

**The 9th RIKEN Life Science Retreat
Program**

Monday, January 29, 2024 (Day 1)

12:00-13:00 Registration and Poster Setup
13:00-13:10 Opening Remarks by Ichiro Hiratani (BDR)

Session I: Oral presentations (Presentation 20 min + Q&A 5 min)

Chair: Aya Ito-Ishida (CBS), Yoichi Shinkai (CPR)

13:10-13:35 **I-1**
Regulation of transposable elements by small non-coding RNAs
Yuka Iwasaki (IMS)

13:35-14:00 **I-2**
Toward finding a cure for NGLY1 deficiency
Tadashi Suzuki (CPR)

14:00-14:25 **I-3**
Spatiotemporal dynamics of glycerolipid metabolism in plant growth
Yuki Nakamura (CSRS)

14:25-15:05

Poster flash talks (Presentation 2 min X 18)

PT-1

Role of chromatin architecture of human cells in the response to infection by Sars-CoV-2

Saumya Agrawal (IMS)

PT-2

Investigating the Transposon-Driven Aging Hypothesis with lifespan-long, population-scale, and individual-resolution motion tracker, nemaLifelogger

Yukinobu Arata (CPR)

PT-3

A synthetic microscale kinetochore establishes a biorientation-like state

Kohei Asai (BDR)

PT-4

Finding patterns in the tetrapod vertebral count

Rory Thomas Cerbus (BDR)

PT-5

Maintenance of metabolic homeostasis by Drosophila and its commensal bacteria under dietary choline deficiency

Yuka Fujita (BDR)

PT-6

B cell receptor sequences link individual stimulus responses with pooled genetic variance

Steven Matthew Heaton (IMS)

PT-7

A single-cell atlas of transcribed cis-regulatory elements in the human genome

Chung-Chau Hon (IMS)

PT-8

Cell chirality induces collective rotational migration of multicellular colony

Tomoki Ishibashi (BDR)

PT-9

CXCR4 induces memory formation over exhaustion in CAR-T cells to achieve durable leukemia targeting

Minggao Liang (IMS)

PT-10

The role of Pri micropeptides in epithelial invagination

Sonoko Mizuno (BDR)

PT-11

Ethanolamine enhances H₂O₂-induced cell death through caspase-3-like pathway in *Arabidopsis thaliana*

Anh Hai Ngo (CSRS)

PT-12

Kalman force inference for epithelial deformation: a force inference method for time-lapse movies

Goshi Ogita (BDR)

PT-13

A 3D Gene Expression Atlas of the Adult Marmoset Brain

Charissa Poon (CBS)

PT-14

Universal molecular motor module for DNA nanodevices

Yusuke Sakai (BDR)

PT-15

Girolline is a sequence context-specific modulator of eIF5A activity

Tilman Schneider-Poetsch (CSRS)

PT-16

Selective Vulnerability of Parvocellular Oxytocin Neuron in Social Dysfunction

Masafumi Tsurutani (BDR)

PT-17

Highly Sulfated Keratan Sulfate is Produced for Tissue Hydration in the Notochord and Otic Vesicles of Vertebrate Embryos

Yuuri Yasuoka (IMS)

PT-18

A trans-omic analysis of pharmacological action

Katsuyuki Yugi (IMS)

15:05-15:25 *Coffee Break*

Poster Session (120 min)

15:25-16:25 Odd number posters

16:25-17:25 Even number posters

Session II: Young Investigator's Talk (Presentation 12 min + Q&A 3 min)

Chair: Katsuyuki Yugi (IMS), Atsushi Takata (CBS)

17:30-17:45

II-1

Transcriptomics in P-bodies reveals the selective mRNA release to modulate translation upon DNA damage

Yuichi Shichino (CPR)

17:45-18:00

II-2

Paternal genome elimination, monogenic reproduction, and the evolutionary genetics of atypical fly sex chromosomes

Thomas Hitchcock (iTHEMS)

18:00-18:15

II-3

Somatic recombination of repeats is a new layer of structural diversity and complexity in our genomes

Giovanni Pascarella (IMS)

Educational Lecture (Presentation 35 min + Q&A 10 min)

Chair: Sa Kan Yoo (BDR)

18:15-19:00

The 'Art' of Publishing Scientific Papers

Spyros Goulas (ASHBi, Kyoto University)

19:00-19:30

Hotel check in

19:30-21:30

Dinner

21:30-23:30

Social Gathering

Tuesday, January 30, 2024 (Day 2)

7:00-9:30 Breakfast
8:30-11:00 Group Work

Session III: Young Investigator's Talk (Presentation 12 min + Q&A 3 min)

Chair: Yoshihiro Shimizu (BDR), Ichiro Hiratani (BDR)

11:00-11:15 **III-1**
Global profiling of the circadian-regulated lipid metabolism in Arabidopsis thaliana leaves
Artik Elisa Angkawijaya (CSRS)

11:15-11:30 **III-2**
How we lost hypothermia tolerance: Insights from lipid condition
Yuichi Saito (BDR)

Special Lecture (Presentation 40 min + Q&A 10 min)

Chair: Ichiro Hiratani (BDR)

11:30-12:20 **To be big or small, that is the question**
Shigeo Hayashi (BDR)

12:20-13:30 Group Photo and Lunch

Session IV: Oral presentations (Presentation 20 min + Q&A 5 min)

Chair: Shintaro Iwasaki (CPR), Sa Kan Yoo (BDR)

13:30-13:55 **IV-1**
Studies using patient-derived iPS cells deposited in RIKEN cell bank
Yohei Hayashi (BRC)

13:55-14:20 **IV-2**
Clarifying the cortical disturbance in the mouse model of developmental disorders
Aya Ito-Ishida (CBS)

14:20-14:45 **IV-3**
Building the cell from molecules: Reconstitution of actin cytoskeletal dynamics and cell functions
Makito Miyazaki (BDR)

14:45-14:50 Closing Remarks by Shintaro Iwasaki (CPR)