

The 20th BSS Student Poster Presentation Program

Session A: 2024/3/13 (Wed) 09:00-10:15 @Yamauchi Hall, Shiran Kaikan

| # | Title |
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| P1 | A role of ADAM metalloprotease Kuzbanian in developing adult adipose tissue in <i>Drosophila</i> *Yusaku Hayashi ¹ , Taiichi Tsuyama ¹ , Tadao Usui ¹ , Takefumi Kondo ^{1,2} and Tadashi Uemura ^{1,3} 1 Graduate School of Biostudies, Kyoto University, 2 RIKEN Center for Biosystems Dynamics Research (BDR) 3 Center for Living Systems Information Science (CeLiSIS), Kyoto University |
| P3 | Odor representation in the dorsal hippocampus during odor-associated learning *Tatsuya Tsutsui, Itaru Imayoshi, Masayuki Sakamoto Laboratory of Brain Development and Regeneration, Graduate School of Biostudies, Kyoto University |
| P5 | Refined hemolymph evaluation method provides a key for rational understanding of osmo-dependent nociceptive gating mechanism *Misato Kurio ¹ , Yuma Tsukasa ¹ , Tadashi Uemura ^{1,2} and Tadao Usui ^{1,2} 1 Laboratory of Cell recognition, Graduate School of Biostudies, Kyoto University, 2 Center for Living Systems Information Science (CeLiSIS), Kyoto University |
| P7 | Distinct roles of dorsal and ventral hippocampus in odor-related learning in mice *Hedan Chen, Itaru Imayoshi, Masayuki Sakamoto Laboratory of Brain Development and Regeneration, Graduate School of Biostudies, Kyoto University |
| P9 | Cell competition is driven by the PERK pathway in <i>Drosophila</i> *Sakura Ishihara ¹ , Rina Nagata ¹ , Shu Kondo ² , Kuniaki Saito ³ , Tatsushi Igaki ¹ 1 Laboratory of Genetics, Graduate School of Biostudies, Kyoto University, 2 Department of Biological Science and Technology, Tokyo University of Science, 3 Division of Invertebrate Genetics, National Institute of Genetics |
| P11 | The role of frontal association cortex in odor-associated learning *Chaorui Ma, Itaru Imayoshi, Masayuki Sakamoto Laboratory of Brain Development and Regeneration, Graduate School of Biostudies, Kyoto University |
| P13 | Identification and mechanistic characterization of a factor mediating JNK-dependent cell death in cell competition *Yutaro Tsubono ¹ , John Vaughn ² , Carmen Siow ² , Takaki Fujii ¹ , Masato Enomoto ² , Kiichiro Taniguchi ² , Tatsushi Igaki ^{1,2} 1 Laboratory of Genetics, Graduate School of Pharmaceutical Sciences, Kyoto University, 2 Laboratory of Genetics, Graduate School of Biostudies, Kyoto University |

