P-01	A mathematical model for emergence of polar order induced by contact				
	following locomotion in a multicellular system				
	Diplob Dhottochariae (DIVEN Contar for Discustants Dynamics December Janes				

Biplab Bhattacherjee (RIKEN Center for Biosystems Dynamics Research, Japan)

#### P-02 Theory of coexistence in biomolecular condensates based on sequencedependent interactions

Kyosuke Adachi (RIKEN Center for Biosystems Dynamics Research, Japan)

#### P-03 In silico discovery of chromatin-regulating sequences

Rory T. Cerbus (RIKEN Center for Biosystems Dynamics Research, Japan)

# P-04 Towards an investigation of spatio-temporally patterned fluid/solid transitions during epithelial fold formation in the *Drosophila* embryo

Bipasha Dey (RIKEN Centre for Biosystems Dynamics Research, Japan)

### P-05 Reconstitution and observation of long chromatin array with defined nucleosome modification patterns

Yohsuke T. Fukai (RIKEN Center for Biosystems Dynamics Research, Japan)

### P-06 Bidirectional flow forces instruct endocardial cell identity for the cardiac valve morphogenesis

Hajime Fukui (National Cerebral and Cardiovascular Center Research Institute, Japan)

#### P-07 Brillouin microscopy meets proteomics: an integrated approach to study the

# (S4-5) determination of mechanical properties during *Drosophila* morphogenesis" Juan Manuel Gomez (European Molecular Biology Laboratory Heidelberg, Germany)

#### P-08 c-Src is a central modulator of vascular expansion and matrix degradation.

Emma Gordon (Institute for Molecular Bioscience, University of Queensland, Australia)

### P-09 Identification of novel miRNAs in pathogenesis of Hirschsprung disease – an enteric nervous system development disorder

Gunadi (Universitas Gadjah Mada, Indonesia)

### P-10 Characterization of the sympathetic nervous systems regulating the visceral organs

Yukiko Harima (RIKEN Center for Biosystems Dynamics Research, Japan)

### P-11 Functions of the eggshell in *C.elegans* development: Effects on starvation resistance and body-surface structure

Akiko Hatakeyama (RIKEN Center for Biosystems Dynamics Research, Japan)

P-12	Tissue pattern	emerges through	h surface-induced	ordering i	n the mouse	eniblasi
1 - 1 -	1133ue pattern	Ciliciacs filloud	II Juliace-Illauceu	OLUCIIII II	ii tiie iiiouse	CPIDIGO

(S5-1) Takafumi Ichikawa (Institute for the Advanced Study of Human Biology, Kyoto University, Japan)

#### P-13 A vasopressin-to-oxytocin receptor crosstalk underlying paternal behavioral

(S3-3) transition in mice

Kengo Inada (RIKEN Center for Biosystems Dynamics Research, Japan)

P-14 SSBD:database and SSBD:repository – Global sharing of bioimaging data Hiroya Itoga (RIKEN Center for Biosystems Dynamics Research, Japan)

### P-15 Three-dimensional cell shape analysis in the *Dictyostelium* culminant using spherical harmonics

Takahiro Kanazawa (The University of Tokyo, Japan)

### P-16 A state of partial Rb inactivation and intermediate E2F activation safeguards proliferation commitment

Yumi Konagaya (Ida) (Weill Cornell Medicine, USA)

#### P-17 Transition of cell movement and molecular properties during stalk formation in Dictyostelium culminant

Satoshi Kuwana (The University of Tokyo, Japan)

### P-18 Molecular and Mechanical Mechanisms Driving Columnar-to-squamous Epithelial Transformation

Chun Wai Kwan (RIKEN Center for Biosystems Dynamics Research, Japan)

#### P-19 The source of chromosome abnormalities in early embryos

(S1-6) Hirohisa Kyogoku (Kobe University, Japan)

#### P-20 Novel surface markers for totipotent cells in vitro

Moyra Lawrence (Kyoto University, Japan)

### P-21 Interplay between fluid pressure and tissue material properties drives brain and spinal cord shape divergence

Susannah McLaren (University of Cambridge, UK)

#### P-22 Nutrient-driven dedifferentiation of enteroendocrine cells promotes adaptive

#### (S6-6) intestinal growth

Yu-ichiro Nakajima (The University of Tokyo, Japan)

## P-23 Recapitulating ventral hindgut development generates bladder organoids from human pluripotent stem cells

Kazuhiro Ofuji (RIKEN Center for Biosystems Dynamics Research, Japan)

P-24	A genome-wide CRISPR screening reveals a role for an essential DNA			
	replication factor in nuclear compartment integrity			
	Asami Oji (RIKEN Center for Biosystems Dynamics Research, Japan)			

