### Posters

P-01	Injury induced epithelial plasticity drives taste bud regeneration via cell dedifferentiation Anish Adpaikar (Yonsei University College of Dentistry, Republic of Korea)
P-02	Live-imaging analysis of mouse oocyte development Eishi Aizawa (RIKEN Center for Biosystems Dynamics Research, Japan)
P-03	Integrative analysis of the developmental pace and direction during differentiation from pluripotent to neural stem cells Hiroto Akuta (Hiroshima University, Japan)
<b>P-04</b> (S4-3)	Growth of the maternal intestine during reproduction Tomotsune Ameku (Imperial College London, UK)
P-05	Global profiling of the circadian-regulated lipid metabolism in Arabidopsis thaliana leaves Artik Elisa Angkawijaya (RIKEN Center for Sustainable Resource Science, Japan)
P-06	A synthetic microscale kinetochore establishes a biorientation-like state Kohei Asai (RIKEN Center for Biosystems Dynamics Research, Japan)
P-07	The Intrinsic And Extrinsic Apoptotic Pathways Inhibit Axon Arbor Growth and Synaptogenesis, Restricting Arbor Aging Via Caspase Catalytic Activity- Dependent And Independent Pathways Douglas Campbell (Kyoto University, Japan)
P-08	Finding patterns in the tetrapod vertebral count Rory Cerbus (RIKEN Center for Biosystems Dynamics Research, Japan)
P-09	Unraveling the temporal dynamics of nuclear A/B compartment formation in mouse embryonic stem cells Linda Choubani (RIKEN Center for Biosystems Dynamics Research, Japan)
P-10	Unbiased genome-wide mapping of fragile sites in single mammalian cells Jothivanan Elumalai (RIKEN Center for Biosystems Dynamics Research, Japan)
P-11	Reconstitution and characterization of long chromatin array with defined nucleosome modification patterns and positional barcodes Yohsuke Fukai (RIKEN Center for Biosystems Dynamics Research, Japan)
P-12	Spontaneous myoblast differentiation driven by intra- and intercellular dynamics

Yoshizuki Fumoto (Graduate School of Medicine, Hokkaido University, Japan, Japan)

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- P-13Investigating genotype-dependent viral infection and immune phenotypes<br/>using genetically diverse human cell libraries<br/>Steven Heaton (RIKEN Center for Integrative Medical Sciences, Japan)
- P-14 Eggshell functions in *C. elegans* embryonic development Akiko Hatakeyama (RIKEN Center for Biosystems Dynamics Research, Japan)
- P-15 Genetic analysis of developmental speed in *C. elegans* Kaho leda (Graduate School of Science, Nagoya City University, Japan)
- P-16 SSBD: Global sharing of bioimaging data Hiroya Itoga (RIKEN Center for Biosystems Dynamics Resarch, Japan)
- P-17 Restoration of biological age during prolonged fasting-refeeding modulated
- (S6-2) by fasting-responsive linker histone

Kazuto Kawamura (Max Planck Institute for Biology of Ageing, Germany)

- P-18Developmental hourglass: Verification by numerical evolution and elucidation<br/>by dynamical-systems theory<br/>Takahiro Kohsokabe (RIKEN Center for Biosystems Dynamics Research, Japan)
- P-19 A state of partial Rb inactivation and intermediate E2F activation safeguards proliferation commitment Yumi Konagaya (RIKEN Center for Biosystems Dynamics Research, Japan)
- P-20 Transcriptomic analysis on the effects of sulfur dioxide on the development and longevity of *Caenorhabditis elegans* King Law (Ritsumeikan University, Japan)
- P-21 The role of MAST4 on spermatogonial stem cell self-renewal during spermatogenesis Seung-Jun Lee (Yonsei University College of Dentistry, Republic of Korea)
- P-22 Timeline analysis for Caenorhabditis elegans epidermal morphogenesis Fangzheng Li (Ritsumeikan University, Japan)
- P-23 Tuning circadian rhythm of CAFs against cancer progression Shujin Li (Yonsei University College of Dentistry, Republic of Korea)
- P-24 NGN3 oscillatory expression controls the timing of human pancreatic endocrine differentiation Anzy Miller (University of Manchester, UK)
- P-25 Why do animals die from starvation?Yusei Miura (RIKEN Center for Biosystems Dynamics Research, Japan)

- P-26 Dietary Availability Acutely Governs Puberty Timing via Hypothalamic Neural (S6-3) Circuit Kazunari Miyamichi (RIKEN Center for Biosystems Dynamics Research, Japan) P-27 Morphological transitions of lipid vesicles driven by the contraction of cortical actomyosin networks Makito Miyazaki (RIKEN Center for Biosystems Dynamics Research, Japan) **P-28** The role of Pri micropeptides in epithelial invagination Sonoko Mizuno (RIKEN Center for Biosystems Dynamics Research, Japan) P-29 Insidious chromatin change with a propensity to exhaust intestinal stem cells during aging Saki Naito (RIKEN Center for Biosystems Dynamics Research, Japan) P-30 An age-dependent signaling network ensures lifelong maintenance of intestinal epithelial homeostasis May Nakajima-Koyama (CiRA, Kyoto University, Japan) P-31 Amino acids exert a suppressive effect on erebosis in the Drosophila midgut Yukana Nakamura (RIKEN Center for Biosystems Dynamics Research, Japan) P-32 Exploration of chromatin accessibility for hepatocyte regeneration using in vitro hepatocyte culture models Mayumi Oda (Keio University School of Medicine, Japan) P-33 Proper nuclear compartment orchestration in G1 phase is essential for DNA replication control Asami Oji (RIKEN Center for Biosystems Dynamics Research, Japan) P-34 Oncogenic stress-induced Netrin is a humoral signaling molecule that reprograms systemic metabolism in Drosophila Morihiro Okada (RIKEN Center for Biosystems Dynamics Research, Japan) P-35 Usp7 regulates glial lineage cell-specific transcription factors by modulating histone H2B monoubiquitination Suresh Ramakrishna (Hanyang University Graduate School for Biomedical Science and Engineering, Republic of Korea) P-36 Contactless metabolism estimation of small animals using high-frequency millimeter-wave radar Hiroaki Ono (RIKEN Center for Biosystems Dynamics Research, Japan)
- P-37 GALDAR: A novel genetically encoded galactose sensor Ugurcan Sakizli (RIKEN Center for Biosystems Dynamics Research, Japan)

