

## Poster Presentation Lineup

### PA. Award for Best Article Candidates

#### PA-01 Bioluminescence by luciferin analogues in mice, pill bugs, and blow flies

\*IKARI Yukimasa<sup>1</sup>, HAYASHI Yuna<sup>1</sup>, FUKUDA Mifuru<sup>1</sup>, KITADA Nobuo<sup>1,2</sup>,  
SAITO-MORIYA Ryohei<sup>1,3,4</sup>, MAKI Shojiro<sup>1,5</sup>, YOSHIKAWA Tomoko<sup>6</sup>,  
NAKAMURA Atsushi<sup>1,5</sup>

<sup>1</sup>Dept. Engineering Sci., Univ. Electro Communications, <sup>2</sup>Coordinated Center for UEC Research Facilities, Univ. Electro Communications, <sup>3</sup>Sch. Pharm., Tokyo Univ. Pharm. Life Sci., <sup>4</sup>Dept. of Chem. & Biol. Sci., Fac. of Sci., Japan Women's Univ., <sup>5</sup>Center Neurosci. and Biomed. Engineering, Univ. Electro Communications, <sup>6</sup>Org. International Education Exchange, Univ. Toyama

#### PA-02 Investigation of neural activity changes derived from extraocular photoreception in the whole brain of larval zebrafish by calcium imaging

\*NAMIKOSHI Yuya<sup>1</sup>, WADA Seiji<sup>2,3</sup>, KOYANAGI Mitsumasa<sup>2,3</sup>,  
TERAKITA Akihisa<sup>2,3</sup>

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#### PA-03 The neural mechanism that regulates the ejaculation-triggered neurons in *Drosophila melanogaster*

\*YAMANOUCHI Hayato, TANAKA Ryoya, KAMIKOUCHI Azusa  
Dept. Bio. Sci., Nagoya Univ.

#### PA-04 Dopamine modulates the function of the auditory system in fruit flies

\*YAMAKOSHI Haruna, Horigome Mihoko, OGURI Noiri, KAMIKOUCHI Azusa  
Grad. Sch. of Sci., Nagoya Univ.

#### PA-05 The role of serotonin on responsiveness to sucrose and walking activity in the ant, *Pristomyrmex punctatus*

\*HAMAYA Yohei, FUNABIKI Yuka, ITO Yuka, YAGUCHI Hajime, HOJO Masaru K.  
Grad. Sch. Sci. Tech, Kwansai Gakuin Univ.

#### PA-06 Quantitative analysis of the fighting behavior in the cricket

\*MURATA Akihisa<sup>1</sup>, TAKEMOTO Kanako<sup>2</sup>, AONUMA Hitoshi<sup>1,2</sup>  
<sup>1</sup>Dept. of Biol., Grad. Sch. of Sci., Kobe Univ., <sup>2</sup>Dept. of Biol., Fac. of Sci., Kobe Univ.

#### PA-07 Roles of octopamine and dopamine neurons in the formation of parallel appetitive and aversive memories and their control over conditioned response in Pavlovian conditioning in the cricket *Gryllus bimaculatus*

\*RAHMAN Sadniman<sup>1</sup>, MIZUNAMI Makoto<sup>2</sup>  
<sup>1</sup>Grad. Sch. Life Sci., Hokkaido Univ., <sup>2</sup>Fac. Sci., Hokkaido Univ.

