P01-A Establishment of sensory nerve-innervated functional taste bud Assembloid system

Anish Ashok Adpaikar (Yonsei University College of Dentistry, Korea)

P02-A Induction and long-term maintenance of hindbrain-like neural stem cells from human iPS cells

Ziadoon Al-Akashi (Center for iPS Cell Research and Application (CiRA), Kyoto University, Japan)

- P03-B Application of pseudo proximal tubule cells extracted from hiPSC-derived
- (S5-3) **kidney organoids in modeling the organ in a microphysiological system** Ramin Banan Sadeghian (Kyoto University, Japan)
- P04-B Engineering of an Expandable Synthetic Membrane Protein Platform for the
- (S7-3) **Control of Cellular Interaction and Assembly** George Chao (Harvard Medical School, USA)
- P05-A Human developing striatum: a potential donor source for Induced pluripotent stem cells generation and differentiation for cell therapy in Huntington's disease Narawadee Choompoo (Naresuan University, Thailand)

- P06-A Modifications of Lipid Pathways Restrict SARS-CoV-2 Propagation in Human Induced Pluripotent Stem Cell-derived 3D Airway Organoids Shih-Jie Chou (Taipei Veterans General Hospital, Taiwan)
- P07-B Analysis of AT2-derived non-inflammatory lung fibrogenesis using in vitro lung fibrosis model Yasunori Enomoto (RIKEN Center for Biosystems Dynamics Research, Japan)
- P08-B Vasculature disruption mediated by SARS-CoV-2 infection on the MPS coculturing bronchial organoids and vascular bed Kazuya Fujimoto (Kyoto University, Japan)
- P09-A Identifying a novel subpopulation of lung stem cells by the established scMORN (Single-cell morphometrics, organoid-forming assay and RNA sequencing) method.
 - Takashi Fujimura (Otsuka Pharmaceutical Company Limited, Japan)
- P10-A Synthetic hydrogels reveal a role for type I innate lymphoid cells in intestinal
- (S8-4) epithelial and matrix remodeling Eileen Gentleman (King's College London, UK)
- P11-B Reconstructing organotypic endothelium and mesenchyme from iPSCs to
- (S4-3) **study pulmonary diseases** Mingxia Gu (Cincinnati Children's Hospital Medical Center, USA)

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- P12-B Human brain organoid microphysiological analysis platform for modeling aging and Alzheimer's disease Feng Gu (Indiana University, USA)
- P13-A Developing next-generation human nervous system to study human
- (S3-2) **development and disease by using stem cell technologies** Ziyuan Guo (Cincinnati Children's Hospital Medical Center, USA)
- P14-A Organoid platform: Design and control of microenvironments to achieve

(S5-2) organ architecture

Masaya Hagiwara (RIKEN Cluster for Pioneering Research, Japan)

- **P15-B** Microfabrication of 3D collagen gel strips can regulate cell behavior Aifang Han (RIKEN Center for Biosystems Dynamics Research, Japan)
- P16-B Complete suspension culture conditions of human induced pluripotent stem
- (S1-3) **cells with suppressors of spontaneous differentiation** Yohei Hayash (RIKEN BioResource Research Center, Japan)
- P17-A Generation of macrophage containing alveolar organoids derived from human pluripotent stem cells for pulmonary fibrosis modeling and drug efficacy testing

Seok-Ho Hong (Kangwon National University, Republic of Korea)

P18-A Cell Fate Decisions in the Developing Lung Tessa Hughes (Gurdon Institute, University of Cambridge, UK)

P19-B Establishment of a system for the evaluation of the maturation of human iPS cell-derived cardiac tissues based on external force-induced tissue cracking pattern

Jun lida (RIKEN Center for Biosystems Dynamics Research, Japan)

- P20-B Development of a chicken embryo-based *in vivo* system to study human iPS cell differentiation into lateral plate mesoderm derivatives Galym Ismagulov (Kumamoto University, Japan)
- P21-A Temperature and Chirality Effects on Membraneless Polyester Protocell Self-Organization on Earth Tony Z. Jia (Tokyo Institute of Technology, Japan)
- P22-A Alveolar macrophages derived from hPSCs: To better function and complexity of alveolar organoids for pulmonary fibrosis modeling. Ji-Hye Jung (Kangwon National University, Republic of Korea)

P23-B Co-culture of vascular bed and vascular endothelial cell-enriched kidney organoid

