
Laboratory for Epithelial Morphogenesis, RIKEN Center
for Developmental Biology

Sunday, Sept. 11th; 13:10-13:40 General Meeting (In Japanese)

Sunday, Sept. 11th; 13:40-14:40 Session for NBRP

Sunday, Sept. 11th; 14:40-15:00 Moriwaki Award Presentation

Poster Session

P-1

Context-dependent functions of Pecanex in Notch and other signaling pathways

Tomoko Yamakawa, Puspa Das, Izumi Morita, Kenji Matsuno

Osaka University

P-2

Transcriptome analysis to identify genes responding to mechanical force in *Drosophila* embryos

Tomoki Ishibashi¹, Katsushi Yamaguchi², Shuji Shigenobu², Yuya Takahashi³, Kenta Shinha³, Hiroshi Kimura³, Kenji Matsuno¹

- 1) Osaka University, 2) National Institute for Basic Biology,
- 3) Tokai University

P-3

Novel role of Notch signaling via cross-talk with Toll signaling in dorsal-ventral axis formation

Satoshi Kuwana¹, Takuma Gushiken¹, Kenjiroo Matsumoto¹, Martin Baron², Kenji Matsuno¹

- 1) Department of Biological Sciences, Osaka University,
- 2) University of Manchester, Faculty of Life Sciences

P-4

Dynamics of subcellular localization of Four-jointed in imaginal disc development

Hodaka Shiraishi, Yoko Kubo, Yoko Keira, Hiroyuki O. Ishikawa

Chiba University

P-5

An overexpression screen identifies

regulators of cell-cell signaling

Moe Wada, Tomoko Tanaka, Yuka Doi, Hiroyuki O. Ishikawa

Chiba University

P-6

Dissecting the mechanism of tumor progression triggered by polyploid giant cells in *Drosophila*

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

P-7

Rab6 is required for multiple apical transport pathways but not the basolateral transport pathway in Drosophila photoreceptors

Yuri Nakamura¹, Nozomi Iwanami¹, Takunori Satoh¹, Ziguang Liu², Akiko K. Satoh¹

 Division of Life Science, Graduate School of Integral Arts and Science, Hiroshima University, 2) Institute of Animal Husbandry, Heilongjiang Academy of Agricultural Sciences, China

P-8

The mechanism of the domain formation within apical membrane in Drosophila photoreceptors

Sakiko Ogi¹, Takunori Satoh¹, Atsushi Matsuda² Jiguang Liu¹, Akiko K. Satoh¹

1) Hiroshima University, 2) Osaka University

P-9

A Link between Mechanical Control of Tissue Growth and Cell Competition

Daiki Umetsu, Erina Kuranaga

Laboratory for Histogenetic Dynamics, Graduate School of Life Sciences, Tohoku University

P-10

Toward Quantitative Analysis of Cellautonomous Polarization in Asymmetric Cell Division by Reconstruction Approach in S2 cells

Kalyn Kawamoto^{1,2}, Shigeki Yoshiura¹, Fumio Matsuzaki^{1,2}

 Laboratory for Cell Asymmetry, Center for Developmental Biology, RIKEN, 2) Graduate School of Biostudies, Kyoto University

P-11

Invagination in polar coordinate system: role of radially propagating EGFR-ERK signaling for the invagination of disc-shaped tracheal placode

Yosuke Ogura, Mustafa Sami, Shigeo Hayashi Center for Developmental Biology, RIKEN

P-12

Useful ImageJ plug-ins for biological image analysis

Housei Wada, Shigeo Hayashi

RIKEN Center for Developmental Biology

P-13

Divergence of structural strategies for Ecadherin homophilic binding among bilaterians

Shigetaka Nishiguchi^{1, 2, 3}, Akira Yagi³, Nobuaki Sakai³, Hiroki Oda^{1, 2}

1) JT Biohistory Research Hall, 2) Osaka University, 3)

Olympus Corporation

P-14

Mechanotransduction mechanisms in compensatory cellular hypertrophy

Kenta Morimoto^{1,3}, Emiko Suzuki¹, Wu-Min Deng², Yoichiro Tamori¹

- 1) National Institute of Genetics, 2) Florida state University,
- 3) Keio University

