

PROGRAM

Day 1 (10/29) Tuesday

13:20-14:00 Registration

14:00-14:10 Opening Remarks

Yen-Hsuan Ni [Dean, College of Medicine, National Taiwan University, NTUCM]

Special Lecture

Chair: Ming-Shyue Lee (IBMB Director)

14:10-14:30 SCUBE2 Regulates Adherens Junction Dynamics and Vascular Barrier Function During Inflammation

Ruey-Bing (Ray) Yang [Research Fellow, Institute of Biomedical Sciences, Academia Sinica]

PI Session I: Structure Biology.

Chair: Katsuhiko Mikoshiba (SIAIS Professor)

14:30-14:45 Structure of a Complete Contractile Bacteriophage

Matthias Wolf (OIST)

14:45-15:00 Structure Basis of Chaperone Interplay, Action and Folding

Soung-Hun Roh (IMBG)

15:00-15:15 Structural Basis for Recruitment of Peptidoglycan Endopeptidase MepS by Lipoprotein NlpI

Shiou-Ru Tzeng (IBMB)

15:15-15:45 Coffee Break

PI Session II: Biotechnology.

Chair: Jongsoon Lee (SIMS Director)

15:45-16:00 Understanding the Forces That Control Cell Fate and Disease Progression

Yongsung Hwang (SIMS)

16:00-16:15 A STAND (Ultra-Stable Cytoplasmic Antibody) Engineered for in vivo Applications to Cancer, Apoptotic-Stress Induced and ER-Stress Induced Diseases

Katsuhiko Mikoshiba (SIAIS)

16:15-16:30 Control of Cell Proliferation by Mitotic Quality Control

Franz Meitinger (OIST)

16:30-16:45 Break

PI Session III: Gene Regulation.

Chair: Hiroshi Kawamoto (LiMe Director)

16:45-17:00 DeepSpaceDB: an Interactive Database for Spatial Transcriptomics Data

Alexis Vandebon (LiMe)

17:00-17:15 Driver Gene Landscape of Gastric Cancer

Tatsuhiro Shibata (IMSUT)

17:15-17:30 SP110 Controls Host Immunity to *Mycobacterium tuberculosis* Infection.

Bo-Shiun Yan (IBMB)

18:00- Dinner (Welcome Dinner)

Day 2 (10/30) Wednesday

YS Session I

Chair: Hsuan-Ju Chen, Marvin Angelo E. Aberin

- 9:00-9:10 RNaseT2-Deficiency Promotes TLR13-Dependent Replenishment of Tissue-Protective Kupffer Cells
Ryota Sato (IMSUT)
- 9:10-9:20 The Role of USP28 in Mitotic Stress Response
Md Hazrat Belal (OIST)
- 9:20-9:30 Mechanistic Insights into Artemisinin-Induced Suppression of Migration and Proliferation of Tongue Cancer Cells
Laurensia Danis Anggradita (SIMS)
- 9:30-9:40 Biomimetic Lymphocyte Capture by Magnetic Polymerized Antigen Presenting Cells for Anticancer Adoptive T Cell Therapy
Chung Yao Hsu (IBMS)
- 9:40-9:50 Cryo-EM Structure of Human DICER in A Cleavage-Ready State
Hansol Lee (IMBG)
- 9:50-10:00 Opto-Combinatorial Indexing Reveals the Distinct Transcriptomic Responses Associated with Paclitaxel-Induced Multinuclear Formation by Linking Cellular Images and Transcriptomes
Taiko Paul Kaneko (LiMe)
- 10:00-10:10 The Study of How Second Messengers and Protein Kinases Regulate Neuronal Polarize Trafficking
Jhao-Ching Jhong (IBMB)
- 10:10-10:40 Coffee Break

YS Session II

Chair: Wei-Xuan Lu, Jia-Yun (Sheryl) Yeh

- 10:40-10:50 Adipose Stem and Progenitor Cells Determine White Fat Depot-Specificity
Hahn Nahmgoong (IMBG)
- 10:50-11:00 Synergistic Cancer Treatment: Leveraging G-Quadruplex Ligands to Suppress c-FOS and Overcome Drug Resistance
Yi-Chen Tu (IBMB)
- 11:00-11:10 Enzymatic Responses to Antibiotic Stress
Elsie Dunkley (OIST)
- 11:10-11:20 Back-Priming: a Unique RNA Replication Strategy of Borna Disease Virus 1
Takehiro Kanda (LiMe)
- 11:20-11:30 The Effects of Piezoelectric Stimulation on Cellular Responses and Neurite Outgrowth of Neuroblastoma Cells
Yu-Chia Chuang (IBMS)
- 11:30-11:40 Development of a Mouse Model for In Utero Hematopoietic Stem Cell Transplantation
Hyojung Jeon (IMSUT)
- 11:40-11:50 Deciphering Developmental Condition of Hindbrain R1 Region on hPSCs System

Virginia Blessy Juwono (SIMS)

11:50-13:30 Lunch

PI Session IV: Stem Cell, Development, and Tissue Engineering. Chair: Amy Shen (OIST Director)

13:30-13:45 Controlling Cell Fate Specification System Based on Network Topology

Atsushi Mochizuki (LiMe)

13:45-14:00 Coral Reef Fish, Hormones and Metamorphosis: a Tale of Adaptation

Vincent Laudet (OIST)

14:00-14:15 Metabolic Modulation of Cell Fates in Stem Cells and Cancer

Takahiro Ito (LiMe)