- PA-08 Recognition of the pup's calls by the mother in Japanese house bats, *Pipistrellus abramus***  
\*HIRAGOCHI Midori, YOSHINO-HASHIZAWA Kazuki, KIHARA Motoki,  
KOBAYASI Kohta I, HIRYU Shizuko  
*Grad. Sch. Life & Med. Sci., Doshisha Univ.*
- PA-09 Aversive e-vector orientation learning in the cricket *Gryllus bimaculatus* using the treadmill device**  
\*MATSUBARA Nobuaki<sup>1</sup>, ANDO Noriyasu<sup>2</sup>, OKADA Ryuichi<sup>1</sup>, OGAWA Hiroto<sup>3</sup>,  
SAKURA Midori<sup>1</sup>  
<sup>1</sup>*Grad. Sch. Sci., Kobe Univ.*, <sup>2</sup>*Dept. Sys. Life Eng., Maebashi Inst. Tech.*, <sup>3</sup>*Dept. Bio. Sci., Fac. Sci., Hokkaido Univ.*
- PA-10 Amino acid transporter SLC46 in pharyngeal muscle regulates cold tolerance of *C. elegans***  
\*YAMASHIRO Serina<sup>1</sup>, MIZUNO Satomi<sup>1</sup>, MOTOMURA Haruka<sup>1</sup>, OHTA Akane<sup>1</sup>,  
KUHARA Atsushi<sup>1,2</sup>  
<sup>1</sup>*Konan Univ., Integrative Neurobio.*, <sup>2</sup>*PRIME, AMED*
- PA-11 Roles of a TRP channel, TRP11, in mechanoresponses in *Chlamydomonas***  
\*KIMURA Miyu<sup>1</sup>, SAGA Kosuke<sup>1</sup>, OSHIMA Daichi<sup>1</sup>, ITOH Neo<sup>1</sup>,  
YOSHIDA Megumi<sup>1</sup>, ISU Atsuko<sup>2</sup>, WAKABAYASHI Kenichi<sup>2</sup>, YOSHIMURA Kenjiro<sup>1</sup>  
<sup>1</sup>*Coll. Syst. Eng. Sci., Shibaura Inst. Technol.*, <sup>2</sup>*Lab. Chem. Life Sci., Tokyo Inst. Technol.*
- PA-12 Functional hybrid receptor composed of GlyR and GABA<sub>A</sub>R subunits**  
\*ANZAI Miku, KASHIMA Makoto, HIRATA Hiromi  
*Dept. Sci. Engineer., Aoyama Gakuin Univ.*
- PA-13 The effect of a peptide hormone, oxytocin, on a rat model of neuropathic pain**  
\*OKUMURA Ryo<sup>1</sup>, KATO Jun<sup>1</sup>, IKEDA Tetsuya<sup>2</sup>  
<sup>1</sup>*Dept. of Psychol., Fac. of Health Sci., Kyoto Tachibana Univ.*, <sup>2</sup>*Dept of Med. Tech. Sci, Fac. of Health Sci., Kyoto Tachibana Univ.*
- PA-14 Two distinct sex pheromone processing pathways in the American cockroach, from receptions to behaviors**  
\*TATEISHI Kosuke<sup>1,2</sup>, WATANABE Takayuki<sup>3,4</sup>, DOMAE Mana<sup>5</sup>,  
NISHINO Hiroshi<sup>5</sup>, MIZUNAMI Makoto<sup>4</sup>, WATANABE Hidehiro<sup>1</sup>  
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- PA-15 Analysis of the effect of SERT expression in *Lymnaea stagnalis* CGC on conditioned taste aversion learning**  
\*CHIKAMOTO Nozomi, NAKAI Junko, ITO Etsuro  
*Dept. Biol., Waseda Univ.*
- PA-16 Efficient particle capturing by silkworm antennal structure revealed by airflow visualization method**  
\*TANZAWA Kyohei<sup>1</sup>, SHIGAKI Shunsuke<sup>2</sup>, SAKURAI Takeshi<sup>1</sup>  
<sup>1</sup>*Fac. Agric., Tokyo Univ. Agric.*, <sup>2</sup>*Grad. Sch. Eng. Sci., Osaka Univ.*
- PA-17 RNA interference of clock genes indicates involvement of the circadian clock in the circa'bi'dian rhythm of the large black chafer *Holotrichia parallela***  
\*WATANABE Kohei, SHIGA Sakiko  
*Grad. Sch. Sci., Osaka Univ.*
- PA-18 Species-specific diversity and multi-modal modulation of beacon aiming in ants**  
\*NOTOMI Yusuke<sup>1,2</sup>, KAZAWA Tomoki<sup>2</sup>, MAEZAWA So<sup>1</sup>, KANZAKI Ryohei<sup>2</sup>, NAMIKI Shigehiro<sup>2</sup>, HAUPT Stephan Shuichi<sup>2</sup>  
<sup>1</sup>*Dept. Appl. Biol. Sci., Fac. Sci. & Tech., Tokyo Univ. Sci.*, <sup>2</sup>*RCAST, Univ. Tokyo*
- PA-19 Experimental setup of classical conditioning to identify magnetoreceptors in mole crickets**  