P-15

Functional Analysis of Apontic during Drosophila endocycle

Xian-Feng Wang¹, Qing-Xin Liu², Emiko, Suzuki¹, Susumu Hirose¹

1) National Institute of Genetics, 2) Shandong Agricultural University, China

P-16

Localization of PIG-B involved in GPI anchor synthesis in *Drosophila*

Miki Yamamoto-Hino, Eri Katsumata, Satoshi Goto Rikkyo University

P-17

The progression of the first mitosis and diploidization in parthenogenetic embryos of *Drosophila ananassae*

Kazuyuki Hirai¹, Haruka Suzuki²³, Yohei Minakuchi⁴, Atsushi Toyoda⁴, Muneo Matsuda¹

1) Kyorin University School of Medicine, 2) International Christian University, 3) University of Tsukuba, 4) National Institute of Genetics

P-18

Scaling of critical weight for

metamorphosis in the genus Drosophila

Ken-ichi Hironaka^{1,2}, Koichi Fujimoto¹, Takashi Nishimura²
1) Osaka University, 2) RIKEN CDB

P-19

Investigating the mechanism of crowdinginduced cell elimination

Yuya Fujisawa¹, Takahiro Chihara^{1,2} and Masayuki Miura^{1,3}

1) Department of Genetics, The University of Tokyo, 2) Hiroshima University, 3) CREST-AMED, JST

P-20

Establishing a system for investigating cellular reprogramming process during disc regeneration in *Drosophila melanogaster*

Mandi Zhou¹, Tomonori Katsuyama^{1,2}, and Masayuki Miura^{1,2}

1) Department of Genetics, Graduate school of Pharmaceutical Sciences, University of Tokyo, 2) AMED-CREST, AMED

P-21

An oogenenic stage-specific RNAi screening for novel maternal-effect genes regulating germ cell development in the *Drosophila* embryo

Keisuke Aimi^{1,2}, Kazuko Hanyu-Nakamura¹, and Akira Nakamura^{1,2}

 Department of Germline Development, Institute of Molecular Embryology and Genetics, 2) Graduate School of Pharmaceutical Sciences, Kumamoto University

P-22

A novel genetic strategy to investigate

embryonic roles of maternal factors with essential functions in oogenesis

Akira Nakamura^{1,2,3}, Takashi Yoshitani^{1,3}

 Department of Germline Development, Institute of Molecular Embryology and Genetics, 2) Graduate School of Pharmaceutical Sciences, 3) School of Pharmacy, Kumamoto University

P-23

eye missing (eym) is a new allele of eye gone (eyg) necessary for Drosophila eye development

Hiroki Yamada¹, Nao Niimi¹, Yasuko Kato^{1,2}, Masanobu Itoh^{1,2}

1) Dep. of Applied Biol., 2) CAIRP, Kyoto Inst. Tech

P-24

polished rice is essential for tip cell specification and tubular fusion of tracheal dorsal branch

Yuki Taira¹, Housei Wada², Shigeo Hayashi², Yuji Kageyama¹

1) Kobe University 2) RIKEN Center for Developmental Biology

P-25

Screening for modifier genes of *polished rice* gain-of-function phenotypes : Results of second and third chromosomes

Yuya Yamabe¹, Yuki Hamada¹, Kosuke Akino¹, Yuki Yoshida¹, Sachi Inagaki². Yuji Kageyama^{1, 2}

Department of Biology, Graduate School of Science,
 Kobe University, 2) Biosignal Research Center, Kobe
 University

Degradation mechanism of a transcriptional repressor dBlimp-1, which regulates pupation timing

Hamdy Aly¹, Hiroaki Kitano², Hitoshi Ueda^{1, 2}

 The Graduated School of Natural Science and Technology, Okayama University, 2) Department of Biology, Faculty of Science, Okayama University

P-27

Expression pattern and function of transcriptional repressor Blimp-1 at late larval period

Haruka Nishida¹, Abdel-Rahman Sultan¹, Hitoshi Ueda¹²

1) The Graduated School of Natural Science and Technology, Okayama University, 2) Department of Biology, Faculty of Science, Okayama University

P-28

The Hippo-mediated morphogenetic robustness during *Drosophila* wing development

Yayoi Wada, Shizue Ohsawa, Tatsushi Igaki Laboratory of Genetics, Graduate School of Biostudies, Kyoto University

