#### Posters (on November 23rd)

#### P1-01 Inhibitory learning in a cricket; extinction and overexpectation

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### P1-02 Low context-dependency of "habitual memory" formed by extended classical conditioning training in crickets

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# P1-03 Validity of stimulus enhancement in explaining theory the social learning in crickets

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### P1-04 Roles of a transcription repressor FoxP in the long-term memory formation in crickets

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## P1-05 Place memory based on polarized light information in the cricket *Gryllus bimaculatus*

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# P1-06 Social experience after imaginal eclosion contributes the development of sexual behavior in male crickets, *Gryllus bimaculatus*

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# P1-07 Copy or innovate: the attractiveness of egg-laying substrates alter responses to social information

\*Ryoga OTAKE, Shigeto DOBATA Graduate School of Agriculture, Kyoto University

## P1-08 Analysis of regulatory mechanism of nymphal growth rate by temperature and photoperiods in the cricket *Modicogryllus siamensis*

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#### P1-09 Age-related changes of biogenic amines in the cricket brain

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#### P1-10 Sex difference of juvenile hormone effects on biogenic amines in honey bees

\*Tomohiro WATANABE, Ken SASAKI Graduate School of Agriculture, Tamagawa University

#### **P1-11** Genes required for natural variation of cold acclimation in nematode *C. elegans* \*Honomi KOYAMA<sup>1</sup>, Misaki OKAHATA<sup>1</sup>, Sawako YOSHINA<sup>2</sup>, Yohei MINAKUCHI<sup>3</sup>,

Atsushi TOYODA<sup>3</sup>, Shohei MITANI<sup>2</sup>, Akane OHTA<sup>1</sup>, Atsushi KUHARA<sup>1, 4</sup> <sup>1</sup> Institute for Integrative Neurobiology, Konan University, <sup>2</sup> Tokyo Women's Medical University School of Medicine, <sup>3</sup> National Institute of Genetics, <sup>4</sup> PRIME, AMED

# P1-12 Molecular mechanisms underlying positive regulation of cold tolerance in *C. elegans*

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### P1-13 Screening for new thermosensory neuron and thermoreceptor in cold tolerance of *C. elegans*

\*Yuya SAKAMOTO<sup>1</sup>, Kohei OHNISHI<sup>1</sup>, Tohru MIURA<sup>1</sup>, Akane OHTA<sup>1</sup>, Atsushi KUHARA<sup>1, 2</sup> <sup>1</sup> Institute for Integrative Neurobiology, Konan University, <sup>2</sup> PRIME, AMED

#### P1-14

Cancelled

### P1-15 Locomotor activity of Japanese loach (*Misgurnus anguillicaudatus*) is regulated by environmental light

\*Yuya SARATANI, Yuki TAKEUCHI, Keiko OKANO, Toshiyuki OKANO Graduate School of Advanced Science and Engineering, Waseda University

#### P1-16 Light sensing and avoidance by non-ocular photosensing system in Limax

\*Haruka NISHIYAMA, Akane NAGATA, Ryota MATSUO Department of Environmental Science, Fukuoka Women's University

#### P1-17 Patch clamp recordings from photoreceptors in ascidian larva

\*Takaho SUGIHARA<sup>1</sup>, Masashi NAKAGAWA<sup>2</sup>, Takeo HORIE<sup>3</sup>, Keisuke SAKURAI<sup>4</sup> <sup>1</sup> Graduate School of Life & Environmental Sciences, University of Tsukuba, <sup>2</sup> Department of Life Science, Graduate School of Life Science, University of Hyogo, <sup>3</sup> Shimoda Marine Research Center, University of Tsukuba, <sup>4</sup> Faculty of Life & Environmental Science, University of Tsukuba

#### P1-18 Neuronal circuitry for achromatic and chromatic vision in the lamina of *Papilio*

\*Pei-Ju CHEN<sup>1</sup>, Gregor BELUŠIČ<sup>2</sup>, Atsuko MATSUSHITA<sup>1</sup>, Kentaro ARIKAWA<sup>1</sup> <sup>1</sup> Department of Evolutionary Studies of Biosystems, Sokendai-Hayama, <sup>2</sup> Department of Biology, Biotechnical Faculty, University of Ljubljana

### P1-19 Spectral and polarization properties of photoreceptors in the eye of a migratory butterfly, *Parantica sita*

\*Nicolas NAGLOO, Kentaro ARIKAWA, Michiyo KINOSHITA Department for Evolutionary Studies of Biosystems, SOKENDAI