\*ENDO Tsubasa<sup>1</sup>, ANDO Noriyasu<sup>2</sup>  
<sup>1</sup>*Grad. Sch. Eng., Maebashi Inst. Tech.*, <sup>2</sup>*Dept. Life Eng., Maebashi Inst. Tech.*
- PA-20 Analysis of leg movements for the initial oriented movements in escape response to airflow in crickets**  
\*RAZA Hamza<sup>1</sup>, SHIDARA Hisashi<sup>2</sup>, OGAWA Hiroto<sup>3</sup>  
<sup>1</sup>*Biosystem. Sci., Grad. Sch. Life Sci., Hokkaido Univ.*, <sup>2</sup>*Dept. Biochem., Grad. Sch. Med., Mie Univ.*, <sup>3</sup>*Dept. Bio. Sci., Fac. Sci., Hokkaido Univ.*
- PA-21 Pigeons and crows use visual motion cues to guide their pecking**  
\*HATAJI Yuya, IZAWA Ei-ichi  
<sup>1</sup>*Dept. Psychol., Keio Univ.*
- PA-22 Reproduction of early processes in the evolution of photosensory system by short-term selection of *C. elegans* optogenetically rendered photosensitive**  
\*SATO Ryu<sup>1</sup>, NAGATA Takashi<sup>2</sup>, KAWANO Taizo<sup>3</sup>, MIYAZAKI Shinichi<sup>3</sup>, HAYASHI Yu<sup>3</sup>, TERAKITA Akihisa<sup>1,4,5</sup>, KOYANAGI Mitsumasa<sup>1,4,5</sup>  
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- PA-23 Selective changes of evoked potentials of the inferior colliculus during echolocation by bats (*Pipistrellus abramus*)**  
\*KIHARA Motoki, YOSHINO-HASHIZAWA Kazuki, HIRAGOCHI Midori, KOBAYASI Kohta I, HIRYU Shizuko  
*Grad. Sch. Life & Med. Sci., Doshisha Univ.*
- PA-24 Functional analysis of sex-determination-related genes in zebrafish**  
\*KASHIMA Hitomi, KASHIMA Makoto, HIRATA Hiromi  
*Dept. Sci. Engineer., Aoyama Gakuin Univ.*
- PA-25 Ionotropic receptors for hygrosensation in the American cockroach**  
\*AIZAWA Yuri<sup>1</sup>, TATEISHI Kosuke<sup>1,2</sup>, WATANABE Takayuki<sup>3</sup>, WATANABE Hidehiro<sup>1</sup>  
<sup>1</sup>*Dept. Earth Syst. Sci., Fukuoka Univ.*, <sup>2</sup>*Res. Fellowship Yng. Scientist DC2-PD, JSPS*, <sup>3</sup>*Res. Cent, Integr. Evol. Sci. / Sch. Adv. Sci., SOKENDAI-Hayama*
- PA-26 Possible involvement of allatotropin and SIFamide receptor in the brain-corpora allata axis in the nymph-adult transition in a cricket, *Modicogryllus siamensis***  
\*SHINOHARA Tsugumichi, GOTO Shinsuke  
*Glad. Sch. Sci. Dept. Biol. Geosci., Osaka City Univ.*
- PA-27 GABA-mediated neural mechanisms of song preference learning in flies**  
\*IMOTO Keisuke<sup>1</sup>, ASO Yoshinori<sup>2</sup>, TANAKA Ryoya<sup>1</sup>, KAMIKOUCHI Azusa<sup>1,3</sup>  
<sup>1</sup>*Grad. Sch. of Sci., Nagoya Univ.*, <sup>2</sup>*Janelia Research Campus*, <sup>3</sup>*Grad. Sch. of Life Sci., Tohoku Univ.*
- PA-28 Localization and changes of the transcription factor FOXO in the central nervous system of the pond snail *Lymnaea stagnalis***  
\*NAKAI Junko, ITO Etsuro  
*Dept. Biol., Waseda Univ.*
- PA-29 Expression patterns of photoreceptor genes in the tissue including the Bolwig organ of *Sarcophaga similis* larvae**  
\*AE Masamichi, SHIGA Sakiko  
*Grad. Sch. Sci., Osaka Univ.*
- PA-30 Genomic and physiological analysis of the *Chlamydomonas* mutant *ppr3* defective in photophobic response**  
\*TAKITA Yuya, ITOH Neo, YOSHIMURA Kenjiro  
*Coll. Syst. Eng. Sci., Shibaura Inst. Technol.*
- PA-31 Mapping invisible area using insect exploratory behavior**  
\*IKEDA Naoyuki<sup>1</sup>, ANDO Noriyasu<sup>2</sup>  
<sup>1</sup>*Grad. Sch. Eng., Maebashi Inst. Tech.*, <sup>2</sup>*Dept. Life Eng., Maebashi Inst. Tech.*