- P-38 Species-specific developmental rate determines the size of the vertebrate neural tube Noriaki Sasai (Nara Institute of Science and Technology, Japan) P-39 Spermatogenic cycle and wave: self-organizing dynamical patterns of germ cell turnover in the mouse testis Toshiyuki Sato (National Institute for Basic Biology, Japan) P-40 Theory of viscoelasticity of chromatin and its surrounding environment Soya Shinkai (RIKEN Center for Biosystems Dynamics Research, Japan) P-41 ELEPHANT: an image analysis tool for 2D/3D cell tracking using incrementally trainable deep learning Ko Sugawara (RIKEN Center for Biosystems Dynamics Research, Japan) P-42 A feedback loop that drives cell death and proliferation and its defect in intestinal stem cells Shivakshi Sulekh (RIKEN Center for Biosystems Dynamics Research, Japan) P-43 Slowing Sepsis in Mice with a Hibernation-like State Genshiro A. Sunagawa (RIKEN Center for Biosystems Dynamics Research, Japan) P-44 Single-housing rearing during the juvenile stage causes fast growth but leads to longer lifespan in African turquoise killifish Chika Takahashi (RIKEN Center for Biosystems Dynamics Research, Japan) P-45 Live chromosome identifying-and-tracking reveals size-based spatial pathway of meiotic errors in oocytes Osamu Takenouchi (RIKEN Center for Biosystems Dynamics Research, Japan) P-46 **BDR Research Automation Project and Core Laboratory** Nobuyuki Tanaka (RIKEN Center for Biosystems Dynamics Research, Japan)
- P-47 Spatio-temporal dynamics and mechanical properties of YAP-regulated immune cell populations during the progression of precancerous lesions Hirotaka Tao (Yamaguchi University Graduate School of Medicine, Japan)
- P-48Selective Vulnerability of Parvocellular Oxytocin Neurons in Social<br/>Dysfunction<br/>Masafumi Tsurutani (RIKEN Center for Biosystems Dynamics Research, Japan)
- P-49 High intake of long-chain fatty acids during growth phase shortens adult
  lifespan via diminished function of histone acetyltransferase Gcn5
  Tadashi Uemura (Kyoto University, Japan)

#### Posters

P-50 A transition from uniformity to diversity in appearance and transcriptome during aging in *C. elegans* 

Masaharu Uno (RIKEN Center for Biosystems Dynamics Research, Japan)

P-51 Generating Kidney Organoids from Nephrotic Syndrome Patients-derived iPSCs

Yukari Usuda (RIKEN Center for Biosystems Dynamics Research, Japan)

P-52 Molecular analysis of CEP290 function in renal development Udval Uuganbayar (Graduate School of Medical Sciences, Nagoya City University, Japan)

# P-53 Time-Dependent Proliferation of Ventral Foregut Primes Enhancer Landscape

(S2-3) **for Organ-Specific Differentiation** Yan Fung Wong (University of Copenhagen, Denmark)

## P-54 Same Clock Ticks Different Time: Molecular Insights into Temporal Scaling of

(S1-3) Neurogenesis

Quan Wu (Graduate School of Medicine, Kyoto University, Japan)

P-55 Spatial regulation of basement membrane turnover rate guides macro-scale organogenesis

Duligengaowa Wuergezhen (RIKEN Center for Biosystems Dynamics Research, Japan)

P-56 Tbx6/Ripply mechanism as a dynamic to static converter in somite

### (S3-3) segmentation

Taijiro Yabe (National Institute for Basic Biology, Japan)

P-57 An optogenetic tool to control spatial and temporal dynamics of the actin cytoskeleton

Kei Yamamoto (RIKEN Center for Biosystems Dynamics Research, Japan)

- P-58 Micro-Nano Processing and Measurement Facility Koki Yamamoto (RIKEN Center for Biosystems Dynamics Research, Japan)
- P-59 Probing the rules of cell coordination in live tissues by interpretable machine learning based on graph neural networks
  Takaki Yamamoto (RIKEN Center for Biosystems Dynamics Research, Japan)
- P-60 Controlling Physical and Biochemical Parameters of Actin Nucleation Using a Patterned Model Lipid Membrane Yosuke Yamazaki (RIKEN Center for Biosystems Dynamics Research, Japan)
- P-61Analysis of compound structure and toxicity on drug discoveryMayuko Yasuda (RIKEN Center for Biosystems Dynamics Research, Japan)

- P-62 Constructing a single-cell transcriptome atlas of the hair cycle to decipher tissue regeneration dynamics in human skin Jun Yokota (POLA Chemical Industries, Inc., Japan)
- P-63 Maternal age-related uterine deficits impact early pregnancy in mice Asmaa Youssef (Nagoya City University, Japan)