P-29

Genetic analysis of programmed cell senescence in *Drosophila*

Yiran Zang, Masanari Yoshimoto, Tatsushi Igaki Laboratory of Genetics, Graduate School of Biostudies, Kyoto University

P-30

Identification and characterization of novel neurons projecting to the prothoracic

gland in Drosophila melanogaster

Eisuke Imura¹, Yuko Shimada-Niwa², Ryusuke Niwa^{3,4}
1) Graduate School of Life and Environmental Sciences,
University of Tsukuba, 2) Life Science Center of Tsukuba
Advanced Research Alliance, University of Tsukuba, 3)
Faculty of Life and Environmental Sciences, University of
Tsukuba, 4) PRESTO, Japan Science and Technology
Agency

P-31

Functional analysis of a transmembrane protein gene regulating the timing of steroid hormone biosynthesis in Drosophila melanogaster

Rena Matsuoka¹, Yuko Shimada-Niwa², Ryusuke Niwa^{3,4}
1) Graduate School of Life and Environmental Sciences,
University of Tsukuba; 2) Life Science Center of Tsukuba
Advanced Research Alliance, University of Tsukuba; 3)
Faculty of Life and Environmental Sciences, University of
Tsukuba; 4) PRESTO, Japan Science and Technology
Agency

P-32

The effect of the parasitic wasp *Asobara* japonica on the development of its host, the fruit fly *Drosophila melanogaster*

Hitomi Takemata¹, Ruriko Fukuda², Yuko Shimada-Niwa³, Ryusuke Niwa⁴

1) Graduate School of Life and Environmental Science, University of Tsukuba, 2) College of Biological Science, University of Tsukuba, 3) Life Science Center of Tsukuba Advanced Research Alliance, University of Tsukuba, 4) Faculty of Life and Environmental Sciences, University of Tsukuba

Mathematical modeling and genetic analysis of the proneural wave

Makoto Sato¹, Tetsuo Yasugi¹, Yoshiaki Minami², Takashi Miura³ and Masaharu Nagayama²

Kanazawa University, 2) Hokkaido University, 3)
 Kyushu University

P-34

Study the role of zona pellucida domain (ZPD) proteins in apical extracellular matrix during epithelial morphogenesis and wound healing

Wei-Chen Chu, Shigeo Hayashi

Laboratory for Morphogenetic Signaling, RIKEN Center for Developmental Biology

P-35

Involvement of cytoskeletal actin and myosin in the corneal protrusion formation of *Drosophila melanogaster*

Ryunosuke Minami¹, Chiaki Sato¹, Yumi Yamahama², Hideo Kubo³, Takahiko Hariyama², Ken-ichi Kimura¹

1) Lab. Biol., Hokkaido University of Education, Sapporo Campus, 2)Dept. Biol., Hamamatsu University School of Medicine, 3) Dept. Math., Hokkaido University

P-36

Analysis of the in vivo function of GW182 in *Drosophila melanogaster*

Eriko Matsuura, Yukihide Tomari The University of Tokyo

P-37

A Novel Function of dSki3 / a Drosophila homologue TTC37 related to

Trichohepatoenteric Syndrome

Kohei Ohnuma¹, Yukiko Sato-Miyata¹, Yoshihito Kishita², Hiromi Nyuzuki², Masakazu Kohda², Kei Murayama³, Akira Ohtake², Okazaki Yasushi², Toshiro Aigaki¹

1) Department of Biological Sciences, Tokyo Metropolitan University, 2) Research Center for Genomic Medicine, Saitama Medical University, 3) Chiba Children's Hospital

P-38

Cross-talk of the hypoxic response and insulin signal control fat accumulation mechanism in drosophila fat body

Kyosuke Yokozeki, Kota Yokono, Nobuhito Goda

Department of Life Science and Medical BioScience,

Waseda University School of Advanced Science and

Engineering

P-39

Screening of type 2 diabetes candidate genes in the OLETF rat using *Drosophila*

Hiroyuki Kose ¹, Tomone Hayashi ¹, Takahisa Yamada ²
1) International Christian University, 2) Niigata University

P-40

Analysis of genes which can suppress anti-bacterial gene promoter

Yoshimasa Yagi Nagoya University

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E3 ubiquitin ligase Sherpa mediates Toll innate immune signaling in Drosophila