**PA-32 Role of abdominal movement in free flight of hawkmoth**

\*ARAFUNE Junnosuke<sup>1</sup>, ANDO Noriyasu<sup>2</sup>

<sup>1</sup>Grad. Sch. Eng., Maebashi Inst. Tech., <sup>2</sup>Dept. Life Eng., Maebashi Inst. Tech.

**PA-33 Functional analyses of cercal giant interneurons in the wind-elicited escape behavior**

\*INOUE Ryuto<sup>1</sup>, CHIDA Hikaru<sup>2</sup>, OGAWA Hiroto<sup>3</sup>

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<sup>3</sup>Biosystem. Sci., Grad. Sch. Life Sci., Hokkaido Univ.

**PA-34 The effect of 5-HT on the trail formation in an ant *Pristomyrmex punctatus***

\*MORIMOTO Tetsu, HOJO Masaru K.

Grad. Sch. Sci. Tech., Kwansei Gakuin Univ.

**PA-35 Measurement of time difference between odorant arrivals by using multiple sensors based on insect antennae**

\*UCHIDA Tomoya<sup>1</sup>, FUKUI Chihiro<sup>2</sup>, SUKEKAWA Yuji<sup>3</sup>, KANZAKI Ryohei<sup>3</sup>,  
TERUTSUKI Daigo<sup>4</sup>

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Grad. Sch. Sci. Tech., Tokyo Univ. of Sci., <sup>3</sup>Intell. Coop. Syst., Res. Ctr. for Adv. Sci. and Tech.,  
The Univ. of Tokyo, <sup>4</sup>Dept. Finemechanics, Grad. Sch. Eng., Tohoku Univ.

**PA-36 Analysis of the distributions of lipid molecules in the outer segments of vertebrate photoreceptor cells**

\*NISHIDA Nanaho<sup>1</sup>, SENO Keiji<sup>2</sup>, UEDA Masahiro<sup>1</sup>, TACHIBANAKI Shuji<sup>1</sup>

<sup>1</sup>Grad. Sch. Frontier Biosci., Osaka Univ., <sup>2</sup>Dept. Biol., Fac. Med., Hamamatsu Univ. Sch. Med.

**PA-37 Adiponectin and adiponectin receptor of the pond snail *Lymnaea stagnalis* are upregulated in the fasting condition**

\*FUJIMOTO Kanta<sup>1</sup>, HATAKEYAMA Dai<sup>2</sup>, ITO Etsuro<sup>1</sup>

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**PA-38 Innate color preferences of different seasonal forms of swallowtail butterfly**

\*NAKAI Nobutaka, KINOSHITA Michiyo

ESB, SOKENDAI

**PA-39 Analysis of light-dependent behaviors with a pineal opsin, parapinopsin-mutant zebrafish**

\*YAMAMOTO Yuki<sup>1</sup>, SAITO Tomoka<sup>1</sup>, WADA Seiji<sup>2,3</sup>, KOYANAGI Mitsumasa<sup>1,2,3</sup>,  
TERAKITA Akihisa<sup>1,2,3</sup>

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Tech., Osaka Met. Univ., <sup>3</sup>Dept. Biol., Grad. Sch. Sci., Osaka Met. Univ.