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| P15 | <p>Development of Kinase Biosensors for Using Near-Infrared Fluorescent Protein</p> <p>*Haruka Mii¹, Michiyuki Matsuda^{1,2}, Kenta Terai³</p> <p>1 Laboratory of Bioimaging and Cell Signaling, Graduate School of Biostudies, Kyoto University, 2 Department of Pathology and Biology of Diseases, Graduate School of Medicine, Kyoto University, 3 Department of Anatomy and Cell Biology, Institute of Biomedical Sciences, Tokushima University</p> |
| P17 | <p>Phosphoproteomic analysis of mitotic dephosphorylation by Ki-67·PP1</p> <p>*Chun Kim Lim, Shige H. Yoshimura</p> <p>Laboratory of Plasma Membrane and Nuclear Signaling, Graduate School of Biostudies, Kyoto University</p> |
| P19 | <p>Pharmacological characterization of <i>lyso</i>-thiosquarylglucoside JA1, a synthetic candidate non-competitive antagonist of G protein-coupled receptor GPR55</p> <p>*Xianyue Huang¹, Junpei Abe², Yukishige Ito², Itaru Imayoshi¹, Adam T. Guy¹</p> <p>1 Graduate School of Biostudies, Kyoto University; 2 Graduate School of Science, Osaka University</p> |
| P21 | <p>Exploring novel factors governing hypoxia-inducible factor (HIF)-independent and replication stress-mediated mechanisms</p> <p>*Joshua Mulele Machayo^{1,2}, Gouki Kambe^{1,2}, Yukari Shirai^{1,2}, Minoru Kobayashi^{1,2}, Hiroshi Harada^{1,2}</p> <p>1 Laboratory of Cancer Cell Biology, Graduate School of Biostudies, Kyoto University, 2 Department of Genome Repair Dynamics, Radiation Biology Center, Graduate School of Biostudies, Kyoto University</p> |
| P23 | <p>Contribution of Hippocampal Neurogenesis in Spatial Learning and its Meta-learning in Mice</p> <p>*Airi Matsumoto, Yusuke Suzuki, Itaru Imayoshi</p> <p>Laboratory of Brain Development and Regeneration, Graduate School of Biostudies, Kyoto University</p> |
| P25 | <p>Approaches to HIF function in stromal cells using a unique genetically engineered mouse model</p> <p>*Meihui Wang¹, Minoru Kobayashi^{1,2}, Hiroshi Harada^{1,2}</p> <p>1 Laboratory of Cancer cell Biology, Graduate School of Biostudies, Kyoto University, 2 Radiation Biology Center, Graduate School of Biostudies, Kyoto University</p> |
| P27 | <p>Minor executive dysfunction in preclinical Alzheimer's disease mouse model</p> <p>*Mei-Lun Huang, Yusuke Suzuki, Itaru Imayoshi</p> <p>Laboratory of Brain Development and Regeneration, Graduate School of Biostudies, Kyoto University</p> |
| P29 | <p>Analysis of the effects of progesterone and its receptor candidates on environmental stress resistance in plants</p> <p>*Yuka Kinugasa¹, Ayumi Yamagami¹, Rira Daibo¹, Ayaka Uebayashi^{2,3}, Setsuko Shimada², Mayumi Iino², Takahito Nomura⁴, Masaaki Sakuta³, Tadao Asami⁵, Takao Yokota⁶, Takeshi Nakano¹</p> <p>1 Laboratory of Molecular and Cellular Biology of Totipotency, Graduate School of Biostudies, Kyoto University, 2 RIKEN, CSRS, 3 Graduate School of Humanities and Science, Ochanomizu University, 4 Center for Bioscience Research and Education, Utsunomiya University, 5 Graduate School of Agriculture, Tokyo University, 6 Department of Biosciences, Teikyo University</p> |

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| P31 | <p>Effects of radiation chemical/radiation biological mechanisms and HIF-1 on radioresistance of hypoxic cancer cells</p> <p>*Satoshi Takeuchi¹, Minoru Kobayashi^{1,2}, Hiroshi Harada^{1,2}</p> <p>1 Laboratory of Cancer Cell Biology, Graduate School of Biostudies, Kyoto University, 2 Department of Genome Repair Dynamics, Radiation Biology Center, Graduate School of Biostudies, Kyoto University</p> |
| P33 | <p>Ablation of the newborn neurons in the adult hippocampus impairs the reinstatement of fear memory</p> <p>*Yuichiro Gyoten¹, Yusuke Suzuki^{1,2}, Itaru Imayoshi^{1,2}</p> <p>1 Laboratory of Brain Development and Regulation, Division of Systemic Life Science, Graduate School of Biostudies, Kyoto University, 2 Center for Living Systems Information Science, Kyoto University Graduate School of Biostudies, 3 Laboratory of Deconstruction of Stem Cells, Institute for Life and Medical Sciences, Kyoto University</p> |
| P35 | <p>Investigating the affinity between neurogenesis and deep-learning architecture</p> <p>*Naoya Matsuo, Yusuke Suzuki, Itaru Imayoshi</p> <p>Laboratory of Brain Development and Regeneration, Graduate School of Biostudies, Kyoto University</p> |
| P37 | <p>Analysis of molecular mechanisms of drought stress resistance of Mongolian grass field plants, <i>Chloris virgata</i></p> <p>*Namuunaa Ganbayar¹, Hiroataka Ogawa¹, Bujin Bardorj¹, Bolortuya Byambajav², Ayumi Yamagami¹, Davaapurev Bekh-Ochir², Tadao Asami³, Batkhuu Javzan², Takeshi Nakano¹</p> <p>1 Laboratory of Molecular and Cellular Biology of Totipotency, Graduate School of Biostudies, Kyoto University, 2 Laboratory of Plant Biotechnology, School of Engineering and Applied Sciences, National University of Mongolia, 3 Graduate School of Agricultural and Life Sciences, Tokyo University</p> |
| P39 | <p>VR system design for freely moving mice and a mixed keypoint detection method</p> <p>*Yicheng Zheng</p> <p>Laboratory of Brain Development and Regeneration, Graduate School of Biostudies, Kyoto University</p> |
| P41 | <p>Analysis of the molecular mechanism of a novel plant growth regulating compound PPG</p> <p>*Sakurako Katsuta¹, Shun Takeno^{2,3}, Shota Tanaka^{2,3}, Keiya Kaga^{1,6}, Kazuma Ohata¹, Ayumi Yamagami¹, Takuya Miyakawa¹, Shoji Segami⁴, Yasumitsu Kondoh², Naoshi Dohmae², Tetsuo Kushiro³, Masayoshi Maeshima⁴, Tadao Asami⁵, Masaru Takagi⁶, Hiroyuki Osada², Takeshi Nakano¹</p> <p>1 Laboratory of Molecular and Cellular Biology of Totipotency, Graduate School of Biostudies, Kyoto University, 2 RIKEN, CSRS, 3 Graduate School of Agriculture, Meiji University, 4 Graduate School of Bioagricultural Sciences, Nagoya University, 5 Graduate School of Agricultural and Life Sciences, The University of Tokyo, 6 Graduate School of Science & Engineering, Saitama University</p> |

