

**11th International Symposium of The Institute Network
“Frontiers in Biomedical Sciences”**

Date:

Thursday 26th and Friday 27th January 2017

Venue:

Fujii Memorial Hall, Kuramoto Campus, Tokushima University, Tokushima
770-8503, Japan

The Institute Network:

Institute for Genetic Medicine, Hokkaido University
Institute of Development, Aging and Cancer, Tohoku University
Institute of Medical Science, The University of Tokyo
Medical Research Institute, Tokyo Medical and Dental University
Cancer Research Institute, Kanazawa University
Institute for Frontier Life and Medical Sciences, Kyoto University
Institute for Protein Research, Osaka University
Research Institute for Microbial Diseases, Osaka University
Medical Institute of Bioregulation, Kyushu University
Institute of Advanced Medical Sciences, Tokushima University

Organized by:

Institute of Advanced Medical Sciences, Tokushima University

Sponsored by:

“Joint Usage Research Center” Program and “Inter-University Research Network for
Trans-Omics Medicine” Program, MEXT Japan

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<http://www.iams.tokushima-u.ac.jp>

Thursday 26th January 2017

11:30 - 13:00

Registration

12:00 - 12:50

Council meeting

13:00

Opening remarks

Sumihare Noji (President, Tokushima U)

13:15

Session 1: Development (chaired by Tatsuya Takemoto and Makoto Tachibana)

13:15-13:45

Hiroshi Nishina (Tokyo MDU) [L-1]

Cellular tension and 3D organogenesis

13:45-14:00

Atsushi Kubo (Tohoku U) [S-1]

Gene regulatory mechanisms by mechanical forces in cardiovascular system

14:00-14:15

Hiroyasu Kidoya (Osaka U) [S-2]

Regulation of blood vessel patterning through reciprocal signals

14:15-14:30

Shuheii Konagaya (Kyoto U) [S-3]

Differentiation of human iPS cells into pancreatic endocrine cells

14:30-14:45

Shunsuke Kuroki (Tokushima U) [S-4]

Roles of H3K9 methylation and demethylation enzymes in mouse development

14:45

Session 2: Beyond Omics (chaired by Hidetaka Kosako and Fumitoshi Ishino)

14:45-15:15

Mariko Okada (Osaka U) [L-2]

Mathematical modeling of molecular networks in immune systems

15:15-15:30

Shinsuke Uda (Kyushu U) [S-6]

An estimation method of sparse partial correlation matrix for omics data analysis

15:30

Coffee break

16:00-16:30

Hideyuki Yoshida (Harvard U, USA) [G-1]

IFN response: analysis of transcriptional network by an unbiased approach

16:30-16:45

Kazunari Iwamoto (Osaka U) [S-6]

Elucidation of NF-kappa B-regulated gene expression mechanism based on various sequence data

16:45

Session 3: Immune system (chaired by Taku Okazaki and Yoshiyuki Minegishi)

16:45-17:15

Koichi Ikuta (Kyoto U) [L-3]

Roles of IL-7 in development and response of the immune system

17:15-17:45

Shinichiro Sawa (Hokkaido U) [L-4]

Microenvironment for the lymph node organogenesis

17:45-18:15

Laura Mackay (U Melbourne, Australia) [G-2]

Transcriptional regulation of tissue-resident lymphocytes

18:15

Poster session 1

19:30

Mixer @ Sora (MC by Munehide Matsuhisa and Tatsuya Takemoto)

Friday 27th January 2017

9:00

Session 4: Inflammation (chaired by Tatsuya Saitoh and Seiichi Oyadomari)

9:00-9:30

Myung-Shik Lee (Yonsei U, Korea) [G-3]
Autophagy, inflammasome, and metabolism

9:30-10:00

Toshiyuki Takai (Tohoku U) [L-5]
Regulatory receptor LILRB4 characterizes pathogenic plasma cells in SLE

10:00-10:30

Yoshinori Fukui (Kyushu U) [L-6]
Immune regulatory functions of DOCK8 in health and diseases

10:30-10:45

Yue Ren (U Tokyo) [S-7]
Generation of iNKT cell-deficient mice by CRISPR/hCas9 and their role in the development of obesity

10:45-11:00

Yumiko Oishi (Tokyo MDU) [S-8]
SREBP1 contributes to resolution of pro-inflammatory TLR4 signaling by reprogramming fatty acid metabolism

11:00

Poster session 2

12:15

Lunch

13:15

Session 5: Infection (chaired by Suehiro Sakaguchi and Mitsuru Matsumoto)

13:15-13:45

Takeshi Satoh (U Tokyo) [L-7]
Virus and immune response - sensing mechanisms and symbiosis

13:45-14:15

Takeshi Kobayashi (Osaka U) [L-8]
Reverse genetics for fusogenic bat-borne orthoreovirus associated with acute respiratory tract infections in humans

14:15-14:30

Taisho Yamada (Hokkaido U) [S-9]

Aryl hydrocarbon receptor-mediated signaling negatively regulates antiviral interferon response

14:30-14:45

Michihiro Takahama (Tokushima U) [S-10]

RAB2B regulates dsDNA-induced antiviral response

14:45

Short break

15:00

Session 6: Cancer (chaired by Yoshinori Murakami and Masanobu Oshima)

15:00-15:30

Seiji Yano (Kanazawa U) [L-9]

Targeted therapy for lung cancer based on gene profiling

15:30-16:00

Toyomasa Katagiri (Tokushima U) [L-10]

Regulation of estrogen/ estrogen receptor signalling in breast cancer cells

16:00-16:15

Dominic Voon (Kanazawa U) [S-11]

Exploring the molecular mechanisms underlying epithelial mesenchymal transition induced cellular plasticity and tumorigenicity