**PA-40 Increased urinary mesotocin concentrations in male-male social bonds formed by the forced triadic cohabitation in large-billed crows (*Corvus macrorhynchos*)**

\*SEGUCHI Akiko, IZAWA Ei-Ichi

*Dept. Psych, Keio Univ.*

**PA-41 Exploring of an identified GABAergic interneurons in Bumble bee**

\*FUJIMOTO Ryota<sup>1</sup>, WATANABE Hidehiro<sup>2</sup>, MITSUHATA Masahiro<sup>3</sup>, AI Hiroyuki<sup>4</sup>

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**PA-42 Spectroscopic and immunohistochemical characterization of a mammalian non-visual opsin Opn3**

\*TAKAKUSA Daigo<sup>1</sup>, SUGIHARA Tomohiro<sup>2</sup>, KIYONARI Hiroshi<sup>3</sup>,

TERAKITA Akihisa<sup>1,2,4</sup>, KOYANAGI Mitsumasa<sup>1,2,4</sup>

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**PA-43 Generation of the transgenic line to elucidate the melanopsin-expressing retinal circuit regulating the background adaptation in zebrafish**

\*TAKEMAE Kazuhiko, KOJIMA Daisuke

*Dept. Biol. Sci., Sch. Sci, Univ. Tokyo.*

**PA-44 Improvement of odor-orientation algorithm for odor source localization robots based on a bio-hybrid odor sensor**

\*FUKUI Chihiro<sup>1</sup>, UCHIDA Tomoya<sup>2</sup>, SUKEKAWA Yuji<sup>3</sup>, KANZAKI Ryohei<sup>3</sup>,

TERUTSUKI Daigo<sup>4</sup>

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**PB. Others: In-Person Presentation Required**

**PB-01 Real-time volumetric neuronal recoding by high-speed light-sheet microscopy**

\*TOMINA Yusuke<sup>1</sup>, SHISHIDO Hikaru<sup>1,2</sup>, MUKUMOTO Kazuki<sup>1,2</sup>,

TOYOSHIMA Yu<sup>3</sup>, IINO Yuichi<sup>3</sup>, MURAKAMI Yuko<sup>4</sup>, OE Suzu<sup>4</sup>,

ISHIHARA Takeshi<sup>5</sup>, MIKAMI Hideharu<sup>1</sup>

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**PB-02 Neural organization of the mushroom body in the swallowtail butterfly: from calyces to lobe**

\*TAKAHASHI Naomi<sup>1</sup>, NAMIKI Shigehiro<sup>2</sup>, KINOSHITA Michiyo<sup>1</sup>

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**PB-03 Stride-based rapid and flexible neural computations for walking course control**

\*FUJIWARA Terufumi<sup>1,2</sup>, CHIAPPE Eugenia<sup>2</sup>

<sup>1</sup>CPR, RIKEN, <sup>2</sup>Champalimaud Ctr. the Unknown, Champalimaud Foundation

**PB-04 Inhibitory glutamatergic signals regulate photoperiodic responses of oviposition-promoting pars intercerebralis neurons in the bean bug *Riptortus pedestris***

\*HASEBE Masaharu, SHIGA Sakiko

Dept. Biol. Sci., Grad. Sch. Sci., Osaka Univ.

**PB-05 Positive phototaxis and its functional significance in cicadas**

\*SAKAI Masaki<sup>1</sup>, NAKAHORI Kiyoshi<sup>1</sup>, MINO Michinobu<sup>1</sup>, WATANABE Hidehiro<sup>2</sup>

<sup>1</sup>Grad. Sch. Nat. Sci. Tech., Okayama Univ. <sup>2</sup>Dept. Earth Syst. Sci., Fukuoka Univ.

**PB-06 Dawn chorus in songbirds: a novel mechanism and function suggested by laboratory experiments in zebra finches**

\*KOJIMA Satoshi<sup>1</sup>, MORI Chihiro<sup>2</sup>, MIZUGUCHI Daisuke<sup>1</sup>, KIM Yunbok<sup>1</sup>

<sup>1</sup>Sens. & Mot. Sys. Res. Grp., Korea Brain Res. Inst., <sup>2</sup>Dept. Mol. Biol., Fac. Pharm. Sci., Teikyo Univ.

**PB-07 Incorporating ventilation variabilities into behavioral tests for drug effects on zebrafish**

\*YOSHIDA Masayuki

Grad. Sch. Integrated Sci. for Life, Hiroshima Univ.