- P-25 Oncogenic stress-induced Netrin reprograms systemic metabolism as a humoral inter-organ molecule in *Drosophila*Morihiro Okada (RIKEN Center for Biosystems Dynamics Research, Japan)
- P-26 Elastic-Plastic Transition in the Mechanical Response of Epithelium
- (S2-2) Satoru Okuda (Nano Life Science Institute, Kanazawa University, Japan)
- P-27 Replication dynamics identifies the folding principles of the inactive X chromosome

  Rawin Poonperm (RIKEN Center for Biosystems Dynamics Research, Japan)
- P-28 Junctional heterogeneity, transitions epithelium to an organized pattern
- (S2-6) Anubhav Prakash (National Centre for Biological Sciences, India)
- P-29 Exploring transitions in metabolic state during the development of bacterial biofilms

  Martin Robert (Kyoto University, Japan)
- P-30 Nucleotide metabolism as a novel and potential target to regulate cardiomyocyte proliferation

  Yuichi Saito (RIKEN Center for Biosystems Dynamics Research, Japan)
- P-31 Glycolysis induces heart regeneration in adult mice
  Akane Sakaguchi (RIKEN Center for Biosystems Dynamics Research, Japan)
- P-32 Trehalose-mediated structural barrier regulates cytoplasmic fluidity in fission yeast spore

  Keiichiro Sakai (National Institute for Basic Biology, Japan)
- P-33 GALDAR: A novel genetically encoded galactose sensor reveals glucose metabolism in fruit fly
  Uğurcan Sakızlı (RIKEN Center for Biosystems Dynamics Research, Japan)
- P-34 Tetraradial symmetry disturbance and recovery at feeding-dependent tentacle initiations in *Aurelia aurita* polyps
  Safiye E. Sarper (RIKEN Center for Biosystems Dynamics Research, Japan)
- P-35 Transitions in Biochemical Systems: Phase Transition of Cooperative Biochemical Systems by Common Elements Competition
  Gaku Sato (Keio University, Japan)

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(S2-4) Sungrim Seirin-Lee (Institute for the Advanced Study of Human Biology, Kyoto University, Japan)

# P-37 Investigating Retinal Cellular Dynamics in Eye Disorders Using Zebrafish Embryos

Swati Sharma (University of Manchester, UK)

### P-38 Feedback circuit that simultaneously drives cell death and proliferation Shivakshi Sulekh (RIKEN Center for Biosystems Dynamics Research, Japan)

#### P-39 Transition to the somatic DNA replication program initiates at the 4-cell stage in mice

Saori Takahashi (RIKEN Center for Biosystems Dynamics Research, Japan)

### P-40 Pattern transitions in thickness oscillation of the slime mold forming their network

Sota Takahashi (Hokkaido University, Japan)

### P-41 Maternal behavioral learning facilitated by a frontal thalamocortical circuit to dopamine system

Gen-ichi Tasaka (RIKEN Center for Biosystems Dynamics Research, Japan)

# P-42 Characterizing intracellular viscosity and its functional implications across cell types during *Drosophila* embryo morphogenesis

Sameer Thukral (RIKEN Center for Biosystems Dynamics Research, Japan)

# P-43 Neonatal stimulation of oxytocin neurons ameliorates oxytocin expression and social impairments in a mouse ASD model

Masafumi Tsurutani (RIKEN Center for Biosystems Dynamics Research, Japan)

### P-44 Dissecting the sympathetic nervous system that regulates body temperature Shuntaro Uchida (RIKEN Center for Biosystems Dynamics Research, Japan)

#### P-45 Impacts of nutritional histories in juvenile stages on the adult lifespan of

#### (S6-7) **Drosophila**

Tadashi Uemura (Kyoto University, Japan)

#### P-46 Epigenetic mechanisms to propagate histone acetylation by p300/CBP

Takashi Umehara (RIKEN Center for Biosystems Dynamics Research, Japan)

### P-47 Dynamic Modulation of Pulsatile Activities of Oxytocin Neurons in Lactating Wild-type Mice

Kasane Yaguchi (RIKEN Center for Biosystems Dynamics Research, Japan)

P-48	Ontology Development for Knowledge Organization of Cellular Senescence
	Processes

Yuki Yamagata (RIKEN Center for Biosystems Dynamics Research, Japan)

- P-49 Development of an optogenetic tool to control actin polymerization Kei Yamamoto (Kyoto University, Japan)
- P-50 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-51 Quantum theory of molecular evolution in proteogenesis
  Masanori Yamanaka (Nihon University, Japan)
- P-52 Actin network assembly on a patterned model membrane Yosuke Yamazaki (Kyoto University, Japan)
- P-53 Computational analysis of tissue mechanical behaviors according to cell proliferation during morphogenesis

  Yuka Yokoyama (Kyoto University, Japan)
- P-54 Epidermal growth factor receptor signaling protects epithelial integrity from mechanical stress in *Drosophila* embryo

  Kentaro Yoshida (RIKEN Center for Biosystems Dynamics Research Japan)
- P-55 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)