16:15

Closing remarks

Yousuke Takahama (Tokushima U)

Posters

P-1

Tomoshige Ando (Osaka U)

Analysis of a metalloprotein, ribonuclease H1 and RNA/DNA hybrid complex by electrospray ionization mass spectrometry

P-2

Mohammad Aslam (Tokyo MDU)

Regulation of self-reactive B cells by CD72 and Fas

P-3

Takahiro Hara (Kyoto U)

Identification and characterization of IL-7 niche in vivo

P-4

Kouyuki Hirayasu (Osaka U)

Microbially cleaved immunoglobulins are sensed by the innate immune receptor LILRA2

P-5

Kota Inoue (Kyushu U)

Stage-dependent contribution of transcriptional and posttranscriptional mechanisms to retrotransposon silencing during male germ cell development in mice

P-6

Kojiro Ishibashi (Hokkaido U)

EDAC eliminates transformed cells by inducing metabolic changes

P-7

Koyu Ito (Tohoku U)

The antihistamine regulates T cell activation in palladium allergy

P-8 [S-6]

Kazunari Iwamoto (Osaka U)

Elucidation of NF-kappa B-regulated gene expression mechanism based on various sequence data

P-9

Jing-jing Jiang (Hokkaido U)

NFkB-specific p300 activation is dependent on BCR-CK2 axis

P-10

Yoshikazu Johmura (U Tokyo)

SCFFbxo22-KDM4A targets methylated p53 for degradation and regulates senescence

P-11 [S-2]

Hiroyasu Kidoya (Osaka U)

Regulation of blood vessel patterning through reciprocal signals

P-12

Yasuyuki Kita (Kyushu U)

The autism-related gene Chd8 is essential for adipogenesis

P-13

Hiroshi Kitamura (Tohoku U)

Molecular basis for tumorigenesis of NRF2-addicted cancer cells

P-14 [S-3]

Shuhei Konagaya (Kyoto U)

Differentiation of human iPS cells into pancreatic endocrine cells

P-15

Mina Kozai (Tokushima U)

CCL21 regulates T-cell self-tolerance in thymic medulla

P-16 [S-1]

Atsushi Kubo (Tohoku U)

Gene regulatory mechanisms by mechanical forces in cardiovascular system

P-17 [S-4]

Shunsuke Kuroki (Tokushima U)

Roles of H3K9 methylation and demethylation enzymes in mouse development

P-18

Yosvany López (Tokyo MDU)

Predicting the site of origin of human cancers by examining somatic mutations in promoters and gene bodies

P-19

Natsumi Maeda (Tokushima U)

Glucocorticoids augment the expression and inhibitory function of PD-1

P-20

Taro Mannen (Hokkaido U)

Distinct RNA polymerase transcripts competitively function as scaffold of the DBC1 nuclear bodies in specific cancer cell lines

P-21

Wenyu Miao (Kanazawa U)

Cellular signaling and gene expression profile evoked by artificial MET-agonist of macrocyclic peptide

P-22

Shizuka Miura (Kyushu U)

Overexpression of transcription factor Snail induces liver tumor formation

P-23

Hitoshi Nishijima (Tokushima U)

Massive infiltration of macrophages and eosinophils in the muscle of mice overexpressing Aire in thymic and peripheral antigen-presenting cells

P-24

Yumiko Nishikawa

B cell intrinsic abnormality caused by Stat3 mutation is responsible for the dysregulation of IgE response in a mouse model of hyper-IgE syndrome

P-25

Tatsunori Nishimura (Kanazawa U)

Dependence of lung cancer cells on the mitochondrial enzyme-mediated purine synthetic pathway

P-26

Takaharu Nishiyama (Kyoto U)

Islet transplantation into subcutaneous immune tolerance sites formed by implanting drug-loaded agarose gel rods

P-27

Izumi Ohigashi (Tokushima U)

Foxn1- β 5t transcriptional axis for CD8⁺ T cell production

P-28 [S-8]

Yumiko Oishi (Tokyo MDU)

SREBP1 contributes to resolution of pro-inflammatory TLR4 signaling by reprogramming fatty acid metabolism

P-29

Boon Min Poh (U Tokyo)

A genome-wide transposon mutagenesis screen identifies driver genes in brain cancer

P-30 [S-7]

Yue Ren (U Tokyo)

Generation of iNKT cell-deficient mice by CRISPR/hCas9 and their role in the development of obesity

P-31

Takashi Satoh (Osaka U)

Identification of a monocyte-granulocyte hybrid cell type linked to fibrosis

P-32

Kenji Shimizu (Tokushima U)

Characterization of target genes of inhibitory co-receptor PD-1 by CAGE

P-33

Hirofumi Sogabe (Tokushima U)

Regulation of D-amino acid oxidase expression in mammalian cells

P-34

Kouichi Tabu (Tokyo MDU)

Self-maintenance strategies of glioma stem cells (GSCs) involving GSC-induced protumoral macrophages

P-35

Hirotsada Tajiri (Kyushu U)

DOCK1 as a novel molecular target for controlling cancer invasion, metastasis and survival

P-36 [S-10]

Michihiro Takahama (Tokushima U)

RAB2B regulates dsDNA-induced antiviral response

P-37

Toshiki Takei (Osaka U)

Study of the effect of selenocysteine-substitution on ferredoxin function

P-38 [S-5]

Shinsuke Uda (Kyushu U)

An estimation method of sparse partial correlation matrix for omics data analysis

P-39 [S-11]

Dominic Voon (Kanazawa U)

Exploring the molecular mechanisms underlying epithelial mesenchymal transition induced cellular plasticity and tumorigenicity

P-40 [S-9]

Taisho Yamada (Hokkaido U)

Aryl hydrocarbon receptor-mediated signaling negatively regulates antiviral interferon response