ASHBi Retreat 2021

Online

Unleash your Curiosity!

20 February, 2021

Institute for the Advanced Study of Human Biology
ASHBi
Kyoto University

Program

1. Date & Venue

Date: Saturday, 20 February 2021

Time: 09:00–17:30

Venue: Zoom Online Meeting

***High-speed LAN/WiFi** environment advised for stability*

2. Zoom & Spatial Chat Links

Zoom: https://us02web.zoom.us/j/82332043015?pwd=aW1hWURVTTJCeldTRGRWU00zRjhVdz09

Spatial Chat: https://spatial.chat/s/ashbiretreat

*Please Access **Spatial Chat via Chrome***

Please log in with your full name (eg. Fumi KOMORI) for both Zoom and Spatial Chat.

3. Schedule

9:00	Opening Remarks/Instruction *(Zoom)*
	Fusion Research Workshop *(Zoom)*
9:10	Speaker #1 - #4
10:30	Break
10:50	Speaker #5 - #7
12:00	**Lunch Break (Spatial Chat)**
	Poster Session *(Zoom & Breakout Rooms)*
13:15	Part 1
14:55	Break
15:15	Part 2
16:55	**Networking Session *(Spatial Chat)***
17:15	Poster Award/Closing Remarks ***(Zoom)***

Emergency Contact: 075-753-9882 (ASHBi Office)

Fusion Research Workshop (9:10 – 11:50)

The 2nd Workshop on ASHBi Fusion Research Grant

Time	Name	Title	Chair
9:10	**Yusuke Imoto** (Imoto Team)	Identification of multi-resolution cell differentiation dynamics from scRNA-seq data via mathematical data analysis and interactive visualization system	Mototsugu Eiraku
9:30	**Yusuke Seto** (Seto Team)	Toward the establishment of experimental and mathematical models to understand cellular basis of osteogenic wave	
9:50	**Sohei Tasaki** (Tasaki Team)	A mathematical modeling approach to epigenetic dynamics	Yasuaki Hiraoka
10:10	**Killian Meehan** (Tsujimura Team)	Topological approaches for integrative 3D epigenomics	
10:30	Break		
10:50	**Kumiko Yoshioka-Kobayashi** (Yoshioka Team)	Characterization of gene regulatory networks in human and non-human in vitro segmentation clocks	Misao Fujita
11:10	**Tsutomu Sawai** (Sawai Team)	Examining Ethics and Governance in Developmental Biology Research	
11:30	**Xun Chen** (Chen Team)	Deciphering evolutionary differences of germline transposable element dynamics	

Poster Session Part 1 (13:15 – 14:55)

(18 Breakout Rooms: A – R)

Room	Name	Title
A	**Yoshihiro Yamanaka** (Alev G)	Reconstitution of human axial development and disease with pluripotent stem cells
B	**Satoko Amemori** (Amemori G)	Causal evidence for the induction of anxiety-like behaviors in monkeys by the network including pACC and cOFC targeting striosome
C	**Xun Chen** (Bourque G)	Towards understanding the inter-individual variability revealed by transposable elements in the human response to virus infection
D	**Masatoshi Ohgushi** (Eiraku G)	Molecular elucidation of trophoblast-like differentiation from human embryonic stem cells
E	**Shoma Matsumoto** (Ema G)	Characterization of cynomolgus monkey trophoblast stem cells under different culture conditions
F	**Go Okui** (Fujita G)	Ethics and governance in embryonic development research: An overview
G	**Shinichiro Oshima** (R Yamamoto G)	Self-renewal and differentiation of hematopoietic stem cells in macaques fetal liver
H	**Sohei Tasaki** (Hiraoka G)	A mathematical modeling approach to epigenetic dynamics
I	**Toshinari Kawasaki** (Isa G)	Dynamic changes of resting-state functional connectivity during functional recovery after spinal cord injury in macaque monkeys
J	**Naoki Hirose** (Murakawa G)	Innovations in the primate gene repertoire –transcriptome atlas of non-human primates–
K	**Yoichi Fujii** (Ogawa G)	Molecular classification and novel diagnostics of upper urinary tract urothelial carcinoma
L	**Masahiro Nagano** (Saitou G)	Nucleome programming for mouse germ cell development in vitro
M	**Masataka Nakaya** (Tsukiyama G)	Novel methods for gene introduction in monkeys
N	**Hajime Morita** (Ueno G)	Diversity of Human Liver-Resident T and B cell Subsets
O	**Joonseong Lee** (T Yamamoto G)	RNA secondary structures responsible for pluripotency gene expression
P	**Yuki Sato** (Yanagita G)	Cellular and molecular mechanism driving age-dependent TLT formation in the kidney
Q	**Reona Yamaguchi** (Isa G)	Global disinhibition across cortical networks for recovery of hand movements after spinal cord injury
R	**Shihori Yokobayashi** (Saitou G)	Inherent genomic properties underlie epigenetic variations of human induced pluripotent stem cells

*Attention for Part 1 presenters: Please return to **Zoom at 13:00** for rehearsal.

Poster Session Part 2 (15:15 – 16:55)

(18 Breakout Rooms: A – R)

Room	Name	Title
A	**Kumiko Yoshioka-Kobayashi** (Alev G)	Live imaging-based characterization of gene expression/cellular dynamics in in vitro-derived mammalian segmentation clocks
B	**Jungmin Oh** (Amemori G)	Chemogenetics manipulation of the primate nucleus accumbens induced loss of motivation to perform conflict decision-making
C	**Qinwei Zhuang** (Bourque G)	The impact of sex on the methylome landscape in mice liver and brain
D	**Rio Tsutsumi** (Eiraku G)	3D culture models of limb cartilage morphogenesis and growth in mouse and human
E	**Masanaga Muto** (Ema G)	Exploring Developmental Potential of Inner Cell Mass in Cynomolgus Monkeys
F	**Tsutomu Sawai** (Fujita G)	The ethics of human brain organoid research and application
G	**Takafumi Ichikawa** (Hiiragi G)	Extra-embryonic tissue facilitates mouse peri-implantation embryonic development via a mechano-chemical interplay
H	**Toshiaki Yachimura** (Hiraoka G)	Trajectory inference of cell differentiation by Gaussian mixture models and optimal transport theory
I	**Satoko Ueno** (Isa G)	Massive re-routing of the corticospinal tract after rehabilitative training following spinal cord injury in the macaque monkey
J	**Tomoko Kasahara** (Murakawa G)	Genetic architecture of human diseases revealed by global 3D genome profiling at high-resolution
K	**Ryunosuke Saiki** (Ogawa G)	Combined analysis of gene mutations and copy-number alterations in clonal hematopoiesis
L	**Ikuhiro Okamoto** (Saitou G)	The X-chromosome dosage compensation program during the development of cynomolgus monkeys
M	**Tomoyuki Tsukiyama** (Tsukiyama G)	Generation of genetically modified monkeys in PRiME
N	**Akinori Murakami** (Ueno G)	Dissecting tissue lymphocyte subsets in rheumatoid arthritis
O	**Ryusaku Matsumoto** (T Yamamoto G)	Spatial transcriptomics for the tissue interaction analysis during pituitary development
P	**Naoya Toriu** (Yanagita G)	Kidney development and disease models in a non-human primate
Q	**Akiko Oguchi** (Murakawa G)	Single-cell enhancer identification reveals genetic and evolutionary diversity of human diseases
R	**Kazunori Sunadome** (T Yamamoto G)	The establishment and application of HybISS (hibridization-based in situ sequencing)

*Attention for Part 2 presenters: Please return to **Zoom at 15:00** for rehearsal.