**PB-08 Putative neural mechanism for repellent effect of a native ant's odor on invasive species**

\*UEBI Tatsuya<sup>1,2</sup>, SAKITA Tomoya<sup>1</sup>, SAKANISHI Keita<sup>1</sup>, ZHANG Zijian<sup>3</sup>, MA Huiying<sup>3</sup>, MATSUBARA Ryosuke<sup>3</sup>, MATSUYAMA Shigeru<sup>4</sup>, NAKAJIMA Satoko<sup>5</sup>, HUANG Rong-Nan<sup>6</sup>, HABE Shunya<sup>1</sup>, HEFETZS Abraham<sup>7</sup>, OZAKI Mamiko<sup>1,2,8,9</sup>

<sup>1</sup> Dept. Biol., Kobe Univ., <sup>2</sup>KYOUSEI Sci. Ctr., Nara Women's Univ., <sup>3</sup>Dept. Chem., Kobe Univ., <sup>4</sup>Grad. Sch. Life and Env. Sci., Univ. of Tsukuba, <sup>5</sup>Grad. Sch. Life and Env. Sci., Kyoto Pref. Univ., <sup>6</sup>Dept. Entomol., National Taiwan Univ., <sup>7</sup>Sch. sci., Tel Aviv Univ., <sup>8</sup>Dept. Chem. Sci. and Eng., Kobe Univ., <sup>9</sup>Morphogenetic Signaling Team, RIKEN BDR

- PB-09** Loss of  $\alpha$ kltho causes reduced motor capability and short lifespan in zebrafish  
\*HIRATA Hiromi, OGURA Yurie, KANEKO Ryoji, UJIBE Kota, WAKAMATSU Yuma, KASHIMA Makoto  
*Aoyama Gakuin Univ.*
- PB-10** Morphology and local synaptic circuits of pigment-dispersing factor-immunoreactive (PDF-ir) neurons projecting to the lateral protocerebrum in the large black chafer, *Holotrichia parallela*  
\*HAMANAKA Yoshitaka<sup>1</sup>, LU Zhiyuan<sup>2</sup>, SHIGA Sakiko<sup>1</sup>  
<sup>1</sup>Grad. Sch. Sci., Osaka Univ., <sup>2</sup>Dept Psychol. Neurosci., Life Sci. Ctr., Dalhousie Univ.
- PB-11** Bimodal central integration in olfactory receptor neurons  
\*ZHOU Rui<sup>1</sup>, SAKURAI Takeshi<sup>2</sup>, KANZAKI Ryohei<sup>1</sup>, NAMIKI Shigehiro<sup>1</sup>, HAUPT Stephan Shuichi<sup>1</sup>  
<sup>1</sup>RCAST, Univ. Tokyo, <sup>2</sup>Dept. Agr. Innov. Sust., Tokyo Univ. Agr.
- PB-12** Motor control on the outlet of urine expulsion in the crayfish, *Procambarus clarkii*  
\*KUROKAWA Makoto<sup>1</sup>, KONDOU Hinako<sup>1</sup>, YONEMITSU Kazuki<sup>1,2</sup>  
<sup>1</sup>Dept. Biol. Sci., Tokyo Metropolitan Univ., <sup>2</sup>Grad. Sch. Pharm. Sci., Tohoku Univ. (present address)
- PB-13** Analyses of light-dependent behavior involving pineal photoreceptions using zebrafish larvae  
\*WADA Seiji<sup>1,2</sup>, KOYANAGI Mitsumasa<sup>1,2</sup>, TERAOKA Akihisa<sup>1,2</sup>  
<sup>1</sup>Grad. Sch. Sci., Osaka Metropolitan Univ., <sup>2</sup>OCARINA, Osaka Metropolitan Univ.
- PB-14** Physiological analyses of the novel signaling pathway in intrinsically photosensitive-retinal ganglion cells of mice  
\*KOJIMA Daisuke<sup>1</sup>, KIMATA Naoki<sup>1</sup>, TORII Masaki<sup>1</sup>, TANAKA Shodai<sup>1</sup>, SUENAGA Shoichi<sup>1</sup>, NAKAO Harumi<sup>2</sup>, KOEBIS Michinori<sup>2</sup>, AIBA Atsu<sup>2</sup>, FUKADA Yoshitaka<sup>1,2</sup>  
<sup>1</sup>Dept. Biol. Sci., Sch. Sci., Univ. Tokyo, <sup>2</sup>Sch. Med., Univ. Tokyo
- PB-15** The function of GABAergic signaling in an auditory neural circuit  
\*OKAMOTO Ryuya<sup>1</sup>, KODAKA Hina<sup>1</sup>, KAMIKOUCHI Azusa<sup>1,2</sup>  
<sup>1</sup>Grad. Sch. Sci., Nagoya Univ., <sup>2</sup>Grad. Sch. Life Sci., Tohoku Univ.
- PB-16** Multimodal interaction and information use in foraging ant workers  
TAZUHARA Yu, \*HOJO Masaru K  
*Grad. Sch. Sci. Tech., Kwansei Gakuin Univ.*



