Posters

P-01   **Aiming for the AI-powered Evolution of the Human Brain: A Computational Approach to Evolving Human Cortical Organoids**
Hiroto Akuta (Hiroshima University, Japan)

P-02   **Generation of natural and synthetic hypo-immunogenic human iPS cells**
Jonathan Arias (VU EMBL partnership institute for gene editing technologies, Lithuania)

P-03   **Large scale production of hiPSC derived Hepatocytes for Cell Based Therapy**
Fabian Bachinger (Max Planck Institute for Molecular Genetics, Germany)

P-04   **Perfusable vasculature-on-chip models reproduce the pathology of Sturge-Weber syndrome**
Kimihiko Banno (Nara Medical University, Japan)

P-05   **Construction of an Advanced Inducible Differentiation Culture Platform for Mouse Gastric Organoids**
Sumimasa Arimura (Baylor College of Medicine, USA)

P-06   **Modelling human development using pancreatic organoid**
(S6-3)   Jonathan Brassard (CuSTOM - Cincinnati Children's Hospital, USA)

P-07   **Clarification Of the Role Of Plasticity Factors In Human Liver Regeneration**
Marta Cagna (Berlin Institute of Health at Charité , Germany)

P-08   **Dissecting human fetal heart regeneration using cardioids**
Lavinia Ceci Ginistrelli (IMBA - Institute of Molecular Biotechnology, Austria)

P-09   **Organoid In Vitro Culture in Corning® Matrigel® Matrix with AI Quantification**
Yi-Chieh Chan (Corning Research Center Taiwan (CRCT), Taiwan)

P-10   **Exploring Chemotherapy Resistance in Pancreatic Cancer: Insights from a 3D Organoid Model**
Heewon Choi (Yonsei University Health System, Republic of Korea)

P-11   **AI-Driven Predictive Modeling of Stochastic Cellular Decision-Making in Multi-Lineage Organoid Differentiation: A Quantum-Inspired Neural Solver for Precision Regenerative Medicine**
Rifaldy Fajar (The Integrated Mathematical, Computational, and Data Science for BioMedicine Research Community Foundation, Indonesia)

P-12   **On-chip vascular bed simulation with experiment-based parameter optimization**

Kazuya Fujimoto (Kyoto University, Japan)

P-13   **Generation of bladder organoids from adult mouse urothelium**

Mizuki Fukuda (RIKEN Center for Biosystems Dynamics Research, Japan)

P-14   **Screening of active ingredients for Aβ oligomer disruption: Fucoxanthin restores ER stress in cerebral organoids**

Kazumi Hirano (National Institute of Advanced Industrial Science and Technology, AIST, Japan)

P-15   **Deconstruct to Reconstruct: Cellular Deconvolution and Multi-Lineage Reconstitution of Human Colonic Organoids**

Christopher Hofmann (Cincinnati Children's Hospital, Germany)

P-16   **Microfluidics for 3D Cell Spheroids Culture**

Chia-Hsien Hsu (National Health Research Institutes, Taiwan)

P-17   **Long noncoding RNA *OIN1* facilitates hypoxic response in patient-derived three-dimensional cultures of ovarian cancer**

Kazuhiro Ikeda (Saitama Medical University, Japan)

P-18   **Breathing Organoids: Establishing a Pulmonary Aciniform Organoid-on-a-Chip Model for Lung Expansion and Fibrosis**

Satoshi Ikeo (The University of Tokyo, Japan)

P-19   **Development of a multi-chamber cardioid model to investigate genetic and environmental causes of congenital heart defects**

Tobias Ilmer (IMBA - Institute of Molecular Biotechnology, Austria)

P-20   **Tonicity matures the collecting ducts of the kidney**

Daisuke Inoue (Kumamoto University, Institute of Molecular Embryology and Genetics, Japan)

P-21   **Investigating the effect of YAP activity and nuclear deformation on the phenotype of vascular smooth muscle cells cultured on convex surface**

Yuga Isobe (Keio University / RIKEN Center for Biosystems Dynamics Research, Japan)

P-22   **Organoid system for trachea/esophagus development modeling**

Keishi Kishimoto (RIKEN Center for Biosystems Dynamics Research, Japan)

P-23 **Microfluidic culture of kidney organoids embedded in fibrin gel promotes microvasculature network formation via VEGF signaling**

Wei Lun Darryl Koh (Kyoto University, Japan)

P-24 **Targeting mis-localized cytoplasmic long non-coding RNA NEAT1 eliminates aggregation-prone TDP-43 condensate and preserve neuron-muscle function in human ALS neuromuscular organoids**

Hung-Chih Kuo (Academia Sinica, Taiwan)

P-25 **Syrian hamster pluripotent stem cells for kidney organoid induction**

Dat Dien Le (RIKEN Center for Biosystems Dynamics Research, Japan)

P-26 **Xeno-Free Long-Term Expansion of hPSCs on Functional Polymer Films**

Hana Lee (KRIBB for Stem Cell Convergence Research, Republic of Korea)

P-27 **Acquired epithelial WNT secretion drives niche independence of developing gastric cancer**

Heetak Lee (IBS Center for genome engineering, Republic of Korea)

P-28 **Proximal tubule-on-chip derived from iPSC kidney organoids for improved drug transporter characterization**

Cheng Ma (Kyoto University, Japan)

P-29 **Basement membrane components construct tissue environment to maintain hair follicle niche fibroblasts as mesenchymal aggregates**

Hiroki Machida (RIKEN Center for Biosystems Dynamics Research, Japan)

P-30 **Reproducing the Responses of Kidney Organoids to Cellular Stresses to Establish *in vitro* Renal Disease Models**