Session B: 2024/3/13 (Wed) 11:15-12:30 @Yamauchi Hall, Shiran Kaikan

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| P2 | <p>Unraveling the mystery of the scramblase Xkr7</p> <p>*Lorenzo Giulio Pepe^{1,2}, Masahiro Maruoka^{1,2}, Jun Suzuki^{1,2,3}</p> <p>1 Institute for Integrated Cell-Material Sciences (iCeMS), Kyoto University, 2 Laboratory of Biochemical Cell Dynamics, Graduate School of Biostudies, Kyoto University, 3 Center for Integrated Biosystems, Institute of Biomedical Sciences, Academia Sinica</p> |
| P4 | <p>CUT&RUN analysis revealed downstream targets of GATA3 in lower urinary tract development</p> <p>*Yu Nakanishi^{1,2}, Filip Jos Wymeersch², Minoru Takasato^{1,2}</p> <p>1 Laboratory of Molecular Cell Biology and Development, Graduate School of Biostudies, Kyoto University, 2 Laboratory for Human Organogenesis, RIKEN Center for Biosystems Dynamics Research, Japan</p> |
| P6 | <p>Novel modality induces elimination of unwanted cells</p> <p>*Yuki Yamato^{1,2}, Jun Suzuki^{1,2}</p> <p>1 Laboratory of Biochemical Cell Dynamics, Graduate School of Biostudies, Kyoto University, 2 Institute for Integrated Cell-Material Sciences (iCeMs), Kyoto University</p> |
| P8 | <p>Development of optogenetic tools for gene expression</p> <p>*Kazuki Kuremura^{1,2}, Shinji C. Nagasaki³, Tomonori D. Fukuda^{1,2}, Mayumi Yamada⁴, Itaru Imayoshi^{1,2,3}</p> <p>1 Laboratory of Brain Development and Regeneration, Graduate School of Biostudies, Kyoto University, 2 Center for Living Systems Information Science, Graduate School of Biostudies, Kyoto University, 3 Laboratory of Deconstruction of Stem Cells, Institute for Life and Medical Sciences, Kyoto University, 4 Laboratory of Cell Biology, Institute for Life and Medical Sciences, Kyoto University</p> |
| P10 | <p>Lipid Droplet Composition Homeostasis and Its Connection to Disease</p> <p>*Wen Ann Wee^{1,2}, Jun Suzuki^{1,2}</p> <p>1 Institute for Integrated Cell-Material Sciences (iCeMS), Kyoto University, 2 Laboratory of Biochemical Cell Dynamics, Graduate School of Biostudies, Kyoto University</p> |
| P12 | <p>Structural Analysis of Possible Intermediate Structure of <i>Ebolavirus</i> Nucleoprotein-RNA helix</p> <p>*Yen Ni Ng¹, Yoko Fujita-Fujiharu^{1,2,4}, Shangfan Hu^{1,2}, Kazuya Hour^{1,2}, Yukiko Muramoto, Masahiro Nakano^{1,2}, Yukihiko Sugita^{1,2,3}, Takeshi Noda^{1,2}</p> <p>1 Laboratory of Ultrastructural Virology, Institute for Life and Medical Sciences, Kyoto University, 2 Laboratory of Ultrastructural Virology, Graduate School of Biostudies, Kyoto University, 3 Hakubi Center for Advanced Research, Kyoto University, 4 Max-Planck-Institute of Biochemistry Department of Cell and Virus Structure</p> |
| P14 | <p>Functional improvement and evaluation of the tetracycline-regulatable transcription silencer suppressing the leaky expression of the Tet-On system</p> <p>*Ikumi Nagano^{1,2}, Shinji C. Nagasaki³, Tomonori D. Fukuda^{1,2}, Mayumi Yamada⁴, Itaru Imayoshi^{1,2,3}</p> <p>1 Laboratory of Brain Development and Regeneration, Division of Systemic Life Science, Kyoto University Graduate School of Biostudies, 2 Center for Living Systems Information Science, Kyoto University Graduate School of Biostudies, 3 Laboratory of Deconstruction of Stem Cells, Institute for Life and Medical Sciences, Kyoto University, 4 Laboratory of Cell Biology, Institute for Life and Medical Sciences, Kyoto University</p> |