## P1-20 Contribution of a pineal opsin to light-suppressed melatonin secretion and light-regulated locomotor activity in zebrafish pineal organ

\*Genki NAKATA<sup>1</sup>, Seiji WADA<sup>1</sup>, Mitsumasa KOYANAGI<sup>1,2</sup>, Akihisa TERAKITA<sup>1,2</sup> <sup>1</sup> Graduate school of Science, Osaka City University, <sup>2</sup> OCARINA, Osaka City University

### P1-21 Histochemical investigation of phototransduction-related gene expression in zebrafish pineal photoreceptor cells

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### P1-22 Comparative investigation of light responses of pineal photoreceptor cells containing different types of opsins with transgenic zebrafish

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#### P1-23 Day length-dependent expression of *Cry1b* in the zebrafish eye

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### P1-24 Analysis of the function of clock gene *clockwork orange* in the circadian clock of the cricket, *Gryllus bimaculatus*

\*Yasuaki TOMIYAMA, Motoki NOSE, Kenji TOMIOKA Graduate School of Natural Science and Technology, Okayama University

### P1-25 Localization of PERIOD-immunoreactive cells in the brain of the bean bug, *Riptortus pedestris*

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# P1-26 Effect of the optic lobe removal on circa'bi'dian rhythm in the large black chafer *Holotrichia parallela*

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#### P1-27 The influence of the odor stimulation on the circadian clock in mouse liver

\*Shinnosuke SATO<sup>1</sup>, Miho SUZUKI<sup>1</sup>, Tomoko YOSHIKAWA<sup>2</sup>, Atsushi NAKAMURA<sup>1, 3</sup> <sup>1</sup> Department of Engineering Science, The University of Electro-Communications, <sup>2</sup> Department of Anatomy and Neurobiology, Kindai University Faculty of Medicine, <sup>3</sup> Brain Science Inspired Life Support Research Center, The University of Electro-Communications

### P1-28 Insect-like odour tracking patterns on a flying robot: relationship between vertical and lateral frequencies

\*Bluest LAN, Noriyasu ANDO, Ryohei KANZAKI RCAST, The University of Tokyo

### P1-29 Development of a frog-robot and its application to the behavioral experiment of wild frogs

\*Takahiro ISHIMARU<sup>1</sup>, Ryosuke KANEKO<sup>2</sup>, Ikkyu AIHARA<sup>3</sup>, Takaharu ODA<sup>4</sup>, Hideitsu HINO<sup>5</sup>, Tohru KAWABE<sup>3</sup>

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### P1-30 Development of convenient smartphone-based simulations for neurobiology education

\*Takayuki YAMAMOTO<sup>1,2</sup>, Makoto KUROKAWA<sup>1</sup>

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#### P1-31 pacHSB: a standard brain for the honeybee primary auditory center

\*Yuka UENOHARA<sup>1</sup>, Kazuaki GOTO<sup>1</sup>, Satoshi TANAKA<sup>2</sup>, Ajayrama KUMARASWAMY<sup>3</sup>, Thomas WACHTLER<sup>3</sup>, Kazuki KAI<sup>4</sup>, Hiroyuki AI<sup>2</sup>, Hidetoshi IKENO<sup>1</sup>

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#### P1-32 A comparative study of the morphology of the projection neurons in Bombycoidea

\*Takuya NIRAZAWA, Shigehiro NAMIKI, Tomoki KAZAWA, Ryohei KANZAKI RCAST, The University of Tokyo

# P1-33 Sex pheromone processing pathway visualized by using anti-pERK antibody in the male cockroach brain

\*Arisa ZEN, Hidehiro WATANABE Department of Earth System Science, Fukuoka University

# P1-34 Analysis of odor source localization strategy algorithm of silkworm moth with information entropy

\*Shunsuke SHIGAKI<sup>1</sup>, Cesar HERNANDEZ-REYES<sup>2</sup>, Daisuke KURABAYASHI<sup>2</sup> 1 Division of Systems Research, Yokohama National University, 2 Department of systems and control Engineering, Tokyo Tech

### P1-35 Analysis of temporal antennal response kinetics associated with efficient pheromone source localization in the silkmoth, *Bombyx mori*

