

Posters

- P01-A Far-reaching density correlation of cells caused by spatial anisotropy**
Kyosuke Adachi (RIKEN Center for Biosystems Dynamics Research, Japan)
- P02-A Ideation for Life Detection payload and experiments**
Paras Adlakha (University of Petroleum and Energy Studies, India)
- P03-B Adaptations of microbial life to extreme aridity**
Armando Azua-Bustos (Center of Astrobiology, CSIC, Spain)
- P04-B The m6a reader YTHDF1 modulates APC and controls dendrite and axon development**
Loic Broix (RIKEN Center for Biosystems Dynamics Research, Japan)
- P05-A A synthetic cell cycle to understand the origin of complex life**
Adriano Caliari (East China Normal University, China)
- P06-A Diffusion controls local versus dispersed inheritance of histones during replication and shapes epigenomic architecture**
Shaon Chakrabarti (National Centre for Biological Sciences, India)
- P07-B Dynamical Neural Computation in Predictive Sensorimotor Control**
Yun Chen (Center for Excellence in Brain Science and Intelligent Technology, Institute of Neuroscience, Chinese Academy of Sciences, China)
- P08-B Visualization of CO₂ Fixation Pathways in Thermophilic Bacteria**
Yoko Chiba (RIKEN Center for Sustainable Resource Science, Japan)
- P09-A Substrate Recognition by the Src Protein Tyrosine Kinase**
Song-Ho Chong (RIKEN Center for Biosystems Dynamics Research, Japan)
- P10-A Enzymatic activity on chromatin organization**
Rakesh Das (Mechanobiology Institute, National University of Singapore, Singapore)
- P11-B Nucleotide-membrane interactions: A probable reciprocal relationship in prebiotically pertinent environments**
Kshitij Ganesh Deshpande (Indian Institute of Science Education and Research, Pune, India)

- P12-B Reconstituting and observing long chromatin with defined nucleosome modification patterns**
Yohsuke T. Fukai (RIKEN Center for Biosystems Dynamics Research, Japan)
- P13-A Ancestral sequence inference of ferredoxins possessed by the last archaeal and bacterial common ancestors**
Ryutaro Furukawa (Waseda University, Japan)
- P14-A How to make an S-layer at the Origin of Life: The Origin of Proteins?**
Richard Gordon (Wayne State University, Canada)
- P15-B Image-based model construction and parameter estimation for epithelial mechanics**
Goshi Ogita (Kyoto University, Graduate School of Biostudies, Japan)
- P16-B Cell Chirality Emerges Collective Cellular Rotation by Regulating Left-Right Asymmetric Formation of Lamellipodia**
Tomoki Ishibashi (RIKEN Center for Biosystems Dynamics Research, Japan)
- P17-A Self-organization of apical ECM molecules underlies insect cuticle nano-patterning**
Yuki Itakura (RIKEN Center for Biosystems Dynamics Research, Japan)
- P18-A SSBD:database and SSBD:repository; Open Resources for Bioimages and Quantitative Data for Biosystems Dynamics**
Hiroya Itoga (RIKEN Center for Biosystems Dynamics Research, Japan)
- P19-B ECellDive: Exploring Biological Systems Hierarchies in Virtual Reality.**
Eliott Jacopin (RIKEN Center for Biosystems Dynamics Research, Japan)
- P20-B Optimal Reliability and Robustness of Nucleus Centering in Fission Yeast is Contingent on Nonequilibrium Force Patterning**
Ishutesh Jain (National Centre for Biological Sciences, India and Institute Curie, France)
- P21-A Primitive Cationic Polyester Microdroplets for RNA Segregation**
Tony Z. Jia (Earth-Life Science Institute, Tokyo Institute of Technology, Japan; Blue Marble Space Institute of Science, USA)
- P22-A The geometry of phenotypic spaces: the emergence of coherent structures in the behavior and development of the roundworm *C. elegans*.**
David Jordan (University of Cambridge, UK)

- P23-B Whole-cell modeling of a bacterial cell from its genomic sequence**
Kazunari Kaizu (RIKEN Center for Biosystems Dynamics Research, Japan)
- P24-B Emergence of prokaryotic operon structure by insertion sequence activity: an experimental demonstration**
Yuki Kanai (The University of Tokyo, Japan)
- P25-A Suppression of the integrated stress response by sandfly fever Sicilian virus NSs protein**
Kazuhiro Kashiwagi (RIKEN Center for Biosystems Dynamics Research, Japan)
- P26-A ¹¹C-Radiolabeling of 4,4'-dimethoxychalcone with anti-aging properties**
Tatsuya Kida (RIKEN Center for Biosystems Dynamics Research, Japan)
- P27-B The function of replication and SCF complex during Drosophila wing development**
Hidetsugu Kohzaki (Shumei University, Japan)
- P28-B WITHDRAWN**
- P29-A Co-evolution between RNA and Peptides on the Early Earth - Hydrophobic-Cationic Peptides Enhance the RNA Polymerase Ribozyme Activity by Accretion -**
Peiyang Li (RIKEN Center for Biosystems Dynamics Research, Japan)
- P30-A Punctuated transitions in the emergence of biochemistry from geochemistry**
Liam Michael Longo (Tokyo Institute of Technology, Japan)
- P31-B Long-range force propagation emerges from interfacial dissipation in tissues**
Yuting Lou (Mechanobiology Institute, National University of Singapore, Singapore)
- P32-B Eph/ephrin signaling in enteric neural crest cell-cell interaction**
Jeffrey Lui (Faculty of Medicine, The Chinese University of Hong Kong, China)
- P33-A Robustness of compositional heredity to the dynamics of prebiotic compartments**
Yoshiya J. Matsubara (National Centre for Biological Sciences TIFR, India)
- P34-A Thioester biochemistry in metabolic evolution.**
Erin Shawn McGlynn (Tokyo Institute of Technology, Japan)