- PB-17 A user-friendly support system for analyzing animal behaviors**  
\*KIMURA Toshifumi<sup>1</sup>, IKENO Hidetoshi<sup>2</sup>, OHASHI Mizue<sup>1</sup>, OKADA Ryuichi<sup>3</sup>,  
OZAKI Mamiko<sup>3,4,5</sup>, AI Hiroyuki<sup>6</sup>, HABE Syunya<sup>7</sup>, ISOKAWA Tejiro<sup>1</sup>  
<sup>1</sup>Univ. Hyogo, <sup>2</sup>The Fukuchiyama Univ., <sup>3</sup>Kobe Univ., <sup>4</sup>Nara Women's Univ., <sup>5</sup>RIKEN, <sup>6</sup>Fukuoka Univ., <sup>7</sup>Kyoto Inst. Tech.
- PB-18 Comparative kinematic analysis of aperture adjustment to the target shape between pigeons and crows**  
\*WADA Kenta, IZAWA Ei-Ichi  
*Dept. Psychol., Keio Univ.*
- PB-19 Opsins in the ocular and extraocular photoreceptors in the marine gastropod *Onchidium verruculatum***  
\*MATSUO Ryota<sup>1</sup>, KOTOH Sanae<sup>1</sup>, TAKISHITA Kiyotaka<sup>1</sup>, SAKAMOTO Katsuhiko<sup>2</sup>,  
UEBI Tatsuya<sup>3</sup>, OZAKI Mamiko<sup>3</sup>, MATSUO Yuko<sup>1</sup>, NISHI Takako<sup>4</sup>  
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- PB-20 Neurons specialized for courtship licking in *Drosophila***  
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- PB-21 Comparison of caste differences in brain dopamine levels during metamorphosis between two eusocial bee species**  
\*ONUMA Takafumi, SASAKI Ken  
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- PB-22 Observation of the motor neurons activated during the foreleg movements induced by electrical stimulation in the praying mantis**  
\*ENDO Koji<sup>1</sup>, HOSODA Yutaka<sup>2</sup>, YAMAWAKI Yoshifumi<sup>2</sup>  
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- PB-23 Transcriptome analyses of chemosensory receptor genes in the antennae of cockroaches and a cricket**  
\*WATANABE Takayuki<sup>1,2</sup>, NISHINO Hiroshi<sup>3</sup>, WATANABE Hidehiro<sup>4</sup>,  
TATEISHI Kosuke<sup>4</sup>, MIZUNAMI Makoto<sup>2</sup>  
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Inst. Electronic. Sci., Hokkaido Univ., <sup>4</sup>Dept. Earth Syst. Sci., Fukuoka Univ.
- PB-24 Spectroscopic characterization of anthozoan opsins in a reef-building coral**  
\*SAKAI Yusuke, KOYANAGI Mitsumasa, TERAOKA Akihisa  
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**PB-25 Acute toxicity of ammonia and nitrite to betta fish**

\*KAJIMURA Makiko, TAKIMOTO Kazuyuki, KOJIMA Ayama  
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**PB-26 Comparison of expression about octopamine and dopamine receptors in some organs of *Marsupenaeus japonicus***

\*ITO Shin, TANAKA Kosuke  
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**PB-27 Effect of bystander on aggressive interactions in crows**

\*AOTA Illia, IZAWA Ei-Ichi  
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**PB-28 Do babies smell good? Chemico-psychological scope of human neonates' odor**