\*Yusuke SHIOTA<sup>1</sup>, Takeshi SAKURAI<sup>2</sup>, Noriyasu ANDO<sup>1</sup>, Stephan Shuichi HAUPT<sup>1</sup>, Hidefumi MITSUNO<sup>1</sup>, Takaaki DAIMON<sup>3</sup>, Ryohei KANZAKI<sup>1</sup> <sup>1</sup> RCAST, The University of Tokyo, <sup>2</sup> Faculty of Agriculture, Tokyo University of Agriculture, <sup>3</sup> Graduate School of Agriculture, Kyoto University

#### P1-36 Putative neural network within an olfactory sensory unit for nestmate and nonnestmate discrimination in the Japanese carpenter ant: the ultrastructures and mathematical simulation

\*Yusuke TAKEICHI<sup>1</sup>, Tatsuya UEBI<sup>1</sup>, Naoyuki MIYAZAKI<sup>2</sup>, Kazuyoshi MURATA<sup>2</sup>, Kouji YASUYAMA<sup>3</sup>, Kanako INOUE<sup>4</sup>, Hideo KUBO<sup>5</sup>, Naoko KAJIMURA<sup>6</sup>, Jo TAKANO<sup>7</sup>, Toshiaki OMORI<sup>7</sup>, Mamiko OZAKI<sup>1</sup>

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## P1-37 Newly identified male pheromone in *Camponotus japonicus* and its effects on neural activity and behavioral control

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# P1-38 Specific cuticular hydrocarbons of Japanese carpenter ant induce urgent aversive behavior to Argentine ant

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# P1-39 The expression of taste related molecules and the distribution of tuft cell in the intestine of Primates

\*Misa HAYASHI, Miho HAKUKAWA, Hiroo IMAI Cellular and Molecular Biology, Primary Research Institute, Kyoto University

# P1-40 Analysis of the physiologic function of *mKast* using the knocked-out male European honeybees

\*Hiroki KOHNO, Takeo KUBO Graduate School of Science, The University of Tokyo

## **P1-41** Quick diving behavior in the pulmonate pond snail, *Lymunaea stagnalis* \*Moeka ENOMOTO, Makoto KUROKAWA

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#### P1-42 Control of foreleg elevation during predatory strike in the mantis

\*Sho OGAWA<sup>1</sup>, Takatoshi UENO<sup>2</sup>, Yoshifumi YAMAWAKI<sup>3</sup>

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# P1-43 Neural correlates for pecking adaptation to an experimentally extended bill in pigeons

#### \*Hiroshi MATSUI, Ei-Ichi IZAWA

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# P1-44 Localization of pacemaker neurons in the gastrointestinal-tract nervous system of *Bursatella leachii* and its regulation by the CNS

\*Hinako KONDO, Makoto KUROKAWA Department of Biological Sciences, Tokyo Metropolitan University

# P1-45 Neural and behavioral basis of sound-induced flash illusion: a study of rodent and human

\*Yuki ITO, Yu MASAGO, Riku TAKAHASHI, Takafumi FURUYAMA, Sizuko HIRYU, Kohta I. KOBAYASHI Department of Biomedical Information, Doshisha University

#### P1-46 Auditory prosthesis with infrared laser

\*Yuta TAMAI, Takafumi FURUYAMA, Yuki ITO, Kensuke HORINOUCHI, Kazuyuki MATSUMOTO, Sizuko HIRYU, Kohta KOBAYASHI

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#### P1-47 A computational study on an energy-efficient mating strategy of male frogs

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## P1-48 Landing behavior of seagull examined by field observation and mathematical modeling

\*Yuri EISAKI<sup>1</sup>, Ikkyu AIHARA<sup>2</sup>, Tohru KAWABE<sup>2</sup>

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# **P1-49** When the impulsive choice is adaptive: analytical and computational investigation of the effect of profitability-based short-sighted evaluation and resource competition \*Yukiko OGURA<sup>1</sup>, Hidetoshi AMITA<sup>2</sup>, Toshiya MATSUSHIMA<sup>3</sup>

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#### P1-50 Analysis of decorin expression in wound healing

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## P1-51 Implantation of mesenchymal stem cells to the wound site and its effect on the healing process

\*Kosei OGAWA, Takashi MATSUZAKI, Akio NISHIKAWA Faculty of Life and Environmental Sciences, Shimane University

## P1-52 Motion hacking: joint torque control based on external electrostimulation for leg muscles in the stick insect

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