14:15-14:30 Break

PI Session V: Stress Response and Metabolism. Chair: Jongkyeong Chung (IMBG Director)

14:30-14:45 PKR Mediates the Mitochondrial Unfolded Protein Response Through Double-Stranded RNA Accumulation Under Mitochondrial Stress

Jaeseok Han (SIMS)

14:45-15:00 Immune Disorders Due to Lysosomal Nucleic Acid Stress

Kensuke Miyake (IMSUT)

15:00-15:15 Metabolic Regulation of PINK1/Parkin Pathway

Jongkyeong Chung (IMBG)

15:15-15:30 T Cell Stress Response and Lupus Organ Damage

Ping-Min Chen (IBMB)

15:30-16:00 Coffee Break

PI Session VI: Brain and Neuroscience. Chair: Yuji Yamanashi (IMSUT former Dean)

16:00-16:15 The Alteration of Brain Metabolism via Astrocytes in Parkinson's Diseases

Jong-seok Moon (SIMS)

16:15-16:30 Unveiling the Hippocampal Link Between Spatial Maps and Exploratory Intent

Ning Zhou (SIAIS)

16:30-16:45 Probing Stimulus Encoding in the Olfactory Bulb Using Synthetic Olfactory Stimuli

Izumi Fukunaga (OIST)

16:45-17:00 Signaling in Neuromuscular Junction (NMJ) Formation/Maintenance and NMJ-Targeted Therapies

Yuji Yamanashi (IMSUT)

17:30- Dinner

Day 3 (10/31) Thursday

YS Session III

Chair: Yi-Chen Tu, Chung Yao Hsu

- 9:00-9:10 Preclinical Models of VNS for the Bench and Bedside
Benjamin Hyunju Ahn (IMBG)
- 9:10-9:20 Reduced Activity of the Enzyme Adenylosuccinate Lyase Affects the Competitive Behavior of Female Mice
Xiang-Chun Ju (OIST)
- 9:20-9:30 The DEPTOR-KIF11 Pathway is a Crucial Regulator of Metabolic Adaptation and Leukemic Progression
Tania Setiawan (SIMS)
- 9:30-9:40 Aggravation of Hypoxic Damage Response in Cardiomyocytes by Macrophages
Wei-Xuan Lu (IBMB)
- 9:40-9:50 Angiogenesis Enhanced by Cyclic Stretching in Human ES Cell-Derived Liver Organoids
Koki Yoshimoto (LiMe)
- 9:50-10:00 Investigation of Tamoxifen-RACK7/KDM5C-IFN-I Axis for ER+ Breast Cancer Immunomodulation
Marvin Angelo Esteban Aberin (IBMS)
- 10:00-10:10 Pancancer Analysis of Subclonal Evolution
Kazuki K. Takahashi (IMSUT)
- 10:10-10:40 Coffee Break

YS Session IV

Chair: Jhao-Ching Jhong, Yu-Chia Chuang

- 10:40-10:50 Elucidating Pathogenesis of Hematopoietic Dysfunction in PNH Using Patient-Derived iPSCs
Jiyuan Liao (IMSUT)
- 10:50-11:00 Development of Neural Crest Derived Facial Tissues in vitro and These Morphogenesis
Ryoma Ogihara (LiMe)
- 11:00-11:10 Influence of Polydeoxyribonucleotide on Tendon Stem Cell Behavior: Adenosine A2A Receptor Activation and Mechanical Force-Driven Migration via Focal Adhesion Formation
Jothilin Subitsha Alex Jeberson (SIMS)
- 11:10-11:20 Impact of Hominin-Specific Genetic Variants on Skeletal Muscle
Shin-Yu Lee (OIST)
- 11:20-11:30 Genome-Wide Association Study of Non-Tuberculous Mycobacterial Lung Disease in Taiwanese Population
Hsuan-Ju Chen (IBMB)
- 11:30-11:40 Targeting Squalene Epoxidase for Breast Cancer Brain Metastasis
Jia-Yun Yeh (IBMS)
- 11:40-11:50 Senescent Hypertrophy: Not a Mere Consequence of Senescence, But a Functional Program of Senescence
Joae Joung (IMBG)
- 11:50-13:30 Lunch

- 13:30-13:45 Structures of the Mononegavirus Nucleoprotein-RNA Complex
Yukihiko Sugita (LiMe)
- 13:45-14:00 Exploring the Hippo Pathway-Autophagy Crosstalk in Cancer Progression
Gayoung Seo (SIMS)
- 14:00-14:15 Inhibition of Invasiveness of Tumor Cell as a Tool to Overcome Therapy Resistance
Yasushi Soda (IMSUT)

Special Lecture

Chair: Nei-Li Chan (IBMB Distinguished Professor)

- 14:15-14:35 Introduction of National Biotechnology Research Park and Biomedical Translation Research Center
Han-Chung Wu [Director, Biomedical Translation Research Center (BioTReC), Academia Sinica]
- 14:35-14:50 Break
- 14:50-15:40 Ken-Ichi Arai Award Lecture and Ceremony
Lecturer: Ming-Jiun Yu Presenter: Jeongbin Yim
- 15:40-16:10 Coffee Break
- 16:10-16:25 Award of Special Achievement
- 16:25-16:40 Outstanding Young Scientist TOMY Award and Closing Remarks
- 16:40-16:50 Greeting From the Next Host
- 18:00- Dinner (Closing Dinner)

Day 4 (11/1) Friday

- 7:30-12:00 Kavalan Whisky Distillery, Yilan
- 12:00- To the Airport