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| P16 | <p>Development of photo-activatable transcription factors for controlling cellular gene expression</p> <p>*Tomonori D. Fukuda¹, Shinji C. Nagasaki², Mayumi Yamada³, Adam T. Guy^{1,4}, Itaru Imayoshi^{1,2,5}</p> <p>1 Laboratory of Brain Development and Regeneration, Graduate School of Biostudies, Kyoto University, 2 Laboratory of Deconstruction of Stem Cells, Institute for Life and Medical Sciences, Kyoto University, 3 Laboratory of Cell Biology, Institute for Life and Medical Sciences, Kyoto University, 4 Laboratory of Science Communication, Graduate School of Biostudies, Kyoto University, 5 Center for Living Systems Information Science, Graduate School of Biostudies, Kyoto University</p> |
| P18 | <p>A broad pH range for virus membrane fusion is required for the production of highly infectious vesicular stomatitis virus pseudotype bearing glycoprotein of Borna disease virus 1</p> <p>*Yusa Akiba^{1,2}, Hiromichi Matsugo^{1,2}, Keizo Tomonaga^{1,2,3}</p> <p>1 Laboratory of RNA Viruses, Department of Virus Research, Institute for Life and Medical Sciences, Kyoto University, 2 Department of Mammalian Regulatory Network, Graduate School of Biostudies, Kyoto University, 3 Department of Molecular Virology, Graduate School of Medicine, Kyoto University</p> |
| P20 | <p>The conserved C-terminal sequence of <i>C. elegans</i> SPO-11 regulates the level of DSB formation</p> <p>*Keita Kameda, Aya Sato-Carlton, Peter Carlton</p> <p>Laboratory of chromosome function and inheritance, Graduate School of Biostudies, Kyoto University</p> |
| P22 | <p>Regulation of neural stem cell differentiation and proliferation by <i>Ascl1</i> downstream genes</p> <p>*Masaya Takatsuji^{1,2}, Shinji C. Nagasaki³, Tomonori D. Fukuda^{1,2}, Mayumi Yamada⁴, Itaru Imayoshi^{1,2,3}</p> <p>1 Laboratory of Brain Development and Regeneration, Graduate School of Biostudies, Kyoto University, 2 Center for Living Systems Information Science, Graduate School of Biostudies, Kyoto University, 3 Laboratory of Deconstruction of Stem Cells, Institute for Life and Medical Sciences, Kyoto University, 4 Laboratory of Cell Biology, Institute for Life and Medical Sciences, Kyoto University</p> |
| P24 | <p>Analysis of drought stress-inducible genes from Mongolian grassland plant <i>Chloris virgata</i></p> <p>*Baldorj Bujin¹, Ganbayar Namuunaa¹, Ayumi Yamagami¹, Beck-Ochir Davaapurev², Javzan Batkhuu², Takeshi Nakano^{1,2}</p> <p>1 Laboratory of Molecular and Cellular Biology of Totipotency, Graduate School of Biostudies, Kyoto University, 2 School of Engineering and Applied Sciences, National University of Mongolia</p> |
| P26 | <p>The function of AAA+ ATPase protein CDC-48.1/48.2 in meiosis in <i>C.elegans</i></p> <p>*Lin Meng, Carlos Rodriguez, Takaya Hashimoto, Aya Sato, Peter Carlton</p> <p>Laboratory of Chromosome Function and Inheritance, Graduate School of Biostudies, Kyoto University</p> |
| P28 | <p>Observation of cAMP concentration changes during proliferation, differentiation and quiescence of neural stem cells</p> <p>*Riko Fujiwara^{1,2}, Mayumi Yamada³, Tatsushi Yokoyama^{1,2}, Masayuki Sakamoto^{1,2}, and Itaru Imayoshi^{1,2,4}</p> <p>1 Laboratory of Brain Development and Regeneration, Graduate School of Biostudies, Kyoto University, 2 Center for Living Systems Information Science, Graduate School of Biostudies, Kyoto University, 3 Laboratory of Cell Biology, Institute for Life and Medical Sciences, Kyoto University, 4 Laboratory of Deconstruction of Stem Cells, Institute for Life and Medical Sciences, Kyoto University</p> |