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

P-31 **Functional analysis of asynchronous Hes1 oscillations in the neural tube formation**
(S1-4) Yuki Maeda (RIKEN Center for Brain Science, Japan)

P-32 **Large-scale production of uniform-sized miniature adipocyte spheroids in hydrogel capsules**

Ruri Maekawa (The University of Tokyo, Japan)

P-33   **Dynamic cell proliferation control coupled with intestinal stem cell differentiation**

Shuji Matsuguchi (RIKEN Center for Biosystems Dynamics Research, Japan)

P-34   **MEK/ERK signaling controls lineage-specific H3K9me3 landscape during human mesoderm and endoderm differentiation**

Satoshi Matsui (Osaka University, Japan)

P-35   **Synthetic Peptide Growth Factors for Organoid Research: Applications of Noggin-Like and Wnt3a Alternative Peptides**

Kosuke Minamihata (PeptiGrowth, Japan)

P-36   **Developing pacemaker-like cardioids to decipher pacemaker dominance of fetal heartbeats**

Amra Mujadzic (IMBA - Institute of Molecular Biotechnology, Austria)

P-37   **Development of a cardiotoxicity evaluation system using a Heart-on-a-Chip Microdevice with aligned fiber device**

Kozue Murata (RIKEN Center for Biosystems Dynamics Research, Japan)

P-38   **Generation of ureter-like tissue from human ES cells *in vitro***

Yu Nakanishi (RIKEN Center for Biosystems Dynamics Research, Japan)

P-39   **Developing gradient culture system for spatial control of extracellular matrix *in vitro***

Yen Ngo Xuan (RIKEN Center for Biosystems Dynamics Research, Japan)

P-40   **Niche-Specific Regulation of MET Events within Kidney Organoids**

Rio Noto (RIKEN Center for Biosystems Dynamics Research, Japan)

P-41   **Disease modeling using Alzheimer's disease patient derived brain organoid**

GwangHyun Park (Gradiant bioconvergence, Republic of Korea)

P-42   **AI-Driven Predictive Modeling of Emergent Vasculature Formation in Multi-Organoid Systems: A Deep Reinforcement Learning Approach for Computational Tissue Engineering**

Prihantini Prihantini (The Integrated Mathematical, Computational, and Data Science for BioMedicine Research Community Foundation, Indonesia)

P-43   **Patient-derived iPSC cerebral organoids as a model for cognitive phenotypes of Duchenne muscular dystrophy**

Chaitra Sathyaprakash (National Center of Neurology and Psychiatry, Japan)

P-44   **Investigating the mechanisms by which SMAD6 mutations cause**
(S5-3)   **tracheoesophageal birth defects**

Vivien Sauer (Cincinnati Children's Hospital Medical Center, USA)

P-45   **Self-organization of embryonic stem cells into a reproducible embryo model through epigenome editing**

Ali Shariati (University of California, Santa Cruz, USA)

P-46   **Light-induced spatial ciliary signaling regulates the dorsal/ventral regionalization**
(S9-2)   **of human brain organoids**

Issei S Shimada (Nagoya City University, Japan)

P-47   **Comparison of patient tissue- to pluripotent stem cell-derived epithelial organoids**

Noah Shroyer (Cincinnati Children's Hospital, USA)

P-48   **Personalized iPSC-derived organoids for human Paneth cell modeling**

Monica Silveira Wagner (Cedars-Sinai Medical Center, USA)

P-49   **Tubular Structure Formation of Bovine Uterine Glands under 3D *In Vitro* Culture Systems**

Yosuke Sugino (Okayama University, Japan)

P-50   **Single-cell CRISPR-activation screen identifies hepatic maturation regulators with zonal resolution**

Atsuhiro Taguchi (Chiba University Graduate School of Medicine, Japan)

P-51   **Establishment of a hiPSC-derived liver-on-a-chip for personalized drug metabolism**
(S2-3)   **studies**

Isabel Tamargo-Rubio (University Medical Center Groningen, The Netherlands)

P-52   **Generation of Wolffian duct-like tissues from human pluripotent stem cells**

Junichi Taniguchi (RIKEN Center for Biosystems Dynamics Research, Japan)

P-53   **Generation of a human pancreatic cancer organoid recapitulating tumor microenvironment by incorporating human iPSC-derived stroma cells**

Naoki Tanimizu (The University of Tokyo, Japan)

P-54 **Elastoplastic transition: A Key Mechanism for Irreversible Epithelial Folding**

Aki Teranishi (Kanazawa University, Japan)

P-55 **Emergent Tissue Morphogenesis in Limb Development: A Synergy of 2.5D, 3D**
(S8-3) **Cultures and Mathematical Modeling**

Rio Tsutsumi (Kyoto University, Japan)

P-56 **Canonical WNT signaling is the major factor of prostate progenitor differentiation**
in embryonic prostate development

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

P-57 **Spatiotemporal Tunable Artificial Microenvironment for Next-Generation**
Organoids: Recapitulating Primitive Streak Formation and Notogenesis

Zhe Wang (Kyoto University, Japan)

P-58 **Human recombinant full-length laminin-111 and their use in cell culture**

Shinomi Yagi (Nippi Research Institute of Biomatrix, Japan)

P-59 **Development of Brain-Gut Assembloids to Recapitulate Inter-Organ Propagation of**
Parkinson's Disease Pathology

Akihiro Yamaguchi (Juntendo Universiry, Japan)

P-60 **A single-cell transcriptome approach revealed the function of BMP4 for mesoderm**
lineage-specification in time-dependent manner

Wei Zhao (RIKEN Center for Biosystems Dynamics Research, Japan)