- P35-B Synchronization of a Population of Neurons Representing Event and Place in Hippocampal CA1**
Kotaro Mizuta (RIKEN Center for Biosystems Dynamics Research, Japan)
- P36-B Niche-Specific Regulation of MET Events within Kidney Organoids**
Rio Noto (RIKEN Center for Biosystems Dynamics Research, Japan)
- P37-A Recapitulating ventral hindgut development generates bladder organoids from human pluripotent stem cells**
Kazuhiro Ofuji (RIKEN Center for Biosystems Dynamics Research, Japan)
- P38-A Creation of a microenvironment to facilitate covalent bond formation realized by dual peptide evolution**
Yuto Ohno (Graduate school of Science, The University of Tokyo, Japan)
- P39-B Tiling mechanisms of the compound eye through geometrical tessellation**
Makoto Sato (Kanazawa University, Japan)
- P40-B Regulation of Cell-Cell Adhesions by BAR Domain Proteins**
Yosuke Senju (Okayama University, Japan)
- P41-A Understanding the Improved protein structure Prediction using potentials from Artificial Intelligence : A Deep Dive In Deep Learning**
Anjali Sharma (University of Delhi, New Delhi, India)
- P42-A Binding Free-Energy Landscape of c-Src Kinase to its Inhibitors: Effect of Inhibitor Size and Flexibility**
Ai Shinobu (RIKEN Center for Biosystems Dynamics Research, Japan)
- P43-B Generation of cortical organoids derived from Rett syndrome and MeCP2 duplication syndrome iPS cell lines**
Atsushi Shiraishi (Otsuka Pharmaceutical Co., Ltd., Japan)
- P44-B Emergence of severe aggression from acute environmental de-enrichment in mice**
Momoe Sukegawa (RIKEN Center for Biosystems Dynamics Research, Japan)
- P45-A Cell Dynamics Underlying Periodic Morphological Change of Mouse Zigzag Hair**
Makoto Takeo (RIKEN Center for Biosystems Dynamics Research, Japan)

- P46-A Residue-Level Coarse-Grained Simulations in GENESIS and Applications to Phase Behaviors of Heat-Resistant Obscure Proteins**
Cheng Tan (RIKEN Center for Computational Science, Japan)
- P47-B Laboratory evolution of a virus-like nucleocapsid from a bacterial enzyme**
Naohiro Terasaka (The University of Tokyo, Japan)
- P48-B Towards understanding the mechanism of early nephron morphogenesis**
Olena Trush (RIKEN Center for Biosystems Dynamics Research, Japan)
- P49-A Coarse-Grained Molecular Dynamics Simulations of Multicomponent Lipid Bilayers using GENESIS**
Diego Ugarte La Torre (RIKEN Center for Computational Science, Japan)
- P50-A Roles of growth factors for initial prostate development.**
Wataru Uno (RIKEN Center for Biosystems Dynamics Research, Japan)
- P51-B Generating Kidney Organoids from Nephrotic Syndrome Patients-derived iPSCs**
Yukari Usuda (RIKEN Center for Biosystems Dynamics Research, Japan)
- P52-B WITHDRAWN**
- P53-A *Irx3* and *Irx5* in Mouse Cochlear Epithelial Cell Fate Maintenance**
Xin Weng (School of Biomedical Sciences, The Chinese University of Hong Kong, China)
- P54-A Epigenetic-dependent temporal scaling mechanisms during brain development of different species**
Quan Wu (RIKEN Center for Biosystems Dynamics Research, China)
- P55-B Visualization of the basement membrane dynamics in developing mouse skin**
Duligengaowa Wuergezhen (RIKEN Center for Biosystems Dynamics Research, Japan)
- P56-B Effects of Antisense Oligonucleotide on Kidney Organoids derived from Alport Syndrome Patient-iPS cells**
Kensuke Yabuuchi (RIKEN Center for Biosystems Dynamics Research, Japan)
- P57-A Reconstruction of the ancient beta-barrel fold with seven amino acid species**
Sota Yagi (RIKEN Center for Biosystems Dynamics Research, Japan)

Posters

- P58-A** **Graph-based machine learning reveals rules of spatiotemporal cell interactions in tissues**
Takaki Yamamoto (RIKEN Center for Biosystems Dynamics Research, Japan)
- P59-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)