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| P30 | <p>Live imaging analysis of DSB-1, a factor required for DNA double-strand break formation during meiotic prophase in <i>C. elegans</i></p> <p>*Sohei Sasagawa¹, Masa A Shimazoe², Aya Sato¹, Peter M Carlton¹</p> <p>1 Laboratory of Chromosome Function and Inheritance, Graduate School of Biostudies, Kyoto University, 2 Genome Dynamics Laboratory, National Institute of Genetics</p> |
| P32 | <p>Generation of GPR55-GFP knock-in mice using CRISPR-Cas9 to analyze LysoPtdGlc/GPR55 signaling mechanism during cerebellar development</p> <p>*Takuto Tamura^{1,2}, Linchi Chen^{1,2}, Adam T. Guy^{1,3} and Itaru Imayoshi^{1,2,4}</p> <p>1 Laboratory of Brain Development and Regeneration, Division of Systemic Life Science, Kyoto University Graduate School of Biostudies, 2 Center for Living Systems Information Science, Kyoto University Graduate School of Biostudies, 3 Laboratory of Science Communication, Graduate School of Biostudies, Kyoto University, 4 Laboratory of Deconstruction of Stem Cells, Institute for Life and Medical Sciences, Kyoto University</p> |
| P34 | <p>Profiling of spermatid-specific alternative splicing and screening of splicing regulators in <i>Marchantia polymorpha</i></p> <p>*Makoto Mashiba, Asuka Higo, Shohei Yamaoka, Keisuke Inoue, Takashi Araki</p> <p>Laboratory of Plant Developmental Biology, Graduate School of Biostudies, Kyoto University</p> |
| P36 | <p>Identification of a potential biased agonism mechanism of GPR55 activation mediated by lysophospholipid diastereomers</p> <p>*Yuji Tatsumi^{1,2}, Xianyue HUANG^{1,2}, Adam T. Guy^{1,3} and Itaru Imayoshi^{1,2,4}</p> <p>1 Laboratory of Brain Development and Regeneration, Division of Systemic Life Science, Kyoto University Graduate School of Biostudies, 2 Center for Living Systems Information Science, Kyoto University Graduate School of Biostudies, 3 Laboratory of Science Communication, Graduate School of Biostudies, Kyoto University, 4 Laboratory of Deconstruction of Stem Cells, Institute for Life and Medical Science, Kyoto University</p> |
| P38 | <p>The Cell Cycle Length Restriction by Surrounding Environment in Early Cortical Development</p> <p>*Yuzuka Takeuchi, Takumi Kawaue, Mineko Kengaku</p> <p>Laboratory of Developmental Neurobiology, Graduate School of Biostudies, Kyoto University</p> |
| P40 | <p>Radial glial lyso-phosphatidylglucoside (LysoPtdGlc) acts as a chemoattractant cue for cerebellar granule cells migration</p> <p>*Linchi Chen, Itaru Imayoshi, Adam T. Guy</p> <p>Laboratory of Brain Development and Regeneration, Graduate School of Biostudies, Kyoto University</p> |
| P42 | <p>Analysis of the cooperation between cells transplanted into the brain and host neurons</p> <p>*Ryusei Abo¹, Takayuki Michikawa², Itaru Imayoshi¹</p> <p>1 Laboratory of Brain Development and Regeneration, Graduate School of Biostudies, Kyoto University, 2 Laboratory of Optical Biomedical Science, Institute for Life and Medical Sciences, Kyoto University</p> |