Yoshikazu Kameda (Kyoto University, Japan)

- P24-BThe impact of particulate matter 2.5 on early definitive endoderm
differentiation and methylation pattern in hPSC-derived alveolar organoids
Minje Kang (Kangwon National University, Republic of Korea)
- P25-A SOX21 negatively regulates SOX2 and the gastric fetal progenitor pool that govern human stomach organogenesis Daniel O. Kechele (Cincinnati Children's Hospital Medical Center, USA)
- P26-ADevelopment of the human cerebral organoids for live tracking
Do young Na (Korea Brain Research Institute, Republic of Korea)
- P27-B Drug Screening Platform for Polycystic Kidney Disease using Human Urine Tubuloids

Hye-Youn Kim (Yonsei University of College of Medicine, Korea)

- P28-B Gradient Culture Platform to Generate Asymmetric Organoids with Two Locally Differentiated Regions Isabel Koh (RIKEN Cluster for Pioneering Research, Japan)
- P29-A Direct visualization of the transition status during neural differentiation by dual-fluorescent reporter human pluripotent stem cells Yoichi Kosodo (Korea Brain Research Institute (KBRI), Korea)
- P30-A The inflammatory tumor micro-environment disrupts osteogenic circadian homeostasis of mesenchymal stem cells Shujin Li (Yonsei University College of Dentistry, South Korea)
- P31-B Functional characterization of host-microbiome interactions in a tissueengineered mini-gut Sophia Hsin-Jung Li (Cincinnati Children's Hospital Medical Center, USA)
- P32-B Lineage plasticity of airway secretory cells is regulated by the tissue microenvironment Sai Manoz Lingamallu (Institute for Stem Cell Science and Regenerative Medicine, India)
- P33-A Investigating the role of interstitial fluid forces on vascular cell-ECM interactions in the context of aortic aneurysm Suzette Lust (Kings College London, UK)

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- P34-A Investigation of flow-induced intracellular Ca²⁺ increase in proximal tubule cells extracted from hiPSC-derived kidney organoids in a microphysiological system for modeling ADPKD Cheng Ma (Kyoto University, Japan)
- P35-B Modeling development and physiology of the human urinary collecting
- (S2-4) **system using ureteric bud organoids** Kyle W. McCracken (Cincinnati Children's Hospital Medical Center, USA)
- P36-B Endocardial and Coronary Endothelial Abnormalities in Hypoplastic Left Heart Syndrome

Yifei Miao (Cincinnati Children's Hospital Medical Center, USA)

- **P37-A** Growth factor alternative and inhibitory peptides and their application Kosuke Minamihata (Peptigrowth Inc., Japan)
- P38-A Reconstruction of a morphogen system with artificial ligand-receptor technology

Kosuke Mizuno (Kanazawa University, Japan)

P39-B Self-organization in epithelial morphogenesis

- (S7-4) Yoshihiro Morishita (RIKEN Center for Biosystems Dynamics Research, Japan)
- P40-B The structural study of Human iPSC-derived cerebral organoid using LM and EM

Seulgi Noh (Korea Brain Research Institute, Korea)

- P41-A Recapitulating ventral hindgut development generates bladder organoids from human pluripotent stem cells Kazuhiro Ofuji (RIKEN Center for Biosystems Dynamics Research, Japan)
- P42-A Altered functional and metabolic phenotypes in human iPSC-derived astrocytes in a neurodevelopmental disorder- Fragile X syndrome Rakhi Pal/Roy (TCG-CREST/NCBS, India)
- P43-B Cyclooxygenase-2 a novel molecular player of early patterning of eye in chick embryo

Bhaval Parmar (The Maharaja Sayajirao University of Baroda, India)

- P44-B Mimicking the in vivo 3D organization of pluripotent stem cells to scale-up iPS-derived cell therapies Francois Renault-Mihara (TreeFrog Therapeutics Japan, Japan)
- P45-A Activation of the PPARα pathway accelerates the maturation rate of proximal tubules within kidney organoids Yoshiki Sahara (Otsuka Pharmaceutical Co. Ltd., Japan)

- P46-A Self-organization process in human pluripotent stem cell-derived cerebral and
- (S3-3) hippocampal organoids Hideya Sakaguchi (RIKEN Center for Biosystems Dynamics Research, Japan)
- P47-B 3D Cell Culture & Organoids for Disease Modeling and Personalized Medicine Kenichi Sasamoto (Bio-Techne, Japan)
- P48-B Patient iPSC-derived cerebral organoids as a potential model of cognitive phenotypes in Duchenne muscular dystrophy Chaitra Sathyaprakash (National Center of Neurology and Psychiatry, Japan)
- P49-A Multi-chamber cardioids unravel human heart development and cardiac defects

Clara Schmid (Institute of Molecular Biotechnology of the Austrian Academy of Sciences, Austria)

- P50-A Co-culture of cerebral organoid and microvasculature on a chip for identifying organoid vascularization factors Maneesha Shaji (Kyoto University, Japan)
- **P51-B** Hydrogel Localization Guides Location-Specific 3D Tissue Morphogenesis Kasinan Suthiwanich (RIKEN Cluster for Pioneering Research, Japan)
- P52-B Induction of neural differentiation in hybrid organoids formed by co-culture system of human induced pluripotent stem cells Kaoru Suzuki (Foundation of Global Healthcare, Japan)
- P53-A A suspension method for efficient induction and maturation of human
- (S8-3) **intestinal organoids using a rotational bioreactor** Junichi Takahashi (Tokyo Medical and Dental University, Japan)
- P54-A Bioengineered skin equivalent with hair follicles and adipocytes generated by
- (S8-5) **in vitro 3D culture** Makoto Takeo (RIKEN Center for Biosystems Dynamics Research, Japan)
- P55-B Generation and application of iPSC-derived mesenchymal cell-dependent alveolar organoids Koji Tamai (Kyoto University, Japan)
- P56-B *In vitro* generation of Wolffian duct and its derivatives from human pluripotent stem cells Junichi Taniguchi (RIKEN Center for Biosystems Dynamics Research, Japan)
- P57-A Restoration of the defect in radial glial fiber migration and cortical plate organization in a brain organoid model of Fukuyama muscular dystrophy MarikoTaniguchi-Ikeda (Fujita Health University Hospital, Japan)

- P58-A Epigenetic dysregulation by ZMYND11 mutants leads to aberrant
- (S3-4) **neurodevelopment** Jason Tchieu (Cincinnati Children's Hospital Medical Center, USA)
- P59-B Alveolar Epithelial Progenitor Cells Drive Lung Regeneration via Dynamic
- (S6-3) Transcriptional Regulation and Chromatin Topology Modulated by Lineage-Specific Nkx2-1 Activity Andrea Toth (Cincinnati Children's Hospital Medical Center, USA)
- **P60-B** Towards understanding the mechanism of early nephron morphogenesis Olena Trush (RIKEN Center for Biosystems Dynamics Research, Japan)
- P61-A All-trans retinoic acid and FGF10 are indispensable and sufficient factors for murine prostate bud differentiation Wataru Uno (RIKEN Center for Biosystems Dynamics Research, Japan)
- P62-A Cryogel mechanical interface for directing Human Induced Pluripotent Stem Cells (hIPSCs) derived gastruloid-like organoids with organized neuromesodermal integration Raja Vadivelu (RIKEN Cluster for Pioneering Research, Japan)
- P63-B Tumor Macrophage Targeted Engineered Phages for Tumor Modulating Chemotherapy in *In Vitro* 3D Tumor Microenvironment Model Veeranarayanan Srivani (Jichi Medical University, Japan)
- P64-B Generation of allogeneic human iPSC-derived retinal sheets for organoidtransplantation therapy Kenji Watari (Sumitomo Pharma Co., Ltd., Japan)
- P65-A Stemness capability of lung stem cell in organoid culture following exposure to cigarette smoke in mice model of COPD Syahidatulamali Che Shaffi (Universiti Sains Malaysia, Malaysia)
- P66-A A Drug Screening System for Cystic Fibrosis Utilizing Stem-cell And Functional Imaging Technologies Yuki Yamamoto (HiLung Inc., Japan)
- P67-B A single-cell transcriptome approach to investigate the mechanism of mesoderm lineage-specification using human iPSCs Wei Zhao (RIKEN Center for Biosystems Dynamics Research, Japan)
- P68-B Enhanced chondrogenic differentiation of iPS cell-derived mesenchymal stem/stromal cells via neural crest cell induction for hyaline cartilage repair Denise Zujur (Center for iPS Cell Research and Application, Kyoto University, Japan)