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Screening of glycosyltransferase involved in innate immunity in *Drosophila*

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Mapping dopamine receptor expression in the fly brain

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Replacement of the glial architecture in Drosophila central brain during metamorphosis

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Novel Functional of a set of fourth order olfactory neurons involved in aversive memory in *Drosophila*

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A genetic approach for the understanding of the brain environment that regulates the plasticity of neural stem cells

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Lobe-less RNA is necessary for establishment of neural circuits in *Drosophila* mushroom body

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Signaling pathway and glial subtype required for dead neural cell clearance in the developing *Drosophila* optic lobe

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Effect of inhibition of synaptic delivery of APP by loss-of-function of *yata* for the *Drosophila* Alzheimer's disease model

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Regulation of Acetylcholine receptor clustering by synaptic cleft protein Hig and the receptor subunits

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A developmental stage-specific regulatory mechanism of synaptic transport of the Drosophila Hikaru genki protein

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Comparative studies of the nocifensive behaviors of Drosophila species and the firing properties of the somatosensory neurons

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Identification of the enhancer region required for expression of pigment-

dispersing factor gene in Drosophila clock neurons

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A Screen and Functional Analysis of Neuropeptides Involved in Nociception in Drosophila melanogaster

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The genes required for the synaptic remodeling in the Drosophila visual system

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Elucidating molecular mechanism of synaptic plasticity in living fruit fly using membrane potential proteins

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The source of Wg that is secreted in activity-dependent synaptic plasticity

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Roles of Dscam family cell adhesion molecules in the development Drosophila medulla

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Alteration in synaptic connection patterns in-vivo for different natural stimulations

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Roles of N-cadherin in the Drosophila medulla formation

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The transplantation of the retinal precursor cells into the adult Drosophila retina

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Integration of auditory and visual signals in Drosophila melanogaster

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The transmembrane protein Golden goal recognizes the correct column at the medulla neuropil border during R8 axons targeting

Hiroki Takechi, Satoko Hakeda-Suzuki, Takashi Suzuki

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Neural basis species-specific for pheromone preference in Drosophila

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Hunger-state modulates stability courtship memory via peptide hormone **NPF**

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Heterogeneity of antennal mechanosensory neurons that respond to high-frequency sound in fruit flies

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Neural basis of species-specific pheromone response in *Drosophila*

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Plasticity in the auditory behavior of fruit flies

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Response properties of local interneurons in the fly auditory system

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Dopaminergic neurons in the VNC regulate reproductive posture of *Drosophila*

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Organization of Neuronal Subgroups in the Scolopidia of Johnston's Organ

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Dissecting taste sensation of ATP in Drosophila and mosquitoes

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Diurnal changing in feeding amount of amino acids in *Drosophila melanogaster*

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Fat body methionine metabolism remotely affects regenerative response in *Drosophila* imaginal disc

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Genetic screening of the secretory mediators for tissue regeneration in Drosophila

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Investigating the functionality of guarana using *Drosophila*

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Succinyl CoA synthetase α subunit is required for optimum development in Drosophila

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Binucleation of male accessory gland cells elevates reproductive capacity in Drosophila

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An unbiased approach to understanding the nutrient basis of budding yeast driving

Drosophila larval development

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Deciphering distinct dietary responses governing growth among *Drosophila* species by comparative multi-omics approaches

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Discovery of chemical inhibitors for the insect steroidogenic enzyme Noppera-bo

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Ehime-fly Provides Reliable Stocks of Wild Type of 135 Species for Japanese and World *Drosophila* Researchers

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The investigation of the physiological function of the Oxytocin-like peptide in social insects, ants

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Genetic bases of the association between body color variation and environmental stress tolerances in *Drosophila melanogaster*

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The genetic basis of rapid morphological diversification of male genitalia

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Interaction among nucleoporins and reproductive isolation in *Drosophila*

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Inheritance pattern of female mating receptivity in *Drosophila prolongata*

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piggyBac and phiC31 mediated genetic transformation of *Drosophila prolongata*

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Social context-dependent modification of courtship behavior in *Drosophila* prolongata

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The expression analysis of the Oxytocinlike peptide, inotocin in ants

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National BioResource Project "Drosophila"

Program

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Consequences of Abruptex Mutations on Notch trafficking and signal regulation

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