\*YOSHIOKA Takuma<sup>1</sup>, KOMETANI Atsushi<sup>2</sup>, UEBI Tatsuya<sup>1</sup>, YANASE Shihoko<sup>3</sup>,  
NAGATA Yoshifumi<sup>4</sup>, SUZUKI Kazunao<sup>5</sup>, ISOMURA Naomi<sup>5</sup>, KANAYAMA Naohiro<sup>6</sup>,  
OHTSUBO Yohsuke<sup>7</sup>, AIHARA Yoshiko<sup>8</sup>, KOBAYAKAWA Tatsu<sup>9</sup>,  
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<sup>11</sup>Dept. Chem. Sci. & Eng., Kobe Univ., <sup>12</sup>Morphogenetic Signaling team, RIKEN Ctr. BDR

**PB-29 Neuronal avalanche on dendrites of brain neurons in crayfish**

\*KAGAYA Katsushi<sup>1</sup>, KUBOTA Tomoyuki<sup>1</sup>, NAKAJIMA Kohei<sup>1,2</sup>  
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**PB-30 'Win-win' chemical defense in Brassicaceae acts on insect olfactory and gustatory systems to depress feeding behavior, limiting damage to both plants and insects**

\*OZAKI Mamiko<sup>1,2</sup>, UEBI Tatsuya<sup>1,2</sup>, TAKAGI Junpei<sup>3,4</sup>, MIZUHO Somare<sup>3</sup>,  
KUNIEDA Tadashi<sup>3</sup>, UEDA Haruko<sup>3</sup>, MAEDA Toru<sup>2,5</sup>, HABA Shunya<sup>2</sup>,  
YAMADA Kenji<sup>5</sup>, HARA-NISHIMURA Ikuko<sup>3</sup>

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<sup>4</sup>Dept. Biol. Sci., Hokkaido Univ., <sup>5</sup>MCB, Jagieollonian Univ.

**PB-31 The hoverfly *Episyrphus balteatus* as a neuroethological model for flower pollination and aphid detection**

\*SEKI Yoichi, OKABE Nobuki, YAMAMOTO Tatsuhiko, FUJIMOTO Naoya,  
YAMAUCHI Junji  
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**PB-32 Analysis of clock genes in the Ant *Camponotus japonicus***

\*MORIYAMA Yoshiyuki

*Dept. Nat. Sci., Kawasaki Med. Sch.*

**PA-33 Towards understanding the adaptive navigation control mechanisms in centipedes (*Scolopendra subspinipes mutilans*)**

\*YASUI Kotaro

*Frontier Res. Inst. Interdisciplinary Sci., Tohoku Univ.*

**PC. Others: Online Presentation Required**

**PC-01 Head-tail-head neural circuit controls temperature acclimation via gut fat content in *C.elegans***

\*MOTOMURA Haruka<sup>1,2</sup>, IOROI Makoto<sup>1,2</sup>, MURAKAMI Kazutoshi<sup>1,2</sup>,  
KUHARA Atsushi<sup>1,2,3</sup>, OHTA Akane<sup>1,2</sup>

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**PC-02 Histochemical investigation of the retinal ganglion cells in the retina of the larval and adult lampreys**

\*KAWANO-YAMASHITA Emi, OSHITA Reika, TAMOTSU Satoshi

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**PC-03 Theoretical study on the temporal aspects of moth odor-source orientation model along turbulent plumes**

\*LIU Yanting, HAUPT Stephan Shuichi, KAZAWA Tomoki, KANZAKI Ryohei

*RCAST, The Univ. of Tokyo*

**PC-04 The significance of carrying nectar fuel for foraging in a solitary bee *Andrena taraxaci orienticola***

\*HARANO Ken-ichi

*Honeybee Sci. Res. Cent., Tamagawa Univ.*

**PC-05 Innexin gene transcripts in the central nervous system of the terrestrial slug *Limax valentianus***

\*SADAMOTO Hisayo<sup>1</sup>, TAKAHASHI Hironobu<sup>2</sup>, KONDO Hirooki<sup>1</sup>,  
KOBAYASHI Suguru<sup>1</sup>, TOKUMARU Hiroshi<